
Fallon Village Project

Draft Supplemental Environmental Impact Report

SCH# 2005062010

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City of Dublin

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1.0 Project Summary

1.1 Introduction

This chapter consists of a summary of the proposed Project, a list of environmental issues to be resolved and a summary identification of each environmental impact and associated mitigation measure.

This summary should not be relied on for a thorough description of the details of the Project, its individual impacts and mitigation requirements. A discussion of the applicability of the California Environmental Quality Act to the proposed Project is outlined in Chapter 2 as well as the history of previous EIRs within the Project area. Chapter 3 contains a detailed discussion of the proposed Project. Chapter 4 includes an analysis of Project impacts and mitigation measures. Chapter 5 provides a range of alternatives to the proposed Project as required by CEQA and a discussion of each alternative. Chapter 6 contains all other CEQA-mandated sections. Finally, Chapter 7 includes the names of the DSEIR preparers, individuals and agencies contacted in the preparation of this document and references. Appendices are included as Chapter 8.

1.2 Summary of Project History

The entire Project area is within the Eastern Dublin General Plan area and the southerly portion is also within the Eastern Dublin Specific Plan (EDSP) area. In 1993, the City of Dublin certified an EIR for the entire Eastern Dublin area that included the Project area.

In 2002, the City of Dublin approved a Supplemental EIR for a Stage 1 Planned Development rezoning application and Stage 1 Development Plan for the Project area., which also included a request by a majority of the property owners to annex the Project area to the City of Dublin. A Supplemental EIR was certified by the City to satisfy the requirements of the California Environmental Quality Act. The Project area was subsequently annexed to the City later in 2002.

The approved 2002 Stage 1 Planned Development zoning and Development Plan allows for a maximum of 2,526 dwellings at a variety of densities, up to 1,421,450 square feet of office development, commercial and similar non-residential land uses, a junior high school, elementary schools, parks and open spaces.

1.3 Summary of Project Description

The Project area contains approximately 1,132 acres of land located in the Eastern Dublin area, generally bounded by Interstate 580 (I-580) to the south, Fallon Road and the Dublin Ranch development to the west, the easterly Dublin city limit line to the east and the northerly edge of the Dublin General Plan area to the north. The

Project area contains thirteen (13) different parcels of land under eleven (11) different ownerships.

The entire Project area is within the incorporated City limits of Dublin. The southerly 472-acres of the area are presently within the boundaries of the Eastern EDSP area. The northerly 472 acres of the Project are lie outside of the EDSP planning area.

The proposed Project includes an amendment to the Eastern Dublin General Plan and the EDSP to include the entire 1132-acre Project area within the EDSP.

A second portion of the proposed Project includes a revised Stage 1 Planned Development rezoning and Stage 1 Development Plan to modify land existing land uses and general roadway alignments established in the 2002 Stage 1 Planned Development zoning and Stage 1 Development Plan. Under the proposed Stage 1 Development Plan, the same general type of development in the Project area would occur, but a large central Open Space Corridor would be established for the purposes of biological resource protection and enhancement. The number of residences would be increased above the approved 2002 Stage 1 Development Plan by 582 dwellings to a total of 3,108 dwellings. Similarly, non-residential development would be increased by approximately 1,081,725 square feet over the 2002 approval to a total of 2,503,175 square feet. The proposed Project would also contain elementary schools, parks at various levels and open space, including the central Open Space corridor.

The third portion of the project includes consideration of a Stage 2 Development Plan for the northerly 486 acres of the Project area. The proposed Stage 2 Development Plan includes development of 1.078 dwellings on the northerly portion of the Project area along with an elementary school, parks, open space areas and a roadway, Upper Loop Road.

1.4 Summary of Environmental Issues

As provided by the California Environmental Quality Act statues and implementing Guidelines, the focus of this Draft Supplemental EIR (DSEIR) will be on changed environmental conditions as contained in the 1993 Eastern Dublin EIR and the 2002 Supplemental EIR to the Eastern Dublin EIR. These issues include those identified in the Initial Study and responses from other public agencies received in response to the Notice of Preparation issued by the City of Dublin. These areas of environmental concern include:

- Land Use and Planning
- Transportation and Traffic
- Community Services and Facilities
- Sewer, Water and Storm Drainage
- Soils, Geology and Seismicity
- Biological Resources
- Visual Resources

- Cultural Resources
- Noise
- Air Quality
- Hazards and Hazardous Materials
- Parks and Recreation

1.5 Summary of Supplemental Impacts and Mitigation Measures

Each potentially significant impact and associated mitigation measure (if required) identified in this DSEIR is summarized on Table 1.1. The summary chart has been organized to correspond with the more detailed supplemental impact and mitigation measure discussion found in Chapter. Table 1.1 is arranged in three columns. The first column identifies supplemental environmental impacts by topic area and level of impact (i.e. significant impact, less-than-significant impact or no impact) prior to implementation of any mitigation measures. The second column includes supplemental mitigation measures. The third and final column identifies the level of significance after implementation of each mitigation measure.

For a complete description of the environmental setting, summary of impacts from previous EIRs, supplemental impacts associated with this proposed Project and supplemental mitigation measures, refer to Chapter 4 of this DSEIR.

1.6 Summary of Alternatives

The DSEIR analyzes __ new alternatives in addition to those previously considered in the Eastern Dublin EIR or the 202 SEIR. These are: 1) a “no project/no development” alternative; 2) a “no project/development under existing land use regulations” alternative; 3) a reduced project alternative; 4) an alternative that considers a relocated Central Parkway through a portion of the Project area; 5) replacement of “General Commercial/Campus Office land uses with an “Industrial” land use designation along a portion of the Project area north of the I-580 freeway; and 6) a changed development pattern on the Jordan property.

These alternatives are detailed and analyzed in Chapter 5 of the DSEIR.

1.0 SUMMARY OF SUPPLEMENTAL ENVIRONMENTAL IMPACTS AND MITIGATIONS

Table 1.1 below summarizes the environmental impacts and mitigations which are discussed in detail in the remainder of this Supplemental Draft Environmental Impact Report.

Supp. Impact	Topic/Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
TRA-1	<p><u>Project contribution to impact to Dublin/Dougherty intersection.</u> Project contribution to impact to Dublin/Dougherty intersection). In the year 2025, traffic generated by buildout of the proposed Project along with other buildout traffic, would cause t the Dougherty Road/Dublin Boulevard intersection to operate at an unacceptable level of service during the p.m. peak hour.</p>	<p>SM-TRA-1. Project developers shall:</p> <p>a) Advance to the City applicable monies for acquisition of right-of-way and construction of the planned improvements at Dougherty Road/Dublin Boulevard. The amount of money advanced to the City shall be based on the developer’s fair share of the deficit (spread over those projects which are required to make up the deficit) between funds available to the City from <i>Category 2 Eastern Dublin Traffic Impact Fee</i> funds and the estimated cost of acquiring the right-of-way and constructing the improvements. The City should provide credit for <i>Category 2 Eastern Dublin Traffic Impact Fees</i> to the developer for any advance of monies made for the improvements planned for the Dougherty Rd./Dublin Boulevard intersection.</p>	<p>Less than significant</p>

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		b) Pay a pro-rata share of the cost to construct the planned improvements at Dougherty Road/Dublin Boulevard through payment of the Eastern Dublin Traffic Impact Fee. The City of Dublin will implement these improvements.	
TRA-2	<u>Project contribution to impact to Santa Rita Road/I-580 eastbound ramps.</u> In the year 2025, traffic generated by buildout of the proposed Project along with other buildout traffic, would cause the Santa Rita Road/I-580 EB Ramps intersection to operate at an unacceptable level of service during the p.m. peak hour.	<u>SM-TRA-2.</u> Project developers shall contribute a pro-rata share of the cost to widen the I-580 eastbound off-ramp approach at Santa Rita Road to include a third eastbound left turn lane.	Less-than-Significant
TRA-3	<u>Project contribution to impact at Central Parkway and Hacienda Drive.</u> In the year 2025, with traffic generated by buildout of the proposed Project along with other buildout traffic, the heavy volumes anticipated for the westbound left turn movement (approximately 800 vehicles in the a.m. peak hour) from Central Parkway onto southbound Hacienda Drive would create safety concerns during the a.m. peak hour.	<u>TSM-RA-3.</u> Project developers shall contribute a pro-rata share of the cost to modify the westbound approach on Central Parkway at Hacienda Drive to include two left turn lanes, one through and one right turn lane.	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
TRA-4	<u>Cumulative impacts to local freeways.</u> In the Year 2030 with traffic generated by buildout of the proposed Project along with other buildout traffic, freeway segments on I-580 and I-680 in the Project area would operate at unacceptable levels of service during the a.m. and p.m. peak hours	No supplemental mitigation measures are available	Significant and Unavoidable
TRA-5	<u>Consistency with Alameda County Congestion Management Plan.</u> In the Years 2015 and 2025, traffic generated by the proposed Project along with other background traffic on I-580 and I-680 would exceed ACCMA monitoring standards for volumes along these freeways.	No supplemental mitigation measures are available	Significant and Unavoidable
SCH-1	<u>Change in student generation rates and number of students.</u> Proposed changes to the Project, to increase the number of dwelling units not analyzed in the 2002 SEIR, and to student generation rates used by the Dublin Unified School District, could result in inadequate school facilities to serve the proposed Project.	No significant impact—no mitigation required	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
SD-1	<p><u>Changed non-point surface water quality standards.</u> Runoff from the Project may not comply with the most recent surface water quality standards and, as a result, could add pollutants to nearby bodies of water.</p>	<p><u>SM- SD-1.</u> The Stage 1 Development Plan shall require that the water quality source control and hydrologic design recommendations of the report prepared by ENGEO, Inc. (February 28, 2005) be implemented for all individual development projects within the Project area.</p>	<p>Less-than-Significant</p>

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
SD-2	<p><u>Changed non-point surface water quality hydromodification standards.</u> The amount and rate of stormwater runoff from the Project may not comply with the most recent water quality hydromodification standards and, as a result, may not comply with current surface water quality standards.</p>	<p><u>SM- SD-2.</u> Development within the Project area shall comply with the hydromodification provisions of the Alameda County Clean Water Program as approved by the RWQCB and administered by the City of Dublin. If no Alameda County Clean Water Program permit has been adopted at the time individual development proposals are approved by the City the applicant may be required to submit hydrology and hydrologic analyses to identify specific increases in storm water runoff into downstream receiving waters. Such reports will be reviewed by both the City of Dublin and Zone 7 Water Agency. Development projects will also be required to pay the then-current Zone 7 Special Drainage Area fee (SDA7-1) in effect at the time of development.</p>	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
GEO-1	<p><u>Potential soil hazards due to alteration in the extent of Project grading.</u> The proposed Stage 1 Development Plan show that Project grading would extend beyond that analyzed in the Eastern Dublin EIR. A number of new landslides have also been identified within the Project area. This could result in potentially significant supplemental impacts since geotechnical conditions of these areas have not been analyzed in the Eastern Dublin EIR.</p>	<p><u>SM-GEO-1.</u> Prior to construction, design level geotechnical report(s) and corrective grading plan(s) depicting the locations and depths of landslide repairs, keyways and subsurface drains is required. The corrective grading plans shall identify appropriate mitigation for graded slopes. In order to stabilize slopes where unstable geologic materials extend at beyond proposed development area, geotechnical corrective grading may extend beyond the limits of improvements and into open space areas. Grading in open space areas shall be limited to excavations that remove unstable soils and landslide debris and backfilling excavations with compacted, drained engineer fills. To provide stable construction slopes, the back slopes of excavated areas may extend up slope and beyond the limits of mapped slides. The corrective measures used will be typical and configured to conform at natural slope contours with materials and compaction at the approval of a geotechnical engineer. This may vary from original grade within repair envelope due to geotechnical and slope drainage considerations.</p>	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
BIO-1	<p><u>Loss or degradation of botanically sensitive habitat.</u> The proposed Project could result in loss or degradation of existing arroyo willow ponds and freshwater marsh due to Project.</p>	<p><u>SM-BIO-1.</u> Impacts to central coast riparian scrub habitat shall be mitigated through the restoration or enhancement of riparian habitat at a 3:1 ratio (on an acreage basis), preferably within the proposed aquatic and buffer zone or corridor zone management areas on-site. If mitigation within the Project area is not feasible, then the developer shall mitigate impacts to central coast riparian scrub through the restoration or enhancement of riparian habitat at a 3:1 ratio (measured by acreage) at an off-site location acceptable to the City. Any riparian mitigation areas shall be preserved and protected in perpetuity. Restored habitat shall be monitored for a period of five years including preparation of an annual report each year.</p>	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
BIO-2	<p><u>Impacts to California red-legged frogs.</u> The Project area has been proposed for designation as critical habitat by the U.S. Fish and Wildlife Service and development of the Project could result in impacts to this species .</p>	<p><u>SSM-BIO-2.</u> If avoidance is infeasible, then mitigation lands providing similar or better habitat for CRLF shall be preserved and protected in perpetuity. Mitigation will be required at a 3:1 replacement ratio for essential aquatic habitat (including verified aquatic breeding habitat) and associated upland habitat within 100 m of essential aquatic habitat, and at a 1.5:1 replacement ratio for dispersal habitat as defined herein (Figure 3.3-D Exhibit 4.7.4). Alternately, the latter ratio may be reduced at the discretion of the City, if additional essential aquatic habitat is provided. The amount of reduction shall be proportional to the amount of additional essential habitat provided, up to a maximum reduction of fifty percent. Because aquatic breeding habitat and perennial water bodies providing summer refugia are expected to limit CRLF population size in the dry eastern Alameda/Contra Costa region more than the availability of suitable upland habitat, flexibility in this mitigation requirement (i.e., to allow for the creation of ponds to serve as partial mitigation and</p>	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		for impacts to upland habitat) provides an opportunity to create greater benefit to CRLF populations on a landscape level. This mitigation shall be proposed in a mitigation monitoring plan submitted to the City.	
		In selecting off-site mitigation lands, preference shall be given to preserving large blocks of habitat rather than many small parcels, selecting mitigation land within the Livermore and Amador valleys, and their surrounding watersheds, to account for local loss of proposed critical habitat, linking preserved areas to existing open space and other high-quality habitat, and excluding or limiting public use within preserved areas.	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
BIO-3	<p><u>Impacts to California tiger salamander.</u> The listing of this species as threatened by the USFWS will not result in additional Project impacts. The Project area has recently been proposed for designation as critical habitat by the U.S. Fish and Wildlife Service and development of the Project could result in impacts to this species.</p>	<p><u>SSM-BIO-3.</u>To compensate for the permanent loss of up to 1.31 acres of aquatic CTS breeding habitat, developers of individual parcels will create and/or enlarge suitable breeding ponds at a 2:1 ratio (mitigation to impact, on an acreage basis), in or adjacent to areas currently supporting CTS and with sufficient surrounding upland habitat to provide a high likelihood of establishment and persistence of a breeding population. In selecting off-site mitigation lands, preference shall be given to preserving one large block of habitat rather than many small parcels, selecting mitigation land within the Livermore and Amador valleys, and their surrounding watersheds, to account for local loss of proposed critical habitat, linking preserved areas to existing open space and other high quality habitat, and excluding or limiting public use within preserved areas.</p>	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		Land selected for mitigation shall be permanently preserved through use of a conservation easement or similar method and shall be managed for use by CTS by a conservation entity. This mitigation shall be proposed in a mitigation and monitoring plan submitted to the City for approval.	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p><u>SSM-BIO-4</u> .To compensate for the permanent loss of up to 658.3 acres of upland CTS habitat, developers of individual parcels will acquire, preserve, and manage suitable upland habitat at a 1:1 ratio (mitigation to impact, on an acreage basis), in or adjacent to areas currently supporting CTS and within 2200 feet of a suitable breeding pond. Alternately, this ratio may be reduced (i.e., to less than 1:1 mitigation for lost upland habitat), at the discretion of the City, if additional aquatic breeding habitat (beyond that required by SM-BIO-11) is provided. The amount of reduction shall be proportional to the amount of additional essential habitat provided, up to a maximum reduction of fifty percent. Because aquatic breeding habitat is expected to limit CTS population size in the dry eastern Alameda/Contra Costa region more than the availability of suitable upland habitat, flexibility in this mitigation requirement (i.e., to allow for the creation of breeding ponds to serve as partial mitigation for impacts to aestivation habitat) may benefit CTS populations on a landscape level.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p>This mitigation requirement may be combined with SM-BIO-11 of the 2002 SEIR so that the overall mitigation results in creation/restoration and preservation of breeding ponds (to mitigate impacts to aquatic breeding habitat and preservation of associated upland habitat (to mitigate impacts to upland habitat according to SM-BIO-12). In selecting off-site mitigation lands, preference shall be given to preserving one large block of habitat rather than many small parcels, selecting mitigation land within the in Livermore and Amador valleys, and their surrounding watersheds, to account for local loss of proposed critical habitat, linking preserved areas to existing open space and other high quality habitat, and excluding or limiting public use within preserved areas.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		Land selected for mitigation shall be permanently preserved through use of a conservation easement or similar method, and shall be managed for use by CTS by a conservation entity. This mitigation shall be proposed in a mitigation and monitoring plan submitted to the City for approval.	
		Nesting status shall be monitored by a qualified biologist to determine when nests are no longer active. All activities shall be prohibited within the buffer until after young have fledged and moved out of the nest. This measure shall also apply to construction of recreational trails in preserved areas.	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
	<p>Revised Mitigation Measure from 2002 SEIR</p>	<p><u>SSM-BIO-1 (revised)</u>. If special-status plants cannot be avoided, then the area containing the plant that is to be impacted, and the approximate number of plants to be impacted, must be determined, and the following steps must be taken:</p> <ul style="list-style-type: none"> a) Harvest seeds from the plants to be lost, or use seeds from another source within the in Livermore and Amador valleys, and their surrounding watersheds, and seed an area suitable for supporting the plant, either within the Project area or off-site, at a level sufficient to replace the impacted individuals at a 1:1 ratio on an individual plant and basis, and at a ratio no less than 0.5:1 on an occupied habitat basis. The mitigation site shall be preserved and protected in perpetuity. If the mitigation site fails to support at least as many plants as were impacted within a five year period, then step "b" below must be implemented. 	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p>b) Permanently preserve, through use of a conservation easement or other similar method, an equal amount of acreage either within the Project area or off-site that contains the plant.</p> <p>Prior to submission of a Stage 2 development plan or tentative map, the developer shall submit a written report to the City for its review and approval demonstrating how the developer will comply with this mitigation measure, including the steps it will take to ensure that transplanting or seeding will be successful.</p>	<p>Less-than-Significant</p>
	<p>Revised Mitigation Measure from 2002 SEIR</p>	<p><u>SSM-BIO-2 (revised)</u>. During the breeding season (February 1-August 31) prior to submittal of Stage 2 development proposals for a particular parcel, or during a subsequent breeding season but prior to the initiation of construction, a survey shall be conducted according to CDFG protocols to determine whether Burrowing Owls are present, and if present, the number of nesting pairs of Burrowing Owls present on the parcel.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
	Revised Mitigation Measure from 2002 SEIR	<p><u>SSM-BIO-3 (revised)</u>. Pre-construction surveys for burrowing owls shall be conducted by a qualified biologist prior to any ground disturbance between September 1 and January 31. If ground disturbance is delayed or suspended for more than 30 days after the survey, the site should be re-surveyed. If no over-wintering birds are present, burrows should be removed prior to the nesting season. If over-wintering birds are present, no disturbance should occur within 150 feet of occupied burrows. If owls must be moved away from the disturbance area during this period, passive relocation measures must be prepared according to current CDFG burrowing owl guidelines, approved by CDFG, and completed prior to construction.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
	Revised Mitigation Measure from 2002 SEIR	<p><u>SSM-BIO-3 (revised)</u>. Pre-construction surveys for burrowing owls shall be conducted by a qualified biologist prior to any ground disturbance between September 1 and January 31. If ground disturbance is delayed or suspended for more than 30 days after the survey, the site should be re-surveyed. If no over-wintering birds are present, burrows should be removed prior to the nesting season. If over-wintering birds are present, no disturbance should occur within 150 feet of occupied burrows. If owls must be moved away from the disturbance area during this period, passive relocation measures must be prepared according to current CDFG burrowing owl guidelines, approved by CDFG, and completed prior to construction.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
	<p>Revised Mitigation Measure from 2002 SEIR</p>	<p><u>SSM-BIO-4 (revised)</u>. If construction is scheduled during the nesting season (February 1 – August 31), pre-construction surveys should be conducted on the entire site-specific Project area and within 500 feet of such Project area prior to any ground disturbance. A minimum buffer (at least 250 feet) shall be maintained during the breeding season around active burrowing owl nesting sites identified in pre-construction surveys to avoid direct loss of individuals. Owls present on site after February 1 will be assumed to be nesting on or adjacent to the site unless evidence indicates otherwise. All active burrows shall be identified. If construction around active nests is scheduled to occur when nests are active (i.e., if they contain, or are assumed to contain, eggs or unfledged young), a 250-foot exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged, typically by August 31. If owls are present during the early part of the breeding season, and evidence indicates that they have not yet begun nesting, they may be passively relocated from the site if authorized by CDFG.</p>	<p>Less-than-Significant</p>

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
	<p>Revised Mitigation Measure from 2002 SEIR</p>	<p><u>SSM-BIO-5 (revised)</u>. If destruction of occupied (breeding or non-breeding season) burrows, or any burrows that were found to be occupied during pre-construction surveys, is unavoidable, a strategy will be developed to replace such burrows by enhancing existing burrows or creating artificial burrows at a 2:1 ratio on permanently protected lands adjacent to occupied burrowing owl habitat, and will include permanent protection of a minimum of 6.5 acres of burrowing owl habitat per pair or unpaired resident owl. A plan shall be developed and approved by CDFG describing creation or enhancement of burrows, maintenance of burrows and management of foraging habitat, monitoring procedures and significance criteria, funding assurance, annual reporting requirements to CDFG, and contingency and remediation measures.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
CUL-1	<p><u>Prehistoric resources on Fallon Enterprises Property</u>). Project grading and construction activities could adversely affect potentially significant buried as yet unknown prehistoric resources on portions of the Fallon Enterprises Property.</p>	<p><u>SM-CUL-1</u>).</p> <p>a) Prior to the initiation of construction or ground-disturbing activities on the Fallon Enterprises Property, Project developer(s) shall retain the services of a qualified consulting archeologist to train construction personnel to understand the potential for exposing subsurface cultural resources and to recognize possible buried cultural resources. Training shall inform all construction personnel of the procedures that shall be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains, and their treatment.</p>	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p>b) Upon discovery of possible buried cultural materials (including potential Native American skeletal remains), work in the immediate area of the find shall be halted and the Project archaeologist notified. Once the find has been identified and evaluated, the Project archaeologist shall make the necessary plans for treatment of the find(s) consistent with CEQA Guidelines Section 15064.5. State law shall be followed in the event of the exposure of Native American skeletal remains. This measure shall be included on all grading and construction plan. State law shall be followed in the event of the exposure of Native American skeletal remains. This measure shall be included on all grading and construction plan.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
CUL-2	Fallon Ranch house. Project grading and construction could damage or remove the historically significant Fallon Ranch house.	<p><u>SM-CUL-2.</u> The following steps shall be taken to preserve and protect the historic Fallon Ranch house:</p> <ul style="list-style-type: none"> a) Retain the building on its historic site and rehabilitate it according to the <i>Secretary of the Interior's Standards and Guidelines for Rehabilitating Historic Buildings</i> (U.S. Department of the Interior 1994). This mitigation measure would reduce the impact to a less-than-significant level. This measure may not be feasible given the residential development planned for the property. b) Move the house to a different location consistent with its historic residential character and rehabilitate it according to the <i>Secretary of Interior's Standards and Guidelines for Rehabilitating Historic Buildings</i>. The feasibility of moving the buildings can only be determined by a contractor or engineer experienced in moving historic buildings. Generally, it is feasible to move small wood-frame buildings like the house at 5781 Fallon Road. 	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		The historic integrity of a building eligible under California Register Criterion 3 is usually not seriously compromised if it is moved, thus it is not considered to be a "substantial adverse change."	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p>c) The salvage of materials and features of the house at 5781 Fallon Road is recommended. Representatives of the Dublin Planning Department, the Dublin Historical Preservation Association, and other interested parties should be given the opportunity to examine the house and provide suggestions for salvaging and relocating elements. The project impacts will be reduced commensurate with the percentage of the existing building that can be incorporated into the design for another building, or otherwise preserved.</p> <p>d) Document the house prior to demolition or salvage. This documentation shall be according to the general guidelines included in <i>Historic American Buildings Survey Guidelines for Preparing Written Historical Descriptive Data</i> (Pacific Coast Basin Regional Office, U.S. National Park Service, 1993) and the <i>Photographic Specifications-Historic American Building Survey</i> (U.S. National Park Service, 1993).</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p>The documentation, with original photo prints and negatives, should be placed in an historical archive or history collection accessible to the general public (e.g., Amador/Livermore Valley Historical Museum or the Dublin Heritage Center).</p>	
		<p>e) Develop a public exhibit/education program on the Fallon Ranch and history of cattle ranching in the Dublin area at the Dublin Heritage Center. The exhibit could incorporate the documentation and interpretative materials developed for Mitigation Measure 4 regarding the significant role of ranching in local history.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
CUL-3	<p><u>Cultural resources on Jordan and Chen properties.</u> Project grading and construction could adversely affect potentially significant buried as yet unknown prehistoric and historic resources associated with the 4J Ranch Site (CA-Ala-508H) on portions of the Jordan and Chen Properties\).</p>	<p><u>SM-CUL-3.</u> Prior to approval of a Stage 2 Development Plan for the Jordan and Chen properties, a detailed cultural resources assessment of combined historic/prehistoric site at the 4J Ranch site (CA-Ala-508/H shall be conducted to determine if the site is eligible for the California Register of Historical Resources. All mitigation measures identified in that study shall be incorporated into the Stage 2 Development Plan approval conditions.</p>	<p>Less than Significant</p>
CUL-4	<p><u>Croak Ranch historic resources.</u> Project grading and construction could adversely affect potentially significant historic resources associated with the Croak Ranch Site homestead. According to the RMP studies, portions of this site could be eligible for the California Register of Historical Resources.</p>	<p><u>SM-CUL-4.</u> Prior to approval of a Stage 2 Development Plan for the Croak property, a detailed historic resources assessment of Croak Ranch Homestead site shall be conducted to determine if the site is eligible for the California Register of Historical Resources. All subsequent measures identified in such study shall be incorporated into the Stage 2 Development Plan approval conditions to ensure that historic resources on the property are preserved.</p>	<p>Less-than-Significant</p>

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
NOISE-1	<p><u>Aircraft flyovers.</u> Residential land uses are proposed be located within the AIA boundary. AB 2776 requires that subdivisions within the AIA must provide full disclosure regarding the presence of noise from aircraft flyovers. Although future aircraft noise would not exceed a CNEL of 60 dBA in the Project area, aircraft overflights would likely be a nuisance for all residents of the proposed Project .</p>	<p><u>SM-NOISE-1.</u> All occupants of the residential dwellings within the proposed Project shall receive written notification at the time of sale, rental or lease of the potential for aircraft overflights of the Fallon Village Project area. Written notices shall be approved by the Dublin Community Development Director.</p>	Less than Significant
NOISE-2	<p><u>Future roadway noise affecting proposed residential development north of Upper Loop Road and East of Croak Road).</u> Traffic noise along Upper Loop Road and Croak Road is expected to exceed a CNEL of 60 dBA. Therefore, proposed residences that abut these roadways would be exposed to noise levels considered conditionally acceptable.</p>	<p><u>SM-NOISE-2.</u> An acoustical study must be prepared for the project. The study shall show how the project will meet an indoor goal of 45 dBA CNEL. In addition, the study must show how noise in outdoor areas will meet the level of a CNEL of 60 dBA (CNEL of 65 dBA at City's discretion). Based on preliminary site development information it is likely that the project can meet the indoor goal with regular double glazed windows (no special sound rating). A noise barrier may be required if backyards or other primary outdoor use spaces are located adjacent to either Croak Road or Upper Loop Road.</p>	Less than Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
NOISE-3	<p><u>Compatibility of school and neighborhood park with future roadway noise.</u> Neighborhood park and elementary school parcels along the Upper Loop Road would be exposed to a CNEL in excess of 60 dBA, which would exceed the normally acceptable exterior noise standard adopted by the City of Dublin.</p>	<p><u>SM-NOISE-3.</u> The design of the elementary school and neighborhood park shall consider noise reduction measures to comply with City exterior noise exposure limits including but not limited to appropriate siting of improvements, use of noise barriers and similar noise reduction techniques as may be needed.</p>	Less than Significant
NOISE - 4	<p><u>Noise from Upper Loop Road affecting existing residences.</u> Traffic noise from the new Upper Loop Road could impact existing residences west of the existing alignment of Fallon Road.</p>	<p><u>SM-NOISE-4.</u> Noise from Upper Loop Road is expected to generate a CNEL in excess of 60 dBA. The existing homes along the existing alignment of Fallon Road are currently exposed to an Ldn of about 56 to 59 dBA. It is unlikely but possible that the noise from Upper Loop Road would cause noise levels to increase by more than 6 dBA at these existing homes. However, an evaluation of noise from Upper Loop Road on existing dwellings shall be made and if it is found that the road would increase noise by more than 6 dBA in backyards of those existing homes, then appropriate noise mitigation measures (i.e. roadway alignment or noise barrier) shall be included in the new roadway design.</p>	Less than Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
AQ-1	<p><u>Construction related air quality impacts.</u> Construction activities would have the potential to result in greater amount of dust and PM-10 due to greater portions of the Project area being proposed for development than previously analyzed.</p>	<p><u>SM-AQ-1.</u> In addition to measures identified in Mitigation Measure 3.11/1.0 of the East Dublin EIR, the City of Dublin shall:</p> <ul style="list-style-type: none"> a) Require construction contractors to water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind. b) Require construction contractors to sweep daily (preferably with water sweepers) all paved access road, parking areas and staging areas at construction sites. c) Require construction contractors to install sandbags or other erosion control measures to prevent silt runoff to public roadways. 	Less than Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
AQ-2	<p><u>Supplemental Program-level Impact AQ-2.</u> The Project would result in a regional emission increase that would exceed the BAAQMD significance thresholds for ozone precursors.</p>	<p><u>SM-AQ-2.</u> In addition to measures identified in MM 3.11/5.0-11.0 of the East Dublin EIR, the City of Dublin shall require that the following be implemented:</p> <ul style="list-style-type: none"> a) The Project proponent should coordinate with LAVTA for the eventual extension of transit service to the Project area. Project proponents should construct or reserve necessary right-of-way for transit facilities such as bus turnouts/bus bulbs, benches, etc. b) Bicycle land and/or paths, connected to community-wide network should be provided as part of the Stage 1 Development Plan. c) Sidewalks and/or paths, connected to adjacent land uses, transit stops, and/or community-wide network should be provided as part of the Stage 1 Development Plan. d) Consider shuttle service to regional transit system or multimodal center. e) Consider providing a satellite telecommute center for Project residents if this is feasible in terms of a convenient location. 	<p>Significant and Unavoidable</p>

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		f) Provide interconnected street network, with a regular grid or similar interconnected street pattern.	
AQ-3	<u>Project contribution to regional air quality</u> . Project-related regional emissions would exceed the BAAQMD thresholds of significance for ozone precursors.	<u>SM-AQ-3</u> . Same as Supplemental Mitigation AQ-2.	Significant and Unavoidable
HAZ-1	<u>Supplemental Program Impact HAZ-1</u> . Demolition of certain residences on the site (i.e. on the Fallon Enterprises (Bankhead), Branaugh, Monte Vista (Campbell), and Croak properties, could subject workers to asbestos containing materials (ACM's) and lead-based paints (LBP's), and otherwise release those materials into the environment.	<u>SM-HAZ-1</u> . Prior to the demolition of any structures identified in the Environmental Site Assessments as potentially containing ACM's or lead-based paints, Project developer(s) shall undertake comprehensive asbestos and LBP surveys of those structures and implement appropriate ACM and LBP handling and disposal methods based on those surveys. As recommended in the ENGEO 2005 report, an environmental professional shall be present during demolition and pre-grading activities to inspect for potential environmental contaminants.	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
HAZ-2	<p><u>Potential for Soil/Groundwater Contamination and Exposure Hazards from Existing Hazardous Materials.</u> Containers of potential hazardous materials and conditions identified in Environmental Site Assessments on some of the Project parcels could result in potential soil and/or groundwater contamination. Exposure of workers, future occupants of Project properties and/or visitors to these materials could present a safety hazard.</p>	<p><u>HAZ-2.</u> As identified in the Environmental Site Assessments for each property, all observed hazardous or potentially hazardous materials and potential containers of those materials shall be removed from the properties by licensed waste contractors prior to building demolition. If no building demolition is required, this removal shall be completed prior to any grading activities on an individual site. The contents of potential hazardous material containers shall be identified and disposed of accordingly, including specific methods to preclude airborne release of materials. All dumped scrap and miscellaneous material and equipment shall be removed from the site prior to any on-site development activities. If recommended in the ESA (i.e. Mandeville, Anderson, and Fallon Enterprises properties), an environmental professional shall view the property during demolition and pre-grading activities to ensure compliance with this measure.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
HAZ-3	<p><u>Potential for soil/groundwater contamination from subsurface contamination.</u> Potential site contamination may have resulted from former or existing underground storage tanks, materials dumped into wells or septic systems, and spills of petroleum products and other hazardous materials on portions of the site. This issue is of particular concern on and adjacent to the former gasoline station site on the EBJ Partners property (including portions of the Anderson and Chen properties), and on the Jordan Ranch complex site, where relatively high levels of petroleum hydrocarbons have been found in the soil. In addition, the buried household garbage dump on the Bankhead property could pose a potential for soil and/or groundwater contamination.</p>	<p><u>SM-HAZ-3a.</u> A Phase II ESA shall be conducted for the former gas station site north and west of Croak Road to obtain information with regard to operation, demolition, and removal of the former gasoline service station in order to better assess the likelihood of this use having a detrimental impact to soils and water quality at the EBJ site and adjacent sites. This Assessment shall be completed and approved by the Alameda County Fire Department prior to any demolition or site grading, whichever is first. Additionally, a limited subsurface investigation shall be conducted for the EBJ parcel and adjacent areas of the Anderson and Chen/Tseng properties to better assess whether impacts to soil and shallow groundwater have resulted from the former gas station.</p>	Less-than-Significant

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p><u>SM-HAZ 3b.</u> All identified potentially contaminated areas on the Jordan Ranch site shall be remediated as identified in the Phase I ESA. In addition, as identified in the Phase II ESA, the Jordan Ranch owner shall inform the Alameda County Environmental Health Services Department (ACEHSD) of an unauthorized release of fuel hydrocarbons as diesel and gasoline in the vicinity of the removed underground fuel tank at the site. The property shall be subject to further subsurface investigations to evaluate the lateral and horizontal extent of the contamination, and to evaluate whether ground water has been affected, and shall be remediated as directed by the ACEHSD. Further site assessment, including soil and groundwater sampling and testing, shall be conducted to evaluate the horizontal and lateral extent of impact to underlying soils and groundwater. A limited Phase II ESA, including soil and groundwater sampling, shall be conducted to evaluate the potential impact on underlying soils and groundwater within the area of the diesel storage drums,</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p>weed killer, and other storage containers in Barn 2, as well as in the vicinity of the stored fuel containers and farm equipment in Barn 1. During removal of hazardous material contaminant sources at the Jordan Ranch site, a qualified environmental assessor shall be present to observe the removal and conditions exposed during that removal. After the removal of these sources from the site, and any excavation to remove contaminated soil, additional soil sampling and laboratory testing shall be conducted to confirm that the contaminated materials have been removed. If potentially hazardous substances are identified, remediation plan(s) shall be prepared by a qualified consulting and approved by an appropriate oversight agency. A worker safety plan shall be included in all remediation plans.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p><u>SM-HAZ 3c.</u> A Phase II ESA shall be conducted for the portion of the Fallon Enterprises property where the buried household garbage dump is located. The assessment shall include soil sampling and testing to evaluate the potential impact to underlying soils. The assessment shall be completed and approved by the Alameda County Fire Department prior to site grading operations. If potentially hazardous substances are identified in the Phase II ESA, remediation plan(s) shall be prepared by a qualified consulting and approved by an appropriate oversight agency. A worker safety plan shall be included in all remediation plans.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p><u>Supplemental Mitigation SM-HAZ 3d.</u> A Phase II ESA shall be conducted for the portion of the Anderson property used by Pleasanton Trucking and Materials. That assessment shall include soil sampling and groundwater testing to evaluate the potential impact to underlying soils. If potentially hazardous substances are identified in the Phase II ESA, remediation plan(s) shall be prepared by a qualified consulting and approved by an appropriate oversight agency. A worker safety plan shall be included in all remediation plans..</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p><u>Supplemental Mitigation SM-HAZ 3e.</u> A Phase II ESA shall be conducted for the portion of the Branaugh properties used by Branaugh Excavating, Branaugh Transportation, and the Golden State/Executive Landscaping Companies. That assessment shall include soil sampling and groundwater testing to evaluate the potential impact to underlying soils. If potentially hazardous substances are identified in the Phase II ESA, remediation plan(s) shall be prepared by a qualified consulting and approved by an appropriate oversight agency. A worker safety plan shall be included in all remediation plans.</p>	
		<p><u>Supplemental Mitigation SM-HAZ 3f.</u> Upon development of each site, all existing wells shall be abandoned under permit from Zone 7 Water Agency and in accordance with all applicable regulations.</p>	

Impact	Topic/ Supplemental Impact	Supplemental Mitigation Measure	Net Supplemental Impact After Mitigation
		<p><u>Supplemental Mitigation SM-HAZ 3g.</u> When, or prior to, the existing structures are demolished, all existing septic systems and associated leach fields shall be pumped out and removed under permit from the Alameda County Health Department.</p>	

2.0 Introduction

2.1 EIR Requirement

This Environmental Impact Report supplements two earlier Environmental Impact Reports prepared to address the impacts of urbanizing the Eastern Dublin General Plan Amendment and Specific Plan.

The Environmental Impact Report for the Eastern Dublin General Plan Amendment and Specific Plan was adopted by the City of Dublin on May 10, 1993 by Resolution No. 53-93 and included approximately 6,920 acres of land for the General Plan Amendment (GPA) and 3,328 acres of land for the Specific Plan. The GPA area was generally bounded by the I-580 freeway to the south, the Alameda County/Contra Costa County line to the north, Parks Reserve Forces Training Area (Parks RFTA) to the west and the ridgeline between Collier and Doolan Canyon to the east. This Environmental Impact Report is hereafter referred to as the Eastern Dublin EIR. The State Clearinghouse Number (SCH) for this EIR is 91103064.

In 2001, the Eastern Dublin Property Owners (EDPO) requested annexation, pre-zoning and related approvals for a 1,120 acre Project area within the larger Eastern Dublin area. The EDPO Project Area was within the development area previously approved by the City in 1993 and was within the scope of the project/program analyzed in the Eastern Dublin EIR. In response to EDPO and consistent with the City's practice for projects in Eastern Dublin, in 2001 the City prepared an Initial Study to determine if the annexation and pre-zoning requests would require additional environmental review beyond that set forth in the Eastern Dublin EIR. That 2001 Initial Study disclosed that many of the anticipated impacts of the proposed annexation and pre-zoning were adequately addressed in the Eastern Dublin EIR. This was predictable given the comprehensive planning for the development area; the Eastern Dublin EIR's analysis of buildout under the Dublin General Plan and East Dublin Specific Plan land use designations and policies; the long term 20-30 year focus of the Dublin General Plan, East Dublin Specific Plan and Eastern Dublin EIR analyses; the fact that annexation and pre-zoning actions were specifically contemplated in the Eastern Dublin EIR; and the fact that the annexation request proposed the same land uses analyzed for the Project Area in the Eastern Dublin EIR. Although the 2001 Initial Study concluded that the Eastern Dublin EIR adequately analyzed most of the potential environmental impacts of the proposed annexation and rezoning, it also identified the potential for some new significant impacts or substantially intensified impacts beyond those analyzed in the Eastern Dublin EIR. The City determined that the potential new and/or substantially intensified impacts required review at an EIR level and concluded that a Supplemental EIR should be prepared. So, in 2001 and 2002, the Eastern Dublin EIR was updated and supplemented by the East Dublin Properties Stage 1 Development Plan and Annexation Supplemental EIR (State Clearinghouse No. 2001052114). That Supplemental EIR, referred to as the "2002 SEIR," provided updated analyses of agricultural resources, biology, air quality, noise, traffic and circulation, schools, and utilities. In certifying the 2002 SEIR and approving the EDPO land use applications, the City Council adopted a Statement of Considerations for cumulative air quality,

biology and cumulative traffic impacts. The 2002 SEIR was challenged in court and was found to be legally adequate.

Presently, in 2005, a number of Program-level changes have been proposed in the land use and circulation pattern within the Project area, which is substantially the same area as addressed in the 2002 SEIR; and development of three properties within the Project area is now being proposed. Consistent with the City's practice for projects in Eastern Dublin, the City recently prepared an Initial Study to determine if the proposed Project would require additional environmental review beyond the two previous EIRs. The Initial Study is found in Appendix 8.1. The Initial Study disclosed that many anticipated impacts of the proposed actions have been adequately addressed in the Eastern Dublin EIR and 2002 SEIR. This is consistent with the comprehensive environmental analysis undertaken as part of the Eastern Dublin EIR with a 20-30 year build-out horizon. Although the Initial Study concluded that the EIRs adequately analyzed most of the potential environmental impacts of the proposed Project, it also identified the potential for a number of new significant impacts or potentially intensified impacts beyond those analyzed in the prior EIR. The City of Dublin has determined that the potential for new and/or substantially intensified impacts required review at an EIR level and concluded that a new Supplemental EIR would be prepared.

Consequently, as required by CEQA, the City prepared and circulated a Notice of Preparation (NOP) to interested public and private parties. A copy of the NOP is included as Appendix 8.2 and responses to the NOP are included in Appendix 8.3.

2.2 Scope of Supplemental EIR

Once an EIR is certified for a project, CEQA prohibits lead agencies from requiring a supplemental or subsequent EIR except in specified circumstances. Additionally, Government Code section 65457 provides that residential projects undertaken consistent with and to implement a specific plan are exempt from further CEQA review unless an event as specified in CEQA section 21166 occurs. According to CEQA section 21166 and CEQA Guidelines section 15162, additional EIR level review may be required only when substantial changes to the project would cause new or substantially increased significant effects, or when substantial changes in circumstances would cause new or substantially increased significant effects, or when substantial new information shows the project would cause new or substantially increased significant effects, or shows that previously infeasible mitigation measures would now be feasible but the project proponent declines to adopt them. Now, in 2005, EDPO, under the Project name of "Fallon Village," proposes amendments to the General Plan, Eastern Dublin Specific Plan, and the existing Stage 1 Development Plan for the entire Project area. The Project also proposes development level entitlements, such as Stage 2 Development Plans, subdivision maps, and site design review, for an approximately 486 acre portion of the Project area. This portion of the Project area shall be referred to as the Development Area.

Based on CEQA section 21166 and this Initial Study, the City has determined that a Supplemental EIR will be prepared for the Project. The Supplement will address the proposed changes to the project analyzed in prior EIRs, will address new and

detailed information for the proposed development areas, and will address several changes in circumstances since the prior EIRs which could affect the impacts and/or mitigations previously identified for the Project. Such changes in the previously analyzed Project and circumstances include, but are not limited to: 1) continued development in the Tri-Valley area and beyond with potential changes in commute patterns and traffic intensities, which also may affect air quality and noise within or on the Project area; 2) changes in the provision and distribution of some public services (schools) and public utilities (water, wastewater, and storm drainage), 3) changes in circulation patterns on the site; 4) completion of a Resource Management Plan (RMP) for biological and cultural resources on the site and additional site-specific biological and cultural resources studies which did not previously exist; 5) changes in the development density and intensity in the Project area that may increase impacts over those previously reviewed; and 6) submittal of Stage 2 Development Plans, subdivision maps and other permit applications containing detailed development plans not previously reviewed. The 2005 Project also includes requested amendments to the Dublin General Plan and EDSP that were not part of previous applications nor were these analyzed in previous EIRs.

Like the Eastern Dublin EIR and the 2002 SEIR, the 2005 Supplemental EIR will be a Program-level document that focuses on the new or substantially increased significant impacts of potential future development pursuant to the proposed General Plan, Eastern Dublin Specific Plan, and Stage 1 Development Plan amendments. Additionally, the 2005 Supplemental EIR will review proposed individual development projects, the environmental impacts they will generate, and the avoidance and mitigation measures they will employ at a Project-level. Unless otherwise noted, all previously adopted mitigation measures applicable to the Project area continue to apply to the proposed Project.

CEQA also requires that an EIR identify a reasonable range of alternatives. The Eastern Dublin EIR provided and analyzed such a reasonable range of alternatives, one of which was adopted in modified form in the 1993 approvals. To address the potential for new and/or substantially intensified significant impacts, the 2002 SEIR identified additional alternatives for the Project Area that could avoid or substantially lessen those impacts. Similarly, the 2005 Supplement will identify additional alternatives that could avoid or substantially lessen identified supplemental impacts and will update each of the previously identified alternatives.

The Eastern Dublin EIR and 2005 SEIR are available for review at the City of Dublin Community Development Department, 100 Civic Plaza, Dublin CA during normal business hours.

2.3 Organization of Draft Supplemental EIR

The Draft Supplemental EIR ("DSEIR") supplements the prior certified EIRs that evaluated development of the Project area, including the Program EIR and Addenda for the Eastern Dublin General Plan Amendment and Specific Plan (SCH #911003064, "Eastern Dublin EIR, or "EDEIR") and the Eastern Dublin Property Owners Stage 1 Development Plan and Annexation EIR (SCH # 2001052114, the "2002 SWIR"). Both prior EIRs are incorporated herein by reference.

This document is organized as follows:

- **Chapter 1.0: Summary of Project and Impacts and Mitigations.** This chapter includes a brief overview of the proposed Project and a summary of impacts and mitigation measures is presented in tabular form.
- **Chapter 2.0: Introduction.** Chapter 2 describes the organization of the DSEIR.
- **Chapter 3.0: Project Description.** This chapter describes the proposed Project, Project location and setting. Project Objectives are also described as well as future approvals required to implement the proposed Project.
- **Chapter 4.0: Environmental Setting, Impacts and Mitigation Measures.** Chapter 4.0 includes the impact and mitigation analysis for the Project. Each environmental topic includes existing conditions (the setting); potential supplemental environmental impacts and their level of significance; and mitigation measures recommended to reduce identified significant impacts.
- **Chapter 5.0: Alternatives.** This chapter addresses alternatives to the proposed Project and a discussion of an environmentally superior alternative.
- **Chapter 6.0: References.** Chapter 6.0 includes references used in the preparation of the DSEIR.
- **Chapter 7.0: Report Authors, Organizations and Persons Contacted.** Chapter 6 lists the authors of the EIR and organizations and persons consulted as part of the environmental analysis.
- **Chapter 8.0: Appendices.** Contained in the Appendices are the Initial Study, Notice of Preparation (NOP), responses to the NOP, City Council Resolution No. 53-93 approving the Eastern Dublin Project EIR, including mitigation findings, overriding considerations and mitigation monitoring program; City Council Resolution No. 40-02 for the 2002 SEIR, technical traffic information

2.4 DSEIR Review Process

The DSEIR will be circulated for public review and comment pursuant to CEQA. Written responses will be prepared to all relevant comments on environmental issues received during the public review period. Public comments and responses will be compiled in a Final Supplemental EIR (FSEIR). After certification, the City will consider the requested Project approvals and make appropriate findings based on the certified SEIR.

2.5 Future Environmental Analysis

Future land use entitlements, including Stage 2 PD-Planned Development rezonings, Site Development Reviews, subdivision maps and other permit-level entitlements, will be required for individual development sites within the Project area not addressed in this SEIR.

Further environmental review may be required for these future projects and additional documentation may be required as appropriate under CEQA and the CEQA Guidelines for activities not examined in the Eastern Dublin EIR, the 2002 SEIR or this DSEIR.

3.0 PROJECT DESCRIPTION

3.1 Project Location

The Project area is approximately 1,132 acres in area and is located on the east side of the City of Dublin, California, in an area bounded by Interstate 580 (I-580) to the south and Fallon Road to the west. **Exhibit 3.1** shows the Project location in relation to the overall Bay Area; **Exhibit 3.2** shows its location in Dublin. The Project area consists of thirteen (13) different parcels of land under eleven (11) separate ownerships. **Exhibit 3.3** shows property ownerships.

All of the Project area is within the City of Dublin and its General Plan area. The southerly portion of the Project area, approximately 494 acres of land, is also in the EDSP planning area.

3.2 Project Area Features

Existing land uses

The topography of the Project area ranges from relatively flat at the southern portion near the freeway, to gently rolling hills at the center, to relatively steep slopes, some exceeding 30% in some places. A series of low knolls trending from northwest to southeast bisect the southern portion of the Project Area and provide a backdrop to the flatter portions of the Project area near the freeway. A few drainages flow north to south through the Project area. A small number of trees exist beyond those planted around existing homesteads and scattered in the drainages.

The properties that comprise the Project area currently are used primarily for dry land farming and cattle grazing with rural residences, a horse ranch and associated outbuildings scattered throughout the site. Improvements to the agricultural lands generally consist of paved and unpaved roads, fences, barns, corrals, wells, water tanks, ponds, single-family homes and various outbuildings.

Adjacent land uses

Land uses surrounding the Project area include rural residential and grazing land uses north of the Project area. The Doolan Canyon rural residential and agricultural area exists east of the Project area. Lands to the west are being developed as the Dublin Ranch project. Properties south of the Project area and south of the I-580 freeway are within the jurisdiction of the City of Livermore and are presently vacant.

Topography.

The topography of the Project area ranges from relatively flat at the southern portion near the I-580 freeway, to gently rolling hills at the center, to relatively steep slopes, some exceeding 30% in some places. A series of low knolls trending from northwest to southeast bisect the southern portion of the Project area and provide a backdrop to the flatter portions of the Project area near the freeway. Existing

topographic elevations range from approximately 350 to 970 feet above sea level. A few drainages flow north to south through the Project area. A small number of trees exist beyond those planted around existing homesteads and scattered in the drainages.

Existing Project area topography is shown on **Exhibit 3.4**.

3.3 Prior Planning Approvals

Eastern Dublin General Plan Amendment

In 1993, the City Council approved the Eastern Dublin General Plan Amendment and Specific Plan (hereafter, "Eastern Dublin project"). The approved project was a modified version of the original General Plan Amendment (hereafter, "GPA") for a 6,920-acre planning area generally known as Eastern Dublin. The original GPA proposed to change commercial land use designations on County property in the southwest portion of the GPA area and agriculture/open space designations elsewhere in the planning area to a range of urban uses, as shown on Figure 2-E of the Eastern Dublin Draft EIR. Within the nearly 7,000 acre planning area, a new Eastern Dublin Specific Plan proposed land use policy at a greater level of detail in order to bridge general plan policy and individual development projects. Intended for both policy and regulatory use, the Specific Plan addressed 3,328 acres, supplementing the GPA with more detailed land use designations, policies, programs and regulations. (Eastern Dublin Draft EIR, hereafter, "Eastern Dublin EIR.")

The GPA planning area was located east of the City of Dublin. The planning area is characterized by a relatively flat plain along I-580, which gives way to rolling foothills and increasingly steep slopes to the northeast. Apart from facilities on County property in the southwest portion of the planning area (former Santa Rita Rehabilitation Center, U.S. Naval Hospital), the Eastern Dublin project area consisted primarily of open grasslands used for grazing and dry farming, and scattered residences. (Eastern Dublin EIR, p. 2-3.)

The original GPA land use plan proposed to replace the undeveloped planning area with a mixed-use urban community. The project concept is set forth in the following excerpt from the Eastern Dublin EIR.

Residential and employment-generating uses will be balanced to enable residents to live near work. Employment-generating uses include retail, service, office, governmental, research and development ("R and D"), and light industrial. Residential designation [sic] range from Rural Residential to High Density multi-family. Higher density housing has been located near the future BART station and along a key transit corridor. Higher densities have also been located close to commercial centers where the concentration of population will contribute to that center's social and economic vitality.

The Eastern Dublin project provides a full complement of regional office and retail land uses located near freeway interchanges, local-serving commercial centers are envisioned as pedestrian- and transit-oriented mixed-use

concentrations which include retail, service, office, and residential uses, and are carefully integrated with surrounding residential neighborhoods.

Open space is a major component of the project's land use plan, giving form and character to the urban development pattern. The open space concept envisions a community ringed by undeveloped ridgelines. Urban and open space areas will be linked by an open space network structured along enhanced stream corridors. The circulation concept calls for an integrated, multi-modal system that reduces potential traffic impacts by providing area residents with choices for a preferred mode of transportation. (DEIR pp. 2-4, Eastern Dublin Responses to Comments, hereafter, "FEIR" p. 66.)

At buildout, the GPA planning area was projected to provide 17,970 new residences, including 2,672 acres designated for Rural Residential with a 100-acre minimum parcel size. Approximately 10.6 million square feet of new commercial space, 25 parks on 287 acres, 571 acres of designated open space, and 12 new schools were also planned, all on 6,920 acres of land. (Eastern Dublin EIR, p. 2-7.) Buildout was expected to occur over a 20 – 30 year period from the start of construction. (Eastern Dublin EIR, p. 2-6, Eastern Dublin Final EIR p. 8.) The major policies of the GPA are summarized on pages 2-9 -10 of the Eastern Dublin EIR.

Exhibit 3.5 depicts the Project area in relation to the current General Plan land use map and Eastern Dublin Specific Plan (EDSP).

Eastern Dublin Specific Plan

The Eastern Dublin Specific Plan addresses 3,328 acres in the south and west portion of the eastern Dublin area. Seventy percent of the GPA residential development and 94% of the new commercial space was planned for in the Specific Plan area. (Eastern Dublin EIR, p. 2-8.) The land use plan calls for compact villages with residential and neighborhood serving uses. Employment-generating commercial uses are provided along arterials with transit access. (Id.) The major policies of the Specific Plan are set forth on pages 2-10 to 2-14 of the Eastern Dublin EIR. The EDSP was amended in 2002 to add the Dublin Transit Center into the planning area. The Transit Center is located on the westerly side of the EDSP planning area.

Eastern Dublin EIR

The City of Dublin prepared a Program EIR for the Eastern Dublin project based on the original 6,920 acre GPA planning area and land use designations, and the Specific Plan area, both as described above. (SCH # 911103064.)

The City initiated the Eastern Dublin project in 1988 after several separate development projects were proposed for the area. The goal of the project was to provide comprehensive planning for development types, locations and patterns in Eastern Dublin, which would be implemented through future individual development projects. As noted in the Eastern Dublin EIR statement of project objectives, one of the objectives of the project was to preserve visually-sensitive and biologically-sensitive habitat areas, encourage development patterns that support transit on local and regional levels, and maintain balanced employment and housing

opportunities to reduce traffic congestion and air pollution. (Eastern Dublin EIR, p. 2-5.)

The EIR analyzes the potential environmental effects of adopting and implementing the GPA and Specific Plan project. The EIR also analyzes the cumulative effects of the Eastern Dublin project, that is, the project "within the context of regional development." (DEIR p. 5.0-1.) As required by CEQA, the Eastern Dublin EIR includes a list of ongoing and future development projects that, together with the Eastern Dublin project, might "compound subregional (i.e. Tri-Valley) environmental problems." (Id.) Reflecting a surge of development interest at the time, the cumulative projects in Dublin alone included 924 units, plus another 3,133 units on 3,140 acres in Western Dublin, and the potential intensification of uses at Parks RFTA. The Dougherty Valley Specific Plan projected 11,000 units; while the City of Livermore was considering the North Livermore General Plan Amendment with a buildout potential between 3,713 and 16,513 units. The various cumulative projects also proposed several million square feet of non-residential development. The list of cumulative projects from the Eastern Dublin EIR is shown on Figure 5-A of that DEIR. Virtually all of the potential new development areas in the list of cumulative projects was undeveloped land, primarily in agriculture and/or open space uses, as evidenced by the aerial photographs which form the base maps for Figures 2-B and 2-C of the Eastern Dublin DEIR.

As would be expected for a major general plan level project during a time of major development activity, the Eastern Dublin EIR identified many potential significant impacts on both a project (GPA and Specific Plan) level and a cumulative (regional) level. Mitigation measures were proposed and adopted for most of the significant impacts to reduce them to less than significant. The City of Dublin would implement some of the mitigation measures directly; examples include but are not limited to adopting a stream corridor restoration program, designating substantial areas within the Project area as Open Space or Rural Residential where low density development will also provide foraging habitat, and continuing to participate in regional studies of future transportation requirements, improvements and funding. Other mitigations would be implemented through conditions or development standards for future development projects; examples include but are not limited to proportionate-share contributions to roadway improvements and transit service extensions. Many of the mitigation measures also included policies and action programs identified in the Eastern Dublin GPA and Specific Plan documents.

Even with mitigation, however, some of the identified significant impacts could not be reduced to a less than significant level. Several of these impacts were cumulative level impacts, such as loss of agriculture and open space, I-580 and other regional traffic impacts, and air quality impacts. As required by CEQA, the Draft EIR identified project alternatives, including No Project and No Development alternatives, a Reduced Land Use Intensities alternative, and a Reduced Planning Area alternative, and analyzed whether the alternatives would avoid any of the otherwise unavoidable impacts. As further discussed below, the City Council adopted a modified version of the Reduced Planning Area alternative after certifying the EIR as adequate and in compliance with CEQA on May 10, 1993. (Resolution 51-93.) The City Council also certified an Addendum dated May 4, 1993

which assessed the modifications to the Reduced Planning Area alternative and concluded that this alternative "will have no environmental impacts not addressed in the Draft Environmental Impact Report for the Eastern Dublin General Plan Amendment and Specific Plan." (May 4, 1993 Addendum, p. 1.) The Addendum further concluded that no subsequent or supplemental EIR was required under CEQA Guidelines section 15162 or 15163 for approval of the modified alternative.

A second Addendum was later prepared. Dated August 22, 1994, the second Addendum updated plans for providing sewer services to Eastern Dublin. The May 10, 1993 certified EIR, the May 4, 1993 Addendum and the August 22, 1994 Addendum are collectively referred to hereafter as the Eastern Dublin EIR, or the "EDEIR" and are incorporated herein by reference.

Eastern Dublin project approval

The Eastern Dublin General Plan Amendment and Specific Plan planning process spanned some five years beginning in 1988. The City identified a preferred alternative in 1991 and prepared a draft GPA for the 6,920- acre planning area and a Specific Plan for 3,328 acres in 1992. A Draft EIR was prepared and circulated for public review in August of 1992. After numerous Planning Commission and City Council hearings, the City Council declined to approve the original 6,920-acre GPA. Instead, the City Council approved a modified version of the Eastern Dublin EIR's Alternative 2: Reduced Planning Area. (Resolution 53-93, see Appendix 8.4 of this DSEIR.)

Following certification of the Eastern Dublin EIR and approval of the modified Reduced Planning Area alternative, a lawsuit was filed challenging the validity of the EIR. The Court upheld the EIR, finding it in compliance with CEQA and the CEQA Guidelines. The City has since implemented the mitigation monitoring program adopted by the Council (Resolutions No. 53-93 and 123-96).

2002 Prezoning and Annexation. In 2002, an application was filed with the City by a number of owners in the Eastern Dublin area to annex the area to the City and the Dublin San Ramon Services Area (DSRSD). Applications were also filed to prezone the land to establish as a PD-Planned Development Zoning District and to approve Stage 1 Development Plan to guide future development of the Project area. The annexation and prezoning were subsequently approved.

As required by the Dublin Zoning Ordinance, the 2002 prezoning included a Stage 1 Development Plan, which currently governs land uses within the Project area. The 2002 Stage 1 Development Plan covers the entire Project area and reflects the general land use types, densities and locations established in the 1993 Eastern Dublin project approvals. At the time of annexation, the residential land use intensity was established by using the mid-point of the allowable density ranges. Retail, industrial and office land use intensity was established by defined floor area ratio. In approving the 2002 Stage 1 Development Plan, the City further established maximum development intensities by property. The Stage 1 Development Plan also included a master landscape plan and development phasing plan.

Table 3.1 shows the existing Stage 1 Development Plan land use designations and number of dwelling units for the Project area as approved in 2002.

Table 3.1. 2002 Stage 1 Development Plan Land Use Summary

LAND USE DESIGNATIONS	Acres	Units	Sq. Ft.
Low Density Residential	433.5	1,734	
Medium Density Residential	9.4	94	
Medium High Residential	34.8	696	
Rural Residential/ Agriculture	269.1	2	
General Commercial	41.0		446,490
Neighborhood Commercial	10.3		134,600
Industrial Park	68.9		840,360
Future Study Areas (RRA, I & GC)	92.6		
Junior High School	14.6		
Elementary Schools	17.3		
Community Park	14.1		
Neighborhood Parks	24.0		
Neighborhood Squares	2.7		
Open Space	76.9		
TOTAL	1,109.2	2,526	1,421,450

Note: In addition to the tabulation above the annexation included approximately 10 acres of road right-of-way for Fallon Road, Croak Road and Central Parkway. The total area annexed, including road rights-of-way, is approximately 1,119 acres.

Source: MacKay & Soms, 2005

Of the 2,526 residential units included in the 2002 annexation and Stage 1 Development Plan, 1,240 homes are located within the EDSP; the remaining 1,286 homes are outside the EDSP. All of the commercial and industrial uses above are located within the existing EDSP area.

The existing Stage 1 Development Plan is shown on **Exhibit 3.6**. The same Exhibit also shows existing General Plan and EDSP land use designations for the Project area.

A portion of the annexation area was designated as a Future Study Area as these properties are located within the boundary of the Livermore Airport Protection Area and precluded from residential development. These Future Study Area properties are also within the boundary of the existing EDSP. The ultimate land uses appropriate for these properties were to be defined in subsequent documents. These lands were annexed with Rural Residential, Industrial or General Commercial land use designations but given only Rural Residential zoning in the existing Stage 1 Development Plan.

3.4 Project Applications

Overview

Project applications considered in this Supplemental DEIR include amendments to the Dublin General Plan, the Eastern Dublin Specific Plan, and the Stage 1 Planned Development rezoning and Development Plan for the entire Project area.

Applications also include a Stage 2 Planned Development rezoning for the northerly portion of the Project area consisting of approximately 486 acres land under the control of Braddock & Logan and related land use entitlements including a vesting subdivision map, Site Development Review, a Development Agreement and a Lot Line Adjustment with the property owner to the west. Cancellation of existing Williamson Act Land Conservation Agreements on portions of the Project area are also proposed.

Program-level applications. The following requested elements apply to the entire Project area.

General Plan Amendment

The existing General Plan land use diagram for the Fallon Village Project area would be modified to reallocate land uses and to change the land use designations for the portion of the Project area encompassed by the Livermore Airport Protection Area from "Future Study Area" to a "General Commercial/ Campus Office/ Industrial" land use designation. A large Open Space Corridor would also be provided in the approximate center of the Project area consistent with the Resource Management Plan prepared for the Project area. The conversion of the Future Study area to commercial office and industrial land uses would result in the potential to develop an additional 1,081,725 gross square feet than would be allowed under current General Plan land use designations.

The proposed General Plan, the Specific Plan land use designations and the Planned Development Stage 1 land use designations are shown on **Exhibit 3.7**

EDSP Amendment

The EDSP planning are presently only encompasses the southerly portion of the Project area (see **Exhibit 3.5**), which includes approximately 472 acres of land. The Project includes an application to amend the EDSP to include all of the Fallon Village Project area (1132 acres) within the EDSP. At the same time, EDSP land use designations would be changed to be consistent with proposed General Plan land use designations.

The amendment also includes a modification to Policy 6-29 contained in the EDSP and modification to Figure 6.3, Environmental Constraints.

Stage 1 Planned Development Rezoning and Development Plan (Program level)

In 2002, prior to the annexation of the Project area to the City of Dublin, the City rezoned the area with PD-Planned Development zoning area. Based on additional planning of the Project area, including but not limited to the completion of the RMP, Project area property owners have requested changes to the existing Stage 1

Planned Development zoning and have submitted a revised Stage 1 Development Plan.

Under the City's zoning ordinance, a Stage 1 Development Plan must, among other things, establish: a plan of proposed land use by type and density of use; the maximum number of dwelling units and commercial/ office/ industrial areas; a master landscape plan; and a preliminary development phasing plan.

Exhibit 3.7 shows the proposed amended Stage 1 Development Plan and General Plan for the Project area. The Project would include 3,108 dwelling units and 2,503,175 gross square feet of commercial and office use. This is 582 dwellings and 1,081,725 gross square feet greater than the current Stage 1 Development Plan. The additional approximately one million square feet of commercial and office is proposed in the Livermore Airport Protection Area and would change the General Plan/ Specific Plan designation of Future Study Area (see discussion above) and the Stage 1 Development Plan zoning of Rural Residential to General Commercial/ Campus Office/ Industrial designation. The 582 additional residential units are included within a total of approximately 600 dwelling units which were, at the time of the 1993 EDSP and EDEIR, planned for the property in the Livermore Airport Protection Area. In the adopted 1993 plans these properties were given a General Plan/ Specific Plan designation of "Future Study Area" with the proviso that residential units could not be constructed unless subsequently found acceptable within the APA. The Project proposes to transfer 582 of these approximately 600 dwelling units to portions of the site not encumbered by the Airport Protection Area restrictions. Table 3.2 contains the land use summary for the proposed Project.

Table 3.2. Project Land Use Summary

Land Use	Acres	Dwelling Units	Non-Residential Sq. Ft.
Low Density Residential	441.3	1,737	--
Medium Density Residential	60.1	601	--
Medium High Residential	33.6	672	--
Village Commercial/ Residential	6.4	96	83,635
Rural Residential/ Agricultural	130.5	2	--
General Commercial	72.1	--	785,169
General Commercial/ Campus Office	134.0	--	1,634,371
Elementary School(s)	20.0	--	--
Community Park	18.3	--	--
Neighborhood Parks	25.8	--	--
Neighborhood Squares	2.7	--	--
Open Space	187.2	--	--
Total	1132.0	3,108	2,503,175

Note: This table includes both the additional 13.0± acres on the west side of the Project Area which have been added since annexation and the additional 10.0 acres of road rights-of-way which were not tabulated at the time of annexation.

Source: MacKay & Somps, 2004

Exhibit 3.7 also shows the boundary of the “Fallon Village Precise Plan Area,” located in the approximate center of the Project area. This area defines the approximate boundary of the proposed Fallon Village Center.

As shown in Table 3.2, above, the applicant proposes to add approximately 13 acres of land to the Project from Dublin Ranch, immediately to the west of the 2002 Project area. This land is presently designated as Rural Residential/ Agriculture, Open Space and a partial elementary school site; however, a school is no longer planned at this location. Development of the additional acreage is integrated into the Project general plan, specific plan and zoning amendments, as well as development permit applications. A related lot line adjustment would revise the property boundary between the Project and Dublin Ranch.

The Fallon Village Center Project area is one of several “villages” described in the EDSP. The “village center” would serve as a social and commercial core to residential neighborhoods in the hills surrounding the village center. The village center would be located along either side of Central Parkway generally west of Croak Road. It would include a mix of Village Commercial, Medium-High Density Residential, Neighborhood Square, and Community Park uses.

Residential density ranges for each of the properties within the Project area would be established by the general plan and specific plan land use designations. Low Density Residential (0.9 to 6.0 dwellings/acre) would allow lot sizes ranging from approximately 3,200 square feet to approximately one acre in size. Medium Density residential (6.1 to 14.0 dwellings/acre) would permit small lot housing types including “z-lot,” and similar cluster type housing. Medium-High densities (14.1-25.0 dwellings/acre) would accommodate rental apartments, condominium and similar housing styles. Finally, the Rural Residential/ Agriculture designation would permit one dwelling per 100 acres of land. The maximum number of homes per existing parcel would be established in the proposed Stage 1 Development Plan.

The Stage 1 Development Plan proposes 2,503,175 square feet of commercial, office and industrial land uses. The proposed Floor Area Ratios for commercial and office uses would be based on the intensities similar to those allowed in the EDSP and evaluated in the Eastern Dublin EIR, which would be 0.25 (General Commercial), 0.30 (Neighborhood Commercial) and 0.28 (General Commercial/ Campus Office). The maximum commercial and office development per existing parcel would be established in the proposed Stage 1 Development Plan.

The Project would also include approximately 18 acres of community parkland, approximately 27 acres of Neighborhood Parks and Neighborhood Squares and would reserve approximately 20 acres for future school use. Interconnected multi-purpose trails would be provided within the Project area.

A major feature of the Project is the central Open Space Corridor. The corridor includes approximately 86 acres running generally northeast-southwest through the Project area. Proposed along an existing drainage, the corridor is approximately 400 feet wide, connecting to open space lands to the north, and widening to a broader

open space area near Fallon Road, which includes an existing arroyo willow riparian woodland near Fallon Road. The Project includes use limitations and improvement standards intended to protect and preserve sensitive biological resources. For example, trails linking residential areas could extend along the Open Space Corridor if such trails do not disturb biological resources.

Table 3.3 indicates the proposed Project land uses and development intensities as would be designated for individual properties in the proposed Stage 1 Development Plan.

**Table 3.3.a. Project Land Use by Property Ownership
(Part 1 – Parcels 1, 2 and 3)**

Parcel No.	1		2		3	
	Acres	du-sf	Acres	du-sf	Acres	du - sf
Low Density Residential	56.1	239	117.4	469	48.0	192
Medium Density Residential			10.4	104	23.4	234
Medium High Density Residential					21.8	542
Rural Residential / Agriculture	69.6	0	19.4	0		
Village Commercial, Residential					[6.4]	96
Village Commercial, Commercial					6.4	0.084
General Commercial						
General Comm/Campus Office/Ind Park						
Public/Semi-Public	[0.7]		[1.6]		[2.4]	
Elementary School	0.6				10.0	
Community Park					11.1	
Neighborhood Park			11.5		5.8	
Neighborhood Square					2.7	
Open Space	33.2		6.8		60.5	
Totals – Acres and units:	159.5	239	165.5	573	189.7	1,064
Totals – Commercial sf	-	0.000	-	0.000	-	0.084

Legend:

Parcel No	Property Owner	Parcel No	Property Owner
1	Braddock & Logan	3	First American Title
2	Croak		

Table 3.3.b. Project Land Use by Property
(Part 2 – Parcels 4, 5 and 6)

Parcel No.	4		5		6	
	Acres	du - sf	Acres	du - sf	Acres	du - sf
Low Density Residential						
Medium Density Residential			7.0	70	9.6	96
Medium High Density Residential	6.5	130				
Rural Residential / Agriculture						
Village Commercial, Residential						
Village Commercial, Commercial						
General Commercial	72.1	0.785				
General Comm/Campus Office/Ind Park	18.5	0.226	34.2	0.417	40.0	0.488
Public/Semi-Public	[0.3]		[0.1]		[0.2]	
Elementary School						
Community Park	7.2					
Neighborhood Park						
Neighborhood Square						
Open Space	35.8		9.1			
Totals – Acres and units:	140.1	130	50.3	70	49.6	96
Totals – Commercial sf		1.011		0.417		0.488

Parcel No	Property Owner
4	Chen
5	Anderson Second Family Ltd Ptrsp
6	Righetti Partners

**Table 3.3.c. Project Land Use by Property (cont'd)
(Part 3 – Parcels 7, 8 and 9)**

Parcel No.	7		8		9	
	Acres	du - sf	Acres	du - sf	Acres	du - sf
Land Use						
Low Density Residential						
Medium Density Residential	9.7	97				
Medium High Density Residential						
Rural Residential / Agriculture						
Village Commercial, Residential						
Village Commercial, Commercial						
General Commercial						
General Comm/ Campus Office/ Ind Park	30.5	0.372	1.1	0.013	9.3	0.113
Public/Semi-Public	[0.2]					
Elementary School						
Community Park						
Neighborhood Park						
Neighborhood Square						
Open Space						
Totals – Acres and units:	40.2	97	1.1	0	9.3	0
Totals – Commercial sf		0.372		0.013		0.113

Parcel No	Property Owner	Parcel No	Property Owner
7	Branough	9	Monte Vista
8	EBJ Partners		

**Table 3.3.d. Project Land Use by Property (cont'd)
(Part 4 – Parcels 10, 11 and Totals)**

Parcel No.	10		11		Totals	
	Acres	du - sf	Acres	du - sf	du - sf	Acres
Low Density Residential	191.1	839			1,739	412.6
Medium Density Residential					601	60.1
Medium High Density Residential					672	28.3
Rural Residential / Agriculture	53.7	0			0	142.7
Village Commercial, Residential					96	[6.4]
Village Commercial, Commercial					0.084	6.4
General Commercial					0.785	72.1
General Comm/Campus Office/Ind Park			0.4	0.005	1.634	134.0
Public/Semi-Public	[2.6]					[8.5]
Elementary School	10.4					21.0
Community Park						18.3
Neighborhood Park	6.3					23.6
Neighborhood Square	5.4					8.1
Open Space	59.9					205.3
Totals – Acres and units:	326.8	839	0.4	0	3,108	1,132.5
Totals – Commercial sf		0.000		0.005	2,503	

Parcel No	Property Owner
10	Fallon Enterprises
11	Pleasanton Ranch Investments

The Stage 1 Development Plan is accompanied by a Design Guideline document that would guide the overall development of the Project area, including the general location and design of community entries and neighborhood entries, the design of streets and intersections within the Project area, the location and design of an internal trail system, site planning guidelines for various land use types, landscape and streetscape designs and treatment of walls and fences. These Guidelines will apply to all development in the Project area.

Project access and circulation. Primary access to and through the Project area would be provided from Fallon Road and the extensions of Dublin Boulevard and Central Parkway. Regional access is currently provided to the Project site and would continue to be provided by the I-580 Freeway. Collector streets located throughout the Project would provide access to residential neighborhoods and non-residential areas; these streets would be specifically identified at the Stage 2 Development Plan and subdivision map level.

Fallon Road would be widened to between four and eight lanes, and improved generally along its current alignment. Central Parkway is proposed to extend in an easterly direction from Fallon Road until it would turn in a southerly direction, following the existing alignment of Croak Road and terminating at Dublin Boulevard. A loop road (the "Upper Loop Road") of two to four lanes in width that would provide access to northern residential neighborhoods. All roads would be constructed to existing City standards.

Multi-use trails would also be constructed in accordance with the policies and programs of the General Plan, EDSP and the City's Park and Recreation Master Plan. Such trails would accommodate bicycle, jogging and pedestrian uses.

Utility Services. The Project area is located within the service area of the Dublin San Ramon Services District (DSRSD). The District would provide potable water, recycled water and wastewater services to serve the proposed Project. Major facilities to serve Project demand would be constructed and/or financed by Project developers. Such services would be provided in accordance with DSRSD's Facilities Master Plan (as may be amended) that includes the Project area.

Exhibit 3.8 shows the preliminary master infrastructure concept plan for the Project area

Stormwater drainage to serve the Project area would include a major backbone drainage system, which would consist of larger pipes that would connect to open channels and/or box culverts toward the existing G-3 box culvert located within Dublin Ranch Area H just west of Fallon Road. Local drainage facilities would be maintained by the City of Dublin with larger regional drainage facilities maintained by Zone 7.

The Project would also include features addressing the water quality and hydromodification standards of the federal Clean Water Act-National Pollution Discharge Elimination System (NPDES) requirements. The Project proposes that

runoff from small, frequent "water quality" events, such as rain storms, enter the infiltration/ water quality facilities, with higher flows by-passing the facilities. The use of these water quality bioretention filters and of the natural Open Space Corridor flow channel would slow runoff and minimize hydromodification impacts on downstream facilities while providing necessary water quality treatment.

Site Grading. Grading activities would occur within the Project area to accommodate planned land uses, roads and utilities. The nature and general location of grading throughout the Stage 1 Development Plan area would continue to be governed by adopted mitigation measures in the Eastern Dublin EIR and 2002 SEIR. Grading proposals and mitigation measures will be refined as future Stage 2 Development Plan are submitted. The proposed grading for the Project Stage 2 Development Plan is further discussed below.

Inclusionary Housing Requirements. The City of Dublin's inclusionary zoning ordinance requires that 12.5 percent of a project's dwelling units must be affordable to very low, low and moderate-income households. Compliance consists of constructing the required number of inclusionary units; up to forty percent out of the total of 12.5 percent requirement may be paid as an in-lieu fee to the City. The proposed Stage 2 Development Plan specified how affected properties would comply with the City's ordinance.

Phasing. The Project is anticipated to be constructed in at least two phases. The first phase would include approximately 473 acres located in the northerly one-third of the Project area. At least one park would be included in this phase. One Elementary School may also be constructed in the first phase, although this could be built in the second phase depending on need.

The second and possibly later phases would include the remainder of the Project area.

Project level applications. The following applications apply to the northerly portion of the Project area.

Stage 2 Planned Development Rezoning and Development Plan

In addition to programmatic level analysis, the 2005 Supplemental EIR will analyze specific development-level actions for the northerly portion of the overall Project area, encompassing approximately 486 acres of land. The applicant is Braddock & Logan Services, Inc.

Pursuant to Chapter 8.32 of the Dublin Zoning Ordinance, a Stage 2 Development Plan provides more detailed information for a development project, including but not limited to permitted land uses, maximum non-residential development densities, architectural standards, a preliminary landscape plan and similar detailed development information.

Stage 2 Development Plan. The Project-level entitlements would permit development of approximately 486 acres encompassing the two northern-most parcels in the Stage 1 Development Plan area as indicated on **Exhibit 3.3**. This area is

comprised of the Fallon Enterprises parcel on the west and the Braddock & Logan parcel on the east. The proposed Stage 2 area is located within the City of Dublin and is bordered by Dublin Ranch and a golf course to the west, the City's Sphere of Influence/City Limits boundary to the east and north, and the Jordan and Croak properties to the south. Project-level entitlements include an approximately thirteen-acre lot line adjustment between the Fallon Enterprises parcel and property owned by the Lin family on the eastern portion of the Dublin Ranch golf course to allow more sensitive and efficient grading in that area between the two projects.

The proposed Stage 2 Development Plan is shown on **Exhibit 3.9**.

Land Use and Development Concept. Five residential neighborhoods are proposed in the Stage 2 Development Plan, with lot sizes ranging between 3,200 and 6,000 square feet. The neighborhoods are arranged around a centrally located elementary school, located along the Upper Loop Road and adjacent to the Stream Corridor. The applicant proposes to construct a day care facility as part of the elementary school in satisfaction of the City's Public/Semi-public sites requirements. The proposed Stage 2 Development Plan would provide an approximately five acre neighborhood park located adjacent to the elementary school and an approximately four-acre neighborhood square located at the terminus of a two-lane central residential collector street with widened sidewalks and parkways. The neighborhood square would be designed to meet the City's park requirements and to provide recreation opportunities in the upper elevations of the development area.

Approximately 34 acres of the Open Space Corridor would be located within the proposed Stage 2 PD area. Multi-use trails with a width of approximately 12 feet, would be located in the outer 30' of each side of the Corridor. The Corridor would preserve, create an enhance habitat for native species and disturbed areas would be revegetated with native landscaping appropriate to the area. Approximately 45 acres of additional land around an existing stock pond northwest of the Corridor is proposed to be designated Open Space and would be placed in a conservation easement to protect sensitive habitat and species as described in the RMP.

Table 3.4, below, summarizes the proposed Stage 2 Development Plan land use data and compares this Project level proposal with the Program level proposed in the amended Stage 1 Development Plan. The residential land uses of the Stage 2 Development Plan are consistent with the proposed Stage 1 Development Plan. The Stage 2 park proposal provides 2.7 acres more parkland than shown in the proposed Stage 1 Development Plan.

Table 3.4. Proposed Stage 2 Development Plan and Amended General Plan Land Use

Land Use Designation	Stage 1 Plan		Stage 2 Plan	
	Acres	DU	Acres	DU
Low Density Residential	277.2	1,076	252.1	1,078
Rural Residential/ Agricultural	111.1	2	120.0	0
Elementary School	10.0	0	11.0	0
Community Park	0	0	0	0
Neighborhood Park	8.5	0	6.3	0
Neighborhood Square	0	0	0	0
Open Space	79.0	0	92.0	0
Totals	486.3	1,078	486.3	1,078

Source: Braddock & Logan, 2005

The design of the Project proposes to take advantage of the existing topography of the site and neighboring properties to create views for future residents. Views from the neighborhoods to the adjacent Dublin Ranch Golf Course are proposed to be integrated into the site plan through the inclusion of open-ended cul-de-sacs that open onto the golf course property and a small green that would provide a view beyond homes through to the golf course.

Access and Circulation. Primary access to and through the Stage 2 Development Plan area would be from Croak Road from the south and Fallon Road from the west connected by the "Upper Loop Road" to the north. The Upper Loop Road would connect to the existing City road network near the northwest corner of the Project area. Croak road would be used as a secondary access. Interim improvements to Croak Road would be necessary to provide access to the first phases of development. Trails are proposed along the Open Space Corridor and along major streets. Croak Road and various other streets are proposed to be single-loaded along portions of the open space to provide views of the stream corridor to pedestrians and motorists. Open-ended cul-de-sacs have also been planned along the Open Space and Rural Residential/ Agricultural areas for recreation/ trail access and maintenance/ fire access purposes.

The Project may include construction of a grade separated pedestrian walkway between the Project area and the Community Park.

Design Guidelines. Design Guidelines have been proposed to ensure consistent implementation of the Stage 2 Development Plan. The Guidelines are more specific than the general Stage 1 Planned Development Design Guidelines described above. Stage 2 Guidelines describe an overall vision for the proposed Stage 2 Development Plan and govern entries, streetscape design, a Project trail system, the design of neighborhood parks, landscaping standards, architectural design criteria, fencing and landscaping and similar elements.

Utility Services: Utility services for the Stage 2 Development Plan area would require connection to DSRSD's existing system and sewer treatment would occur at DSRSD's existing wastewater treatment plant. Gravity sewer mains would serve all the proposed development area west of the Open Space corridor, conveying sewage to proposed sewer main facilities in Fallon Road and Dublin Boulevard. The portion of the development west of the Open Space corridor would be sewer, in an interim condition, by a combination of pumped sewer from the southern areas and then by gravity sewer from the northern areas, both flowing to a gravity connection westward across the Open Space corridor that would be sewer by a gravity sewer main along the ultimate Croak Road alignment, flowing south to the Dublin Boulevard sewer main.

Water would be supplied to the proposed Stage 2 development area by extension of DSRSD's Zone 2 and Zone 3 mains in Dublin Ranch. Water supply mains would be looped through the development area and connected to an existing main in Fallon Road.

The storm drain system for the Stage 2 development area proposes a combination of underground piped conveyance of development area runoff and use of the Open Space drainage corridor to convey collected runoff from adjacent open space and rural residential/agriculture designated land uses. The major underground systems would be located in the Upper Loop Road and Croak Road extension with minor facilities running through the local subdivision streets. Stormwater collection facilities would be sized to City standards. The strategy for maintaining the quality of post-development storm water runoff from the Project is in accordance with the guidelines proposed at a Program level. The "Stage 1 Plan Development Level Stormwater Quality/Drainage Concept" report will be the basis for this strategy. A number of Best Management Practice (BMP) methods would be employed in the Stage 2 development (i.e.: bioretention filters, bio-treatment swales, inlet stenciling, etc.). The primary focus for the Stage 2 Development Plan Project water quality treatment would be to collect and direct "first flush" runoff (or approximately the second year plus storm events) into biofilter type treatment facilities. Some portion of runoff would be directed by surface conveyance into linear biofilter strips located in the wider parkway strips between curb and sidewalk on major, non-home fronting streets. The majority of water quality treatment will be accomplished by using diversion structures to direct a portion of runoff (the "first flush" runoff) out of the storm drain system in the Upper Loop Road and Croak Road into bioretention filter beds located in the lowest portions of the development, adjacent to these major roads. Where feasible, cleaned water from the bioretention filters would be discharged back to the Open Space drainage corridor to replenish natural runoff. All runoff treatment would occur prior to entering the Zone 7, G-3 drainage facility at Fallon Road.

Site grading. Slopes within developed areas are proposed to be graded at a 2:1 ratio with most slopes within Open Space and Rural Residential/Agricultural areas proposed at 3:1. At the north of the urban development area grading at a 2.5:1 or 3:1 slope is proposed to remove and repair existing landslides which exist above proposed homes. New slope contours would tie smoothly to existing

contours and disturbed areas would be hydroseeded so as to retain a natural look for the graded hills. Where needed for maintenance and fire safety access purposes, a 30-foot wide access bench and easement are proposed along the rear of lots which would abut open space.

Inclusionary Housing Requirements. The Project proposes to meet the City inclusionary zoning ordinance by constructing the required number of inclusionary units or, as an alternative, paying for up to forty percent of the total 12.5 percent requirement as an in-lieu fee to the City.

Phasing. Phasing of the neighborhoods is proposed to proceed generally from west to east and from south to north. Park and school phasing are to be subject to the requirements of the City of Dublin and the Dublin Unified School District respectively.

Subdivision map

The Stage 2 Development Plan is accompanied by a Vesting Tentative Map application to divide the Stage 2 area into smaller lots for purpose of sale. **Exhibit 3.9** shows the proposed vesting tentative tract map in addition to the proposed Stage 2 Development Plan.

Lot Line Adjustment

The applicant proposes to add approximately 13 acres of land to the Project from Dublin Ranch, immediately to the west of the Project area. This land is presently designated as Rural Residential / Agriculture, Open Space or a partial elementary school site; however, a school is no longer planned at this location. Development of the additional acreage is integrated into the Project general plan, specific plan and zoning amendments, as well as development permit applications. A related lot line adjustment would revise the property boundary between the Project area and Dublin Ranch.

Exhibit 3.10 shows the proposed land affected by the proposed Lot Line Adjustment.

Williamson Act Agreement Cancellation

The Project area includes Williamson Act Land Conservation Agreements on two of the properties comprising the Project area. This includes 162 acres of land on the Croak property within the proposed Stage 1 Development Plan area for which a Notice of Non-Renewal was filed in January 2001 and the Contract will expire in January 2010. A second Williamson Act contract exists on the Fallon Enterprises property within the proposed Stage 2 Development Plan area. A Notice of Non-Renewal was filed for this property in January 1997 and the contract will expire in January 2006.

Landowners may request that one or both of the Contracts be cancelled prior to expiration. Such cancellation must be approved by the Dublin City Council after making certain findings and the property owners must pay cancellation fees to the State of California.

Potential Williamson Act cancellation was addressed in the 1993 EIR and was found to be not significant.

Properties under Williamson Act Agreements include 475.75 acres of land which are shown on **Exhibit 3.11**.

Development Agreement

A Development Agreement would be executed between the City of Dublin and the applicant, pursuant to the Dublin Municipal Code. The Development Agreement would vest the land use regulations for the Stage 2 Project, establish the Developer's vested rights and obligations, and facilitate implementation of the Stage 2 Development Plan Project.

Geologic Hazards Abatement District

Project developers may form one or more Geological Hazard Abatement Districts for the purpose of financing remediation of landslides and/or other soil conditions.

3.5 Project Objectives

The objectives of the Eastern Dublin Project are set forth in the Eastern Dublin EIR. (DEIR p. 2-5.) Additional objectives of the currently proposed Project include.

- a) Implement the City's objectives for Eastern Dublin as set forth in the General Plan, Eastern Dublin Specific Plan, and Eastern Dublin EIR.
- b) Consistent with the Livermore Airport Land Use Plan and Alameda County Airport Land Use Policy Plan, provide for non-residential uses in the Airport Protection Area.
- c) Provide flexibility to allow a potential mix of future commercial, office and/or light industrial uses in the Airport Protection Area and along the I-580 freeway in the southeasterly portion of the Project area by creating a new General Plan and Eastern Dublin Specific Plan land use designation and related development standards to allow future Project developers to respond more effectively to changing development trends.
- d) Provide a zoning level framework to guide future development projects within the Project area consistent with the General Plan and Eastern Dublin Specific Plan.
- e) Provide for development of up to 3,108 dwelling units and up to 2,503,175 square feet of office, commercial and similar non-residential development in the Project area.
- f) Implement findings and recommendations of the Resource Management Plan by establishing an Open Space Corridor within the Project area to protect sensitive biological species and their habitats.

3.6 Future Actions Using This Supplemental DEIR

This Draft SEIR supplements the certified Eastern Dublin EIR and 2002 SEIR pursuant to Sections 15162 and 16163 of the CEQA Guidelines for the following anticipated future actions related to the proposed Project.

- City action on the General Plan Amendment and Specific Plan Amendment;

- City action on the Planned Development rezoning and related Stage 1 Development Plan for the entire Project area;
- City actions on the Stage 2 Development Plan for the Braddock & Logan portion of the Project area;
- City actions on subdivision maps, Site Development Reviews, cancellation of Williamson Act contracts and a Development Agreement for the Stage 2 Development Plan portion of the Project area.

In addition to the above approvals, the DSEIR may also be used by state or regional agencies in their review of other permits required for the Project (e.g. CDFG Streambed Alteration Agreements, California Endangered Species Act permits, Water Quality Certification or waiver by the Regional Water Quality Control Board under the Clean Water Act).

Blue Ox Associates, Berkeley, California 8-8-2005

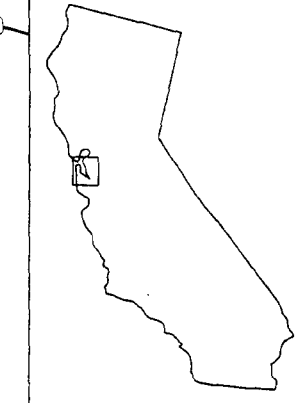
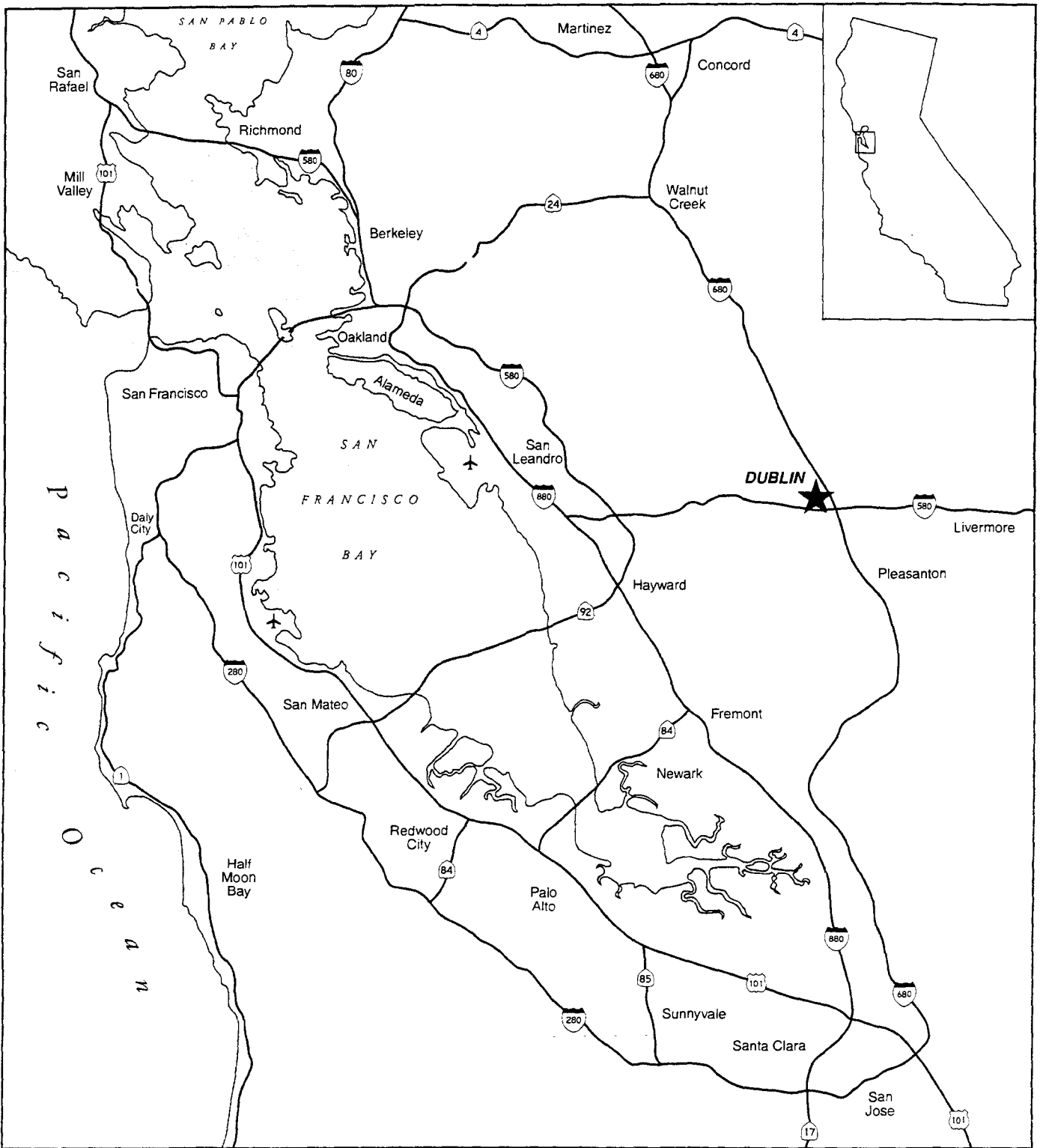
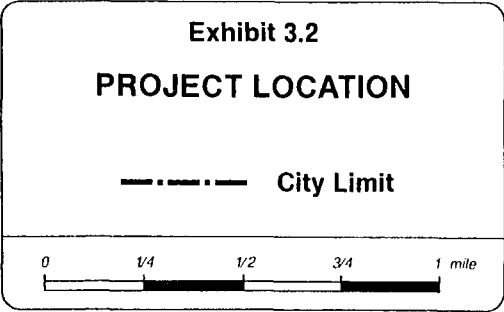
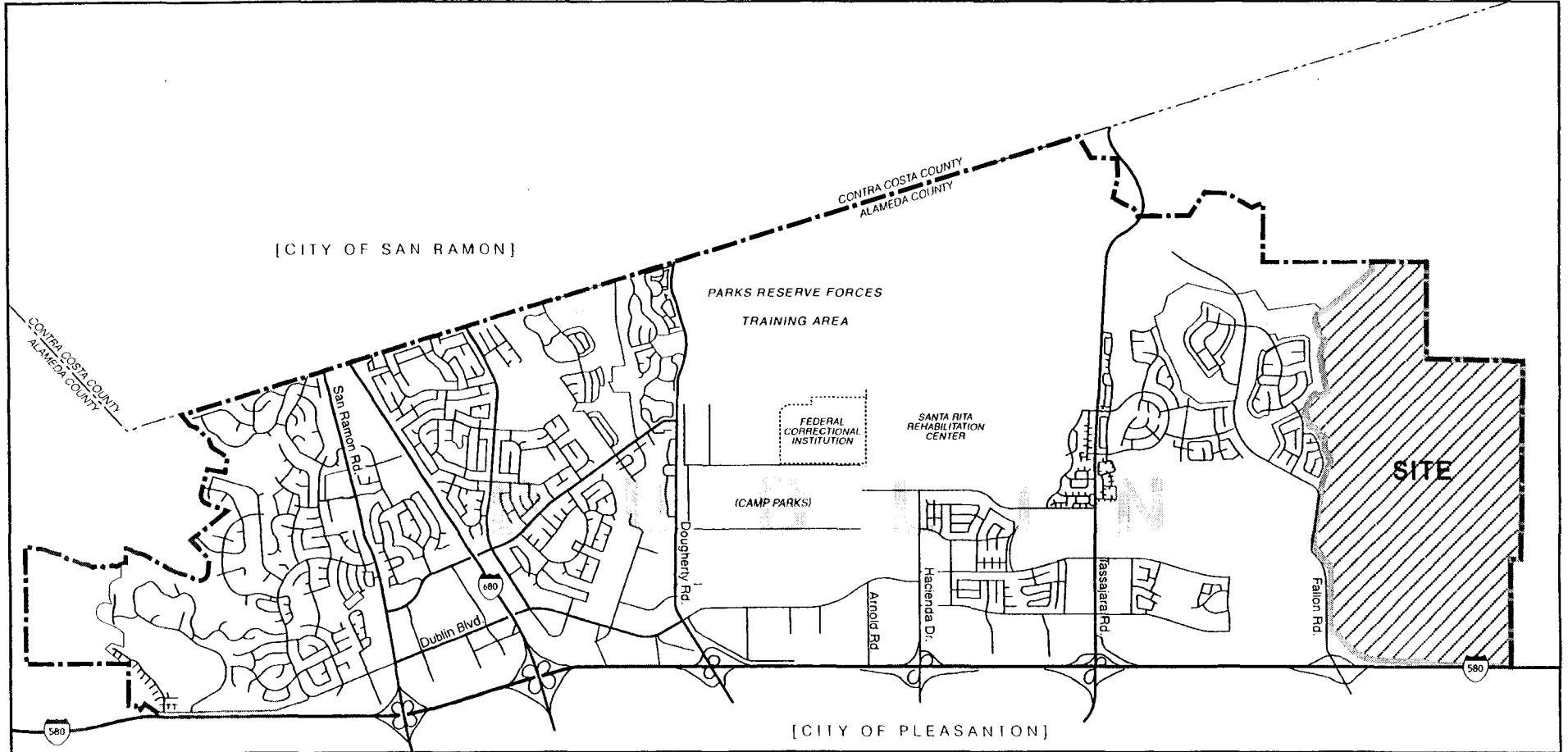
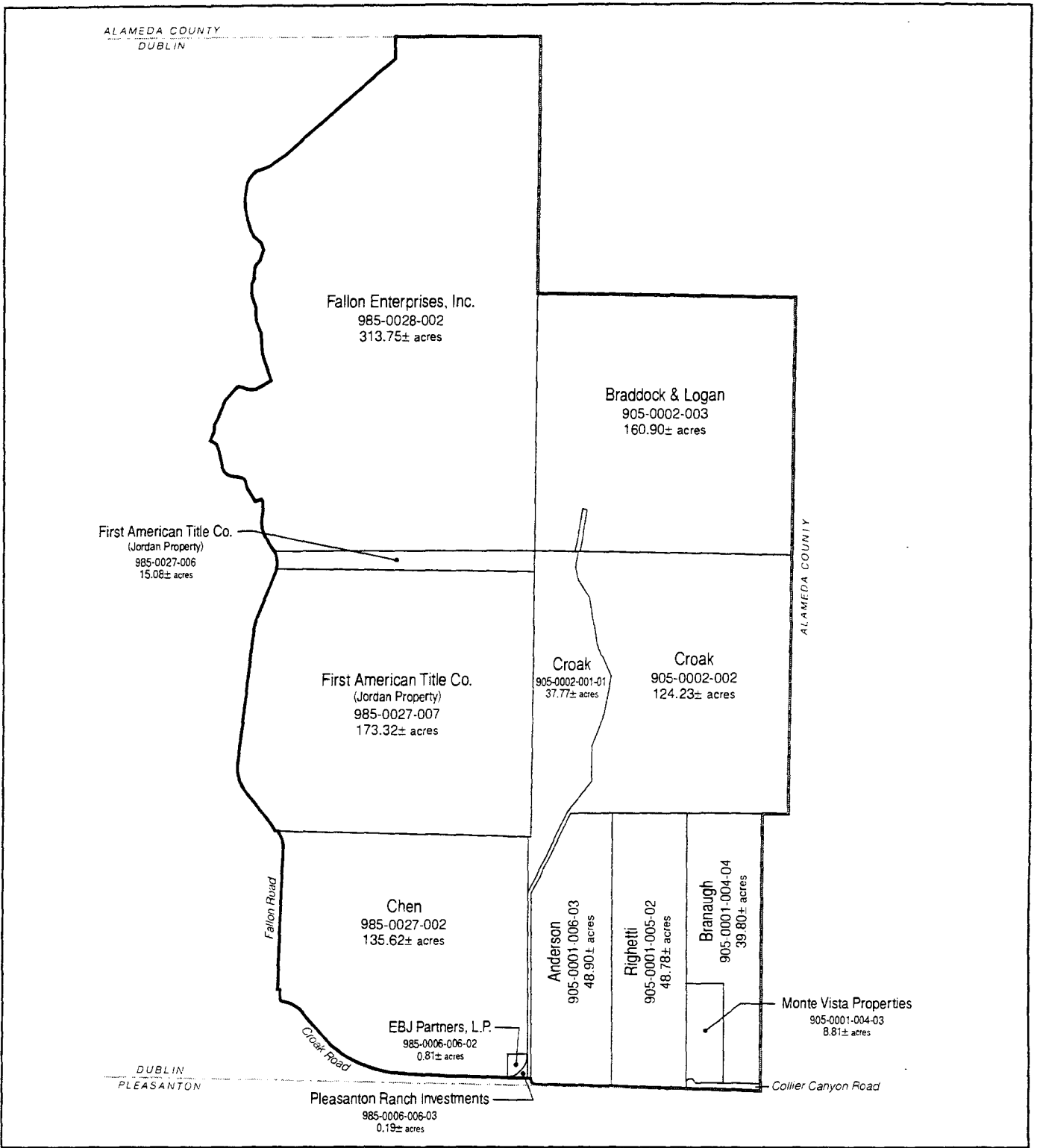


Exhibit 3.1
REGIONAL LOCATION

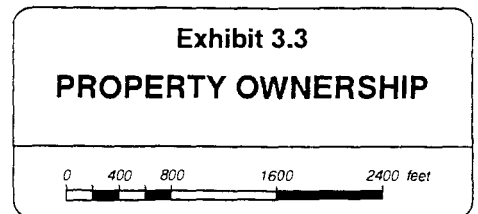




Blue Ox Associates, Berkeley, California 8-8-2005

SOURCE: MacKay & Soms, 6-15-2005.

**CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT**



ALAMEDA COUNTY
DUBLIN

DUBLIN
PLEASANTON

Fallon Road

Cross Road

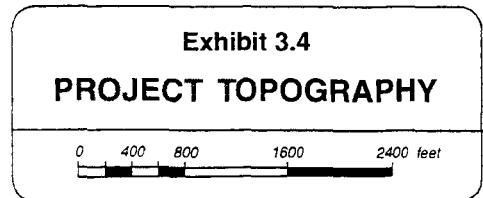
Cross Road

ALAMEDA COUNTY

Blue Ox Associates, Berkeley, California 8-8-2005

SOURCE: MacKay & Soms, 6-15-2005.

**CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT REPORT**



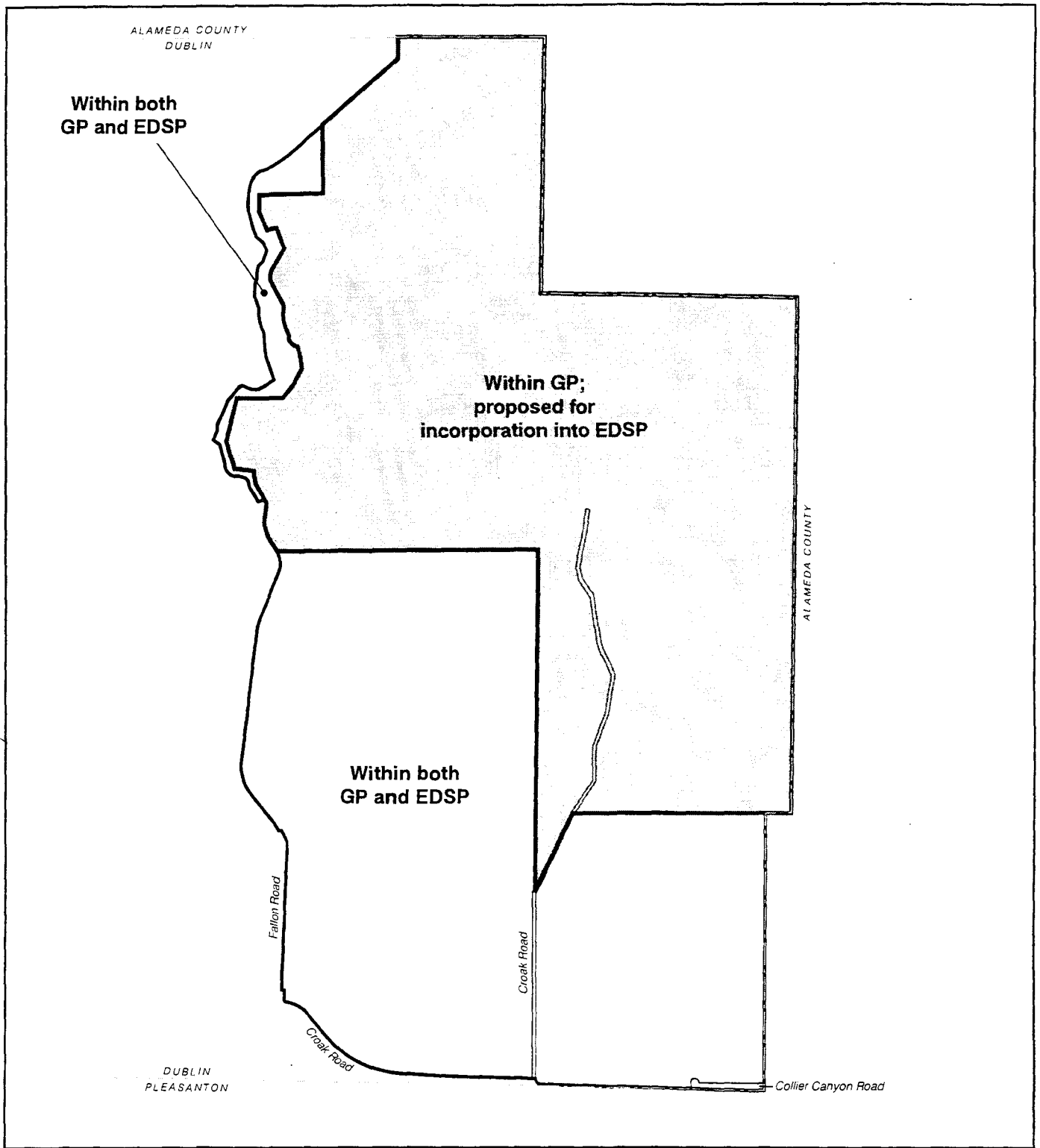


Exhibit 3.5
**PROJECT AREA WITHIN
DUBLIN GENERAL PLAN AND
EASTERN DUBLIN SPECIFIC PLAN**

0 400 800 1600 2400 feet

Blue Ox Associates, Berkeley, California 8-15-2005

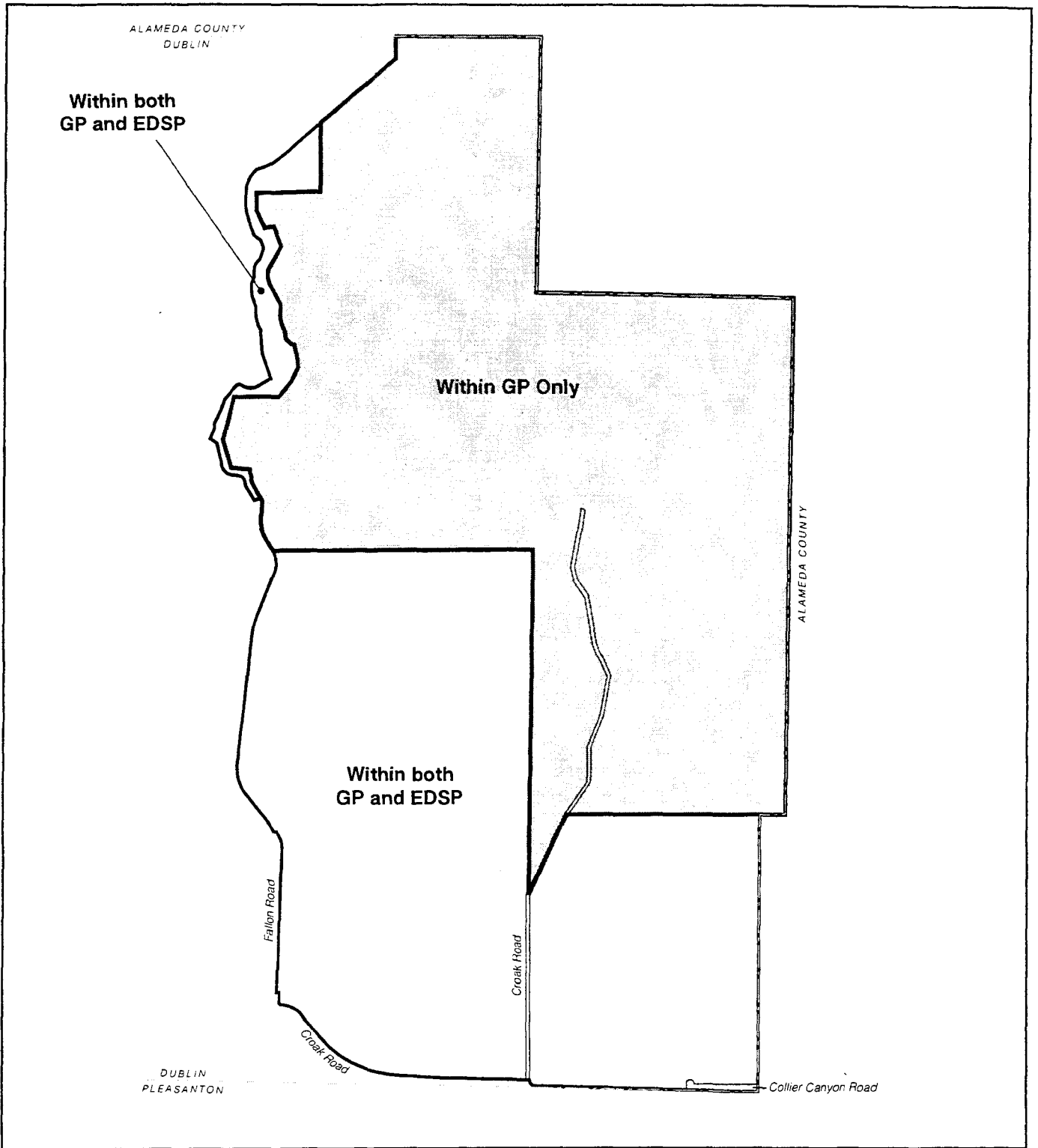
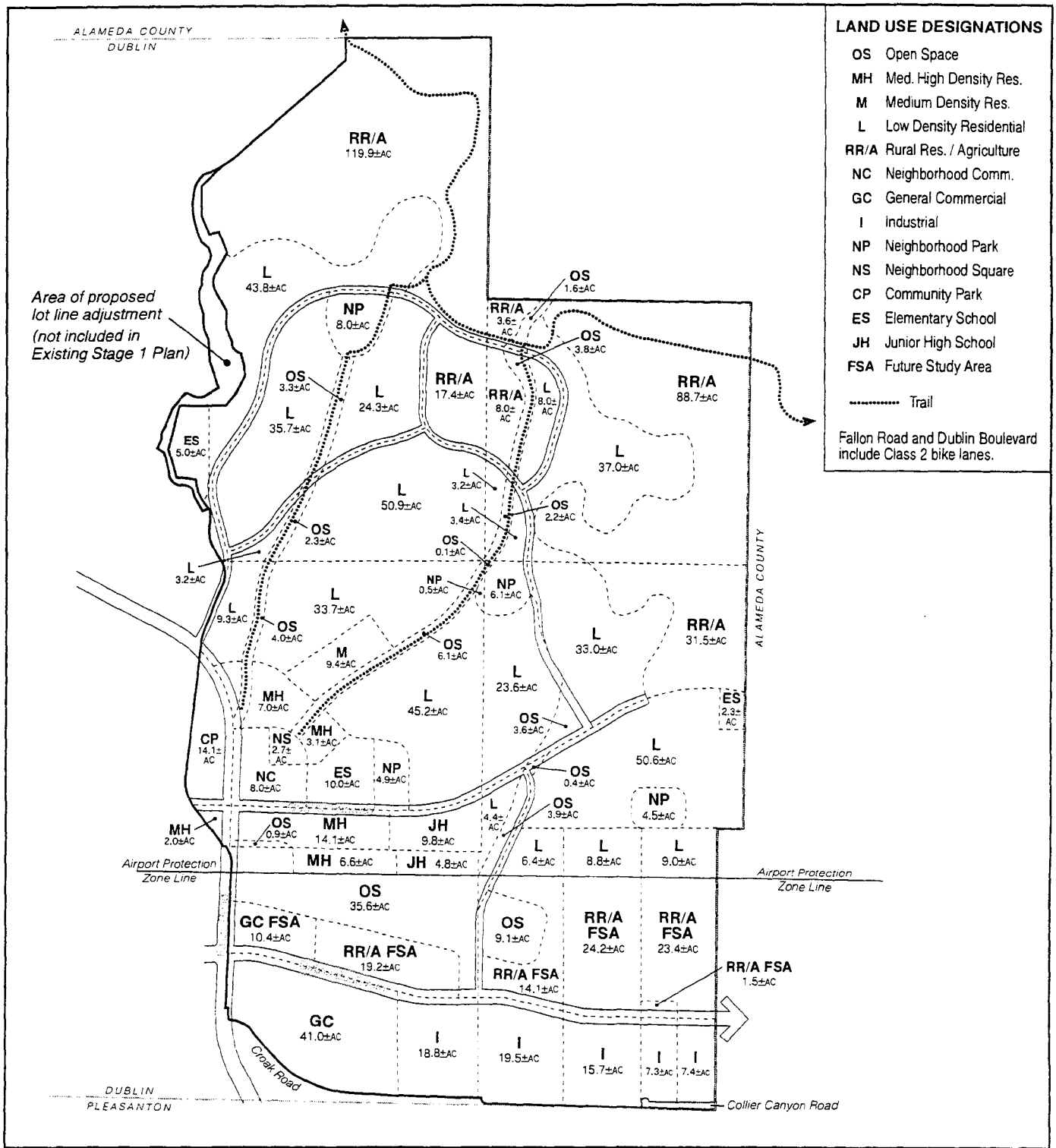


Exhibit 3.5

**PROJECT AREA WITHIN
DUBLIN GENERAL PLAN AND
EASTERN DUBLIN SPECIFIC PLAN**

0 400 800 1600 2400 feet

Blue OX Associates, Berkeley, California 8-10-2005



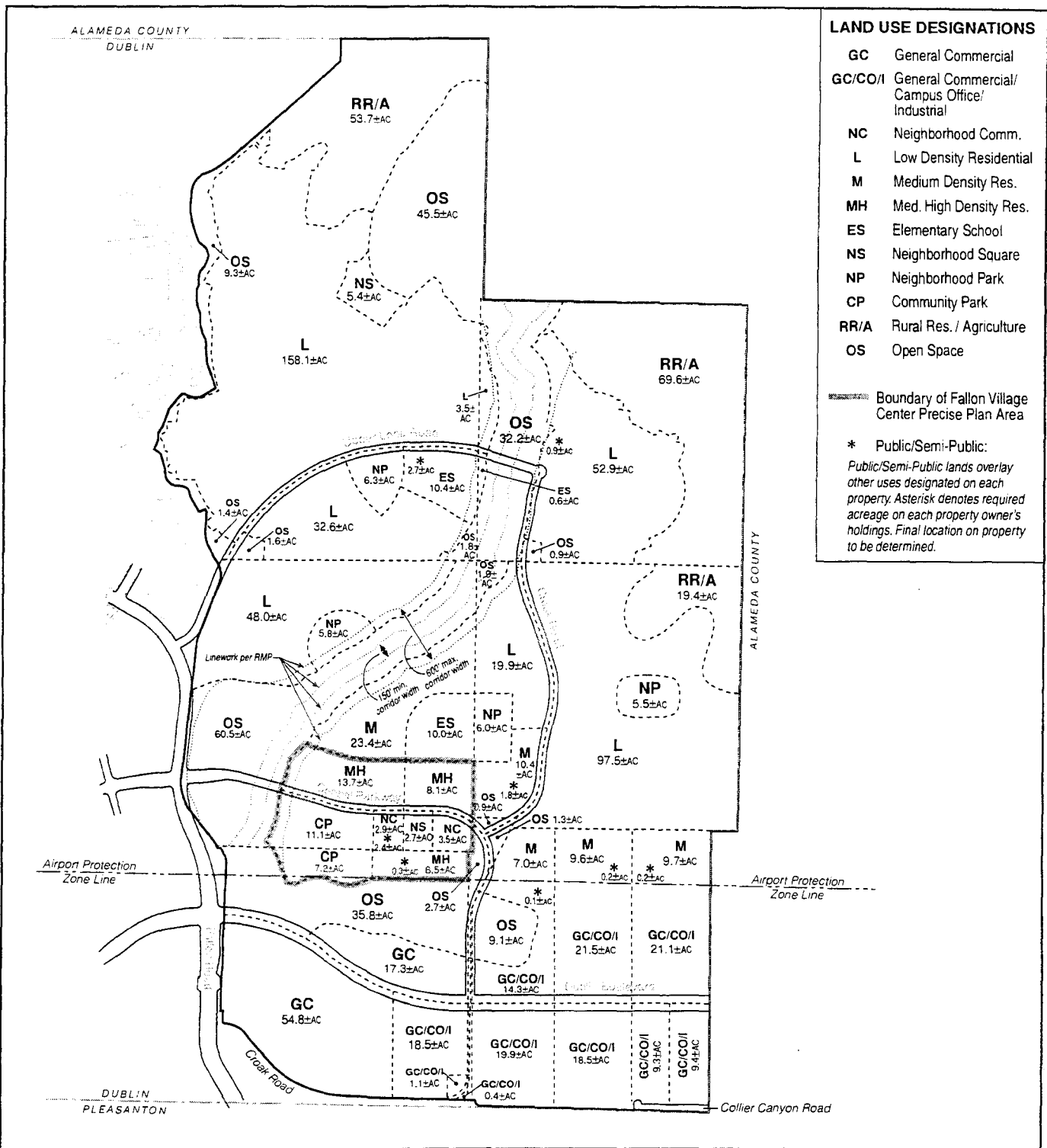
SOURCE: MacKay & Soms, 2-23-2001.

Exhibit 3.6

**EXISTING GENERAL PLAN
 LAND USES AND STAGE 1
 DEVELOPMENT PLAN (2002)**

0 400 800 1600 2400 feet

N



LAND USE DESIGNATIONS

- GC General Commercial
- GC/CO/I General Commercial/ Campus Office/ Industrial
- NC Neighborhood Comm.
- L Low Density Residential
- M Medium Density Res.
- MH Med. High Density Res.
- ES Elementary School
- NS Neighborhood Square
- NP Neighborhood Park
- CP Community Park
- RR/A Rural Res. / Agriculture
- OS Open Space

Boundary of Fallon Village Center Precise Plan Area

* Public/Semi-Public:
Public/Semi-Public lands overlay other uses designated on each property. Asterisk denotes required acreage on each property owner's holdings. Final location on property to be determined.

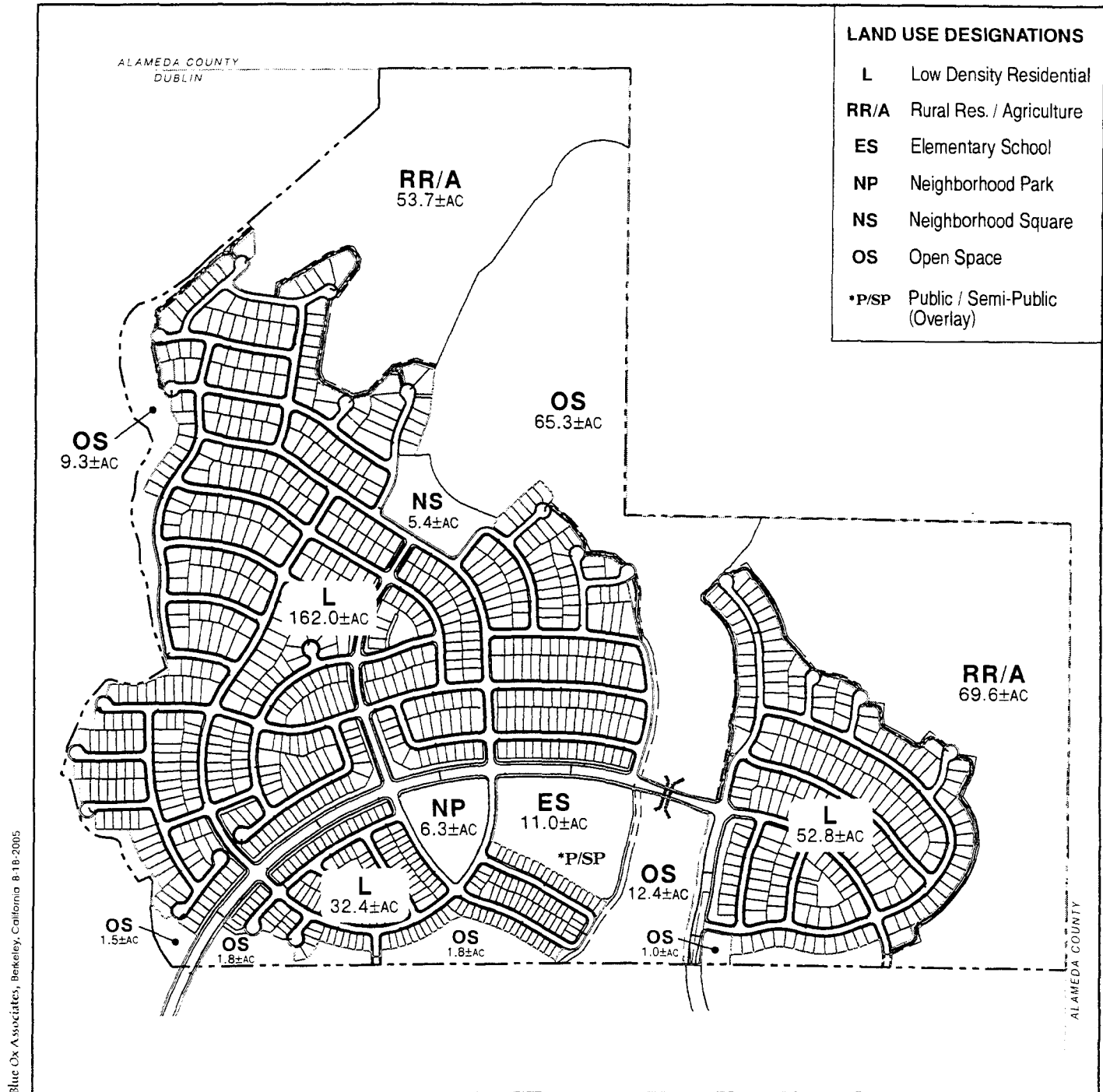
Blue Ox Associates, Berkeley, California 8-18-2005

SOURCE: MacKay & Soms, 8-9-2005.

**CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT**

**Exhibit 3.7
PROPOSED GENERAL PLAN
AMENDMENT AND STAGE 1
DEVELOPMENT PLAN**

0 400 800 1600 2400 feet



Blue Ox Associates, Berkeley, California 8-18-2005

SOURCE: MacKay & Somps, 8-9-2005.

CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT



Exhibit 3.9
PROPOSED STAGE 2
DEVELOPMENT PLAN
Braddock & Logan Properties
Tract 7586

0 200 400 800 1200 feet

ALAMEDA COUNTY
DUBLIN

Fallon Enterprises, Inc.
985-0028-002

Dublin Ranch Golf Course

Proposed property line

Existing property line

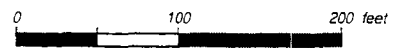
Area to be transferred
±13 acres

Blue Ox Associates, Berkeley, California 8-8-2005

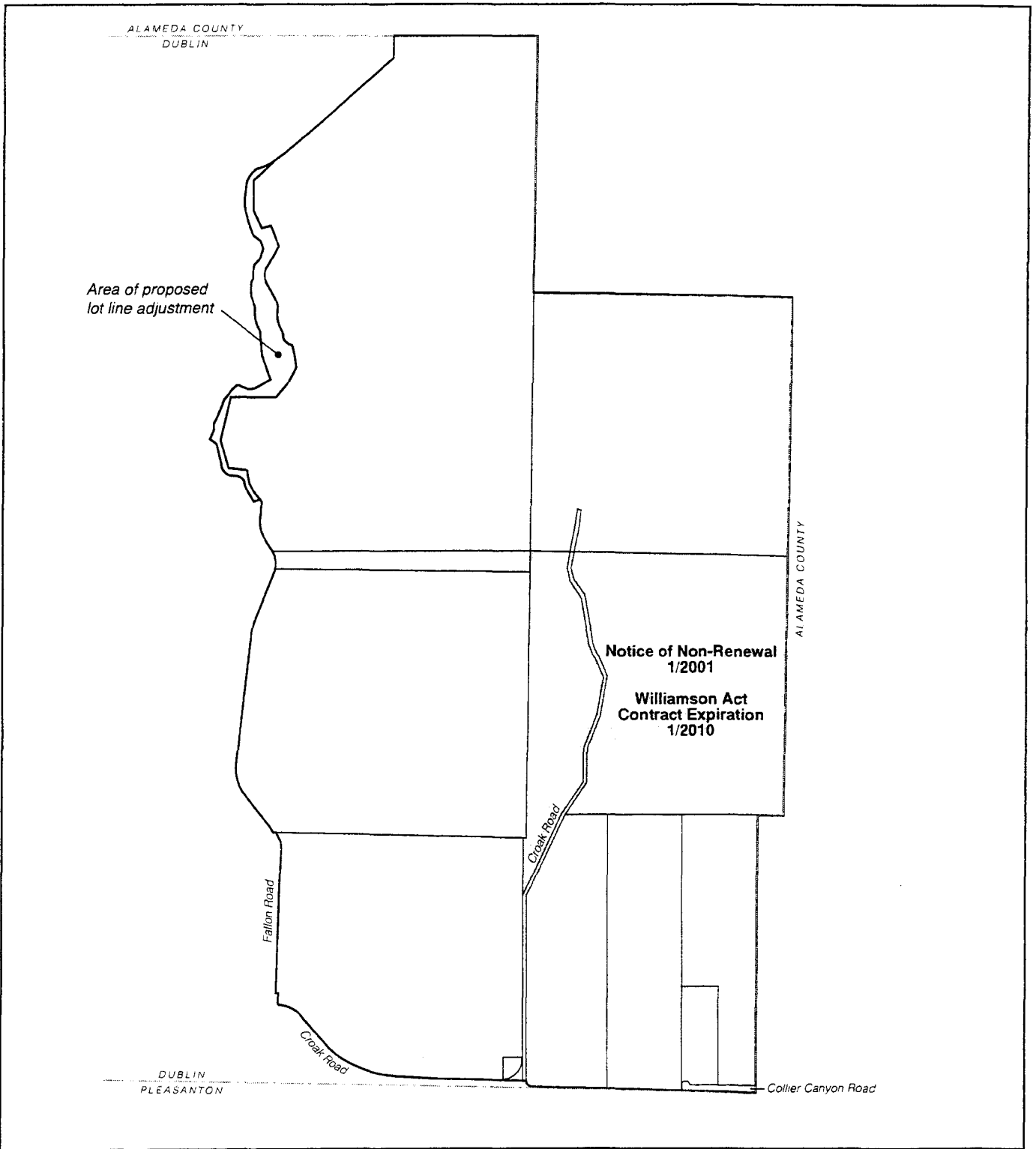
CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT



Exhibit 3.10
PROPOSED LOT LINE ADJUSTMENT
Assessor Parcel 925-0028-002



Blue Ox Associates, Berkeley, California 8-15-2005



SOURCE: MacKay & Somps, 8-8-2005, based on East Dublin GPA, SP, EIR (Part 1), and Preliminary Title Reports.



Exhibit 3.11
**WILLIAMSON ACT LAND
WITHIN PROJECT AREA**

0 400 800 1600 2400 feet

4.0 Environmental Analysis

Topics Addressed in the DEIR

This section of the DEIR identifies specific environmental areas which may be affected as a result of the implementation of the proposed Project. The impact areas are discussed individually in subsections 4.1 through 4.13:

- 4.1 Land Use and Planning
- 4.2 Transportation and Traffic
- 4.3 Community Services and Facilities
- 4.4 Sewer, Water & Storm Drainage
- 4.6 Soils, Geology and Seismicity
- 4.7 Biological Resources
- 4.8 Visual Resources
- 4.9 Cultural Resources
- 4.10 Noise
- 4.11 Air Quality
- 4.12 Hazards and Hazardous Materials
- 4.13 Parks and Recreation

Each topic area is covered in the following manner:

- A. Environmental Setting
A discussion of existing conditions, facilities, services and general environmental conditions on and around the Project sites.
- B. Impacts and Mitigation Measures from the Eastern Dublin EIR AND 2002 SEIR
- C. Supplemental Environmental Impacts
An identification and evaluation of whether the potential impacts on the environment identified in the Initial Study, should the Project be constructed as proposed would result in a significant substantially increased manner beyond the analysis in the Eastern Dublin EIR based on the standards of significance set forth therein.
- D. Supplemental Mitigation Measures
An identification of specific efforts and measures which can be incorporated into the Project to reduce identified supplemental environmental impacts to a level of insignificance.

4.1 LAND USE AND PLANNING

INTRODUCTION

Land use impacts were analyzed in Chapter 3.1, Land Use, of the Eastern Dublin EIR. Impact areas included Project alterations to existing and planned land use patterns, land use compatibility with on-site and adjacent land uses. Consistency with relevant local land use plans and policies was also discussed. This Supplement examines whether the proposed land use changes comply with applicable land use plans and policies, including the Livermore Airport Land Use Plan.

ENVIRONMENTAL SETTING

On-site land uses

The southerly portion of the Project area is relatively flat adjacent to the I-580 Freeway. Gradual slopes transition to moderate hillsides in the approximate center of the area with higher hillsides to the north. Hillside areas are intermixed with small valleys that contain local drainage courses.

Properties that comprise the Project area are currently used primarily for dryland farming and cattle grazing, with dryland farming, cattle grazing, a horse ranch and rural residences with associated outbuildings. Improvements to agricultural lands include paved and unpaved roads, fences, barns, corrals, wells, water tanks and similar improvements.

Surrounding land uses

Land uses north of the Project area include scattered rural residential dwellings, open fields and grazing uses within the unincorporated portion of Alameda County. The Dublin General Plan designates this area as Future Study area.

Land to the east consists of scattered rural residential uses with agriculture and open spaces uses along Doolan Canyon Road. These properties are located within the unincorporated portion of Alameda County and outside the sphere of influence of Dublin.

Land to the west is being developed as the Dublin Ranch with residential uses at varying densities and a golf course.

Land to the south is vacant and is within the City of Livermore.

Regulatory framework

Dublin General Plan / Eastern Dublin Specific Plan. The General Plan Land Use Diagram designates the Project area as a mix of "Rural Residential / Agriculture (1 dwelling per 100 acres)," "Low Density Residential (0-6 dwellings per acre)" "Medium Density Residential (6.1 to 14.0 dwellings per acre)," "Medium High Density Residential (14.1-25.0 dwellings per acre)," "General Commercial," "Industrial Park,"

"Neighborhood Park," "Elementary School," "Open Space" "Stream Corridor," and "Future Study Area." **Exhibit 3.7** shows existing General Plan land use designations.

The EDSP Planning Area encompasses only the southerly portion of the Project area. EDSP land use designations within the Project area include "Rural Residential (0-.001 dwellings/ acre)," "Single Family Residential (0.0-6 dwellings/ acre)," "Medium Density Residential (6.1-14.0 dwellings/ acre)," "Medium High Density Residential ((14.1-25 dwellings/ acre)," "General Commercial," "Neighborhood Park," "Elementary School" and "Open Space." **Exhibit 3.7** shows the existing EDSP land use designations.

The EDSP identifies the Fallon Gateway subarea within the Planning area as located at the Fallon Road interchange with I-580 that would occupy the area east and west of Fallon Road between Dublin Road and the Freeway. The Fallon gateway plans for General Commercial and Campus Office land uses that benefit from visibility and access from the adjacent freeway and other nearby arterial roadways. The EDSP anticipates that primary uses in the Fallon Gateway area will include establishments which sell bulky "big ticket" items that are auto-oriented and have a regional sales draw.

Another Planning subarea shown in the Project area is The Fallon Village Center located on the east side of Fallon Road north of the planned extension of Central Parkway. Village Centers are proposed to include mixed-use areas that provide commercial centers for more suburban areas outside of the Town Center area.

The third planning subarea in the Project area is an Industrial Park, located in the south easternmost corner of the Eastern Dublin area. The Industrial Park is intended to accommodate a wide variety of minimum-impact light industrial uses.

A number of goals and policies are contained in the EDSP deal with protecting visual resources within the Eastern Dublin area and that are also related to land use. These include:

- Goal: To establish a visually distinctive community which preserves the character of the natural landscape by protecting key visual elements and maintaining views from major travel routes (EDSP, p. 106).

Figure 6.3 of the EDSP identifies the presence of Visually Sensitive Ridgeland within the northerly and easterly portions of the Project area.

Dublin Zoning Ordinance. As part of the 2002 Project approvals, the City Council rezoned the Project area as "Planned Development" and adopted a Stage 1 Development Plan for the area, identifying land uses, densities and related development standards. The existing approved zoning designations for the Project area are shown on **Exhibit 3.6**.

Eastern Dublin Development Elevation Cap. In 1998, the City of Dublin amended its General Plan to establish a Development Elevation Cap for the Eastern Extended Planning Area. The development cap limits urban development to locations below

the 770' elevation contour. The intent of the cap is to identify areas where orderly and logical growth may occur without major impacts to visually sensitive ridgelines, biological resources or public services and infrastructure. The cap complements other City policies for development adjacent to existing development, incorporating open space systems and preserving Eastern Dublin's visual resources. The Project area is subject to the Development Elevation Cap restrictions, which are reflected in the Stage 1 Development Plan.

IMPACTS AND MITIGATIONS FROM PREVIOUS EIRs

The Eastern Dublin EIR analyzed the conversion of the Eastern Dublin area from a predominantly rural and agricultural area to a predominantly urban area. Significant land use impacts applicable to the Project area included the cumulative loss of agricultural and open space lands (Impact 3.1/B). Upon approval of the Eastern Dublin Project in 1993, the City of Dublin adopted a Statement of Overriding Considerations for this significant unavoidable impact.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The proposed Project contains land use changes at both the Program level, that involve the entire 1,132 Project area, as well as the Project (development) level on the northerly 486-acre portion of the area. Proposed land use changes associated with the Project are detailed in Section 3.0 of the DSEIR, Project Description. The Project also includes an amendment to the EDSP to include the entire Project site into the EDSP planning area.

Other proposed land uses changes from prior approvals and previous EIR analyses within the Project area, include:

- The addition of up to 1,081,725 square feet of General Office/Campus Office/Industrial space north of the proposed extension of Dublin Boulevard on land currently occupied by a Future Study Area land use designation;
- The addition of 582 dwelling units on the Project area that were originally included in the 1993 Project in the Future Study Area;
- The addition of a Open Space Corridor in the approximate center of the Project area to serve as a biological resource protection and enhancement area. The creation of this Corridor was recommended in the Resource Management Plan (RMP) prepared for the Project area as a result of the 2002 SEIR.
- Modifications to Visually Sensitive Ridgelines as set forth in Figure 6.3 of the EDSP and a an associated redesignation of existing Open Space and Rural Residential lands for residential development;
- Creation of a new "Commercial Office/Campus Office/Industrial" land use designation within the EDSP and the application of this new designation to properties currently designated as Future Study Area north of the I-580 Freeway within the Project area.

Significance Criteria. The following criterion has been used to identify the significance supplemental land use impacts, if the following would occur to a substantially greater degree than was analyzed in the Eastern Dublin EIR:

- conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project, including but not limited to a general plan, specific plan, zoning ordinance or similar document, adopted for the purpose of avoiding or mitigating an environmental impact;

Supplemental Program-Level Impacts. The Project includes proposed amendment to the General Plan and EDSP to redesignate portions of the Project area, as described above. If the requested amendments are approved, the Project area would remain as an urban mixed-use community as envisioned in the EDSP and as analyzed in the Eastern Dublin EIR and the 2002 SEIR. Although the requested amendments include a new combination of commercial/office/industrial land use designation and a replacement of the Future Study Area with more urban type uses, the shift of location of existing designations across the Project area, no new land use categories would be introduced to the Project area.

The Project includes the addition of approximately 445 acres of land to the Eastern Dublin Specific Plan area as shown on Exhibit 3.5. Land use designations for this portion of the Project area would correspond to the related General Plan land use designation. The proposed General Plan and EDSP land use designations are, in turn, reflected in the Proposed Stage I Development Plan for the entire 1,132-acre Project area and the 486-acre Stage 2 Development Plan application for the northerly portion of the Project area.

No supplemental impacts are anticipated for expanding the EDSP area since this area is now governed by the Dublin General Plan. Expansion of the EDSP planning boundary and the designation of land uses would be consistent with the General Plan vision of the Project area as an urban, mixed-use community.

The proposed Project includes a requested increase of commercial, office and industrial development in the Project area by 1,082,725 square feet, most of which would be located in the Future Study Area (and Airport Protection Area), as well as an additional 582 dwelling units that are proposed to be developed within residentially designated areas. The proposed Stage 1 Development Plan also proposes the creation of a central Open Space Corridor through the approximate center of the Project area, which also involves redesignation of land uses to allow this change to occur. These proposed changes, plus the redesignation and relocation of Project open space, do not have direct land use impacts. The changed uses and designations could, however, affect traffic and other environmental topics. Associated direct and indirect impacts associated with the increased commercial and office square footage as well as additional residential and revised open space and other land use designations are analyzed in the Transportation and Traffic Section (Section 4.2), Community Services and Facilities Section (Section 4.3), increased stormwater runoff (Section 4.4), Visual Resources (Section 4.7), Noise (Section 4.8), Air Quality (Section 4.9), and Hazards and Hazardous Materials (Section 4.10), and other sections as appropriate.

There are no significant supplemental land use impacts for the proposed Project.

Supplemental Development-Level Impacts. There would be *no supplemental impacts* regarding land use at the development level beyond that identified for the program-level portion of the proposed Project.

4.2 TRAFFIC AND TRANSPORTATION

INTRODUCTION

Transportation and Circulation was analyzed in Chapter 3.3 of the Eastern Dublin Specific Plan EIR and Chapter 3.6 of the 2002 SEIR. This supplement to the previous EIRs examines the proposed Project to determine if any new or more significant impacts would exist regarding traffic or circulation issues as a result of changed conditions, including but not limited to increased urban development in the Tri-Valley area and beyond, proposed additional residential and commercial development proposed in the proposed Project beyond that included in previous EIRs, and the City's use of a new traffic model that could yield different results than identified in earlier EIRs.

Information and analysis included in the following section is based on the "Fallon Village Traffic Study" prepared by TJKM Transportation Consultants in August 2005. This report is available for review at the Dublin Public Works Department during normal business hours. Technical information, including Level of Service calculations, is included in Appendix 8.6 of this DSEIR.

ENVIRONMENTAL SETTING

Existing roadways

Existing roadways serving the Project area include:

Interstate 580 is an eight-lane east-west freeway that connects Dublin with local cities such as Livermore and Pleasanton as well as regional origins and destinations such as Oakland, Hayward and Tracy. In the vicinity of the proposed Project, I-580 carries between 184,000 and 196,000 vehicles per day (vpd) (according to Caltrans 2003 *Traffic Volumes on California State Highways*) with interchanges at Dougherty Road/Hopyard Road, Hacienda Drive, Tassajara Road/Santa Rita Road and Fallon Road/El Charro Road.

Dublin Boulevard is a major east-west arterial in the City of Dublin. Dublin Boulevard, west of Dougherty Road is a four to six lane divided road fronted largely by retail and commercial uses. Between Dougherty Road and Tassajara Road, Dublin Boulevard is a six-lane divided arterial fronted primarily by residential, commercial and vacant lands. Dublin Boulevard extends east of Tassajara Road to Keegan Street as a four-to-five lane roadway fronted by new residential development. It will eventually extend to Fallon Road.

Tassajara Road connects with Santa Rita Road at I-580 to the south and continues north to the Town of Danville. It is four to six lanes wide between I-580 and North Dublin Ranch Drive. North of the Contra Costa County line, it is named Camino Tassajara. Camino Tassajara is used primarily for local traffic in the Tassajara Valley, with some through traffic.

Santa Rita Road is a six-lane divided urban arterial from the I-580 interchange south to Valley Avenue. It serves the east side of Pleasanton, including the Hacienda Business Park, and provides access to the downtown Pleasanton area.

Central Parkway is a two-to-three lane east-west collector that extends from Arnold Road to Keegan Street (east of Tassajara Road) as a parallel east-west collector to Dublin Boulevard.

Hacienda Drive is an arterial designed to provide access to I-580. North of I-580, Hacienda Drive is a three to six lane arterial running in the north-south direction from Gleason Drive southerly to I-580. It is primarily fronted by commercial, office and residential uses. South of I-580, Hacienda Drive is a six-lane divided road, a major arterial in the City of Pleasanton.

Gleason Drive is an east-west four-lane road parallel to and north of Dublin Boulevard. It currently serves the Santa Rita Rehabilitation Center, the Federal Correctional Institution and the developments along Gleason Drive. Gleason Drive connects Tassajara Road with Arnold Road. It has recently been extended easterly to connect with Fallon Road.

Fallon Road is a north-south two to four lane arterial extending from I-580 to about 2 miles north of I-580. It will be extended to connect to Tassajara Road on the north in future. As a part of on-going development in east Dublin, it will eventually be widened to eight lanes near I-580, six lanes near Dublin Boulevard and four lanes to the north.

North Canyons Parkway is a four-lane major east-west arterial. North Canyons Parkway is primarily fronted by office and commercial uses. Currently, it also serves as the prime access to Las Positas College and residential uses in northwest Livermore. It is on the same alignment as Dublin Boulevard; eventually the two streets will be extended and connect.

Airway Boulevard (SR 84) is a four-lane north-south arterial in the Project vicinity. It provides access to traffic from the I-580/ Airway Boulevard interchange to the residential and commercial uses in northwest Livermore and also to the Livermore Airport and the Las Positas Golf Course to the south of freeway.

Existing transit service

Transit service to the Project area is provided by the following:

Livermore-Amador Valley Transit Authority (Wheels). "Wheels" is the fixed-route transit service provided by the Livermore Amador Valley Transit Authority (LAVTA) for the Tri-Valley communities of Dublin, Livermore, and Pleasanton. Bus

Lines that currently provide service to east Dublin include routes 12 and 20. Route 12 provides service between the Dublin/Pleasanton BART station and the Livermore Transit Center at approximate 30-minute headways on weekdays between 5:30 a.m. and 9:50 p.m. Route 12 provides service on weekends between 7:00 a.m. and 7:00 p.m. at one hour headways. Route 20 provides weekday morning and afternoon service at 30-minute headways. Both routes 12 and 20 provide service along I-580 in the immediate vicinity of the Project. Route 202 provides school service connecting Fallon Road to Wells Middle School and Dublin High School once each in the morning and afternoon periods.

Bay Area Rapid Transit (BART) system. BART provides regional rail transit access from the Dublin/Pleasanton station. BART runs at 15- to 20-minute headways between 4:00 AM and 12:00 AM on weekdays. Saturday service is available every 20 minutes between 6:00 AM and 12:45 AM. Service is also available on Sunday from 8:00 AM to 12:45 AM with 20-minute headways.

A new West Dublin-Pleasanton station is in the planning stages and is expected to be operational within about five years. In addition, long-range planning studies of potentially extending BART lines to Livermore are being conducted. The studies also will examine alternative means of improving transit service to Livermore in the BART corridor until funds are available to construct the BART extension.

ACE Commuter Train. Altamont Commuter Express (ACE) offers an alternative to the automobile for regional commute trips from Livermore to Pleasanton and the South Bay area including Fremont, Santa Clara and San Jose. Since primarily serving commute trips to the Bay area, ACE trains run westbound in the morning, and run eastbound in the evening. There is one ACE station in Pleasanton near the intersection of Bernal Avenue and Pleasanton Avenue. Livermore has two ACE stations, one in Downtown near the Livermore Avenue/Railroad Avenue intersection and the other on Vasco Road, at the Vasco Road/Brisa Street intersection. In the morning, westbound trains stop at Pleasanton at approximately 5:40 a.m., 6:45 a.m. and 7:55 a.m. In the evening, eastbound trains stop at Pleasanton at approximately 4:30 p.m., 5:30 p.m. and 6:30 p.m.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

Eastern Dublin EIR

The Eastern Dublin EIR analyzed the following impacts:

Freeways. The Eastern Dublin Environmental Impact Report (EIR) identified significant, significant cumulative, and significant unavoidable adverse impacts related to daily traffic volumes on I-580 for Year 2010 with and without build-out of the Eastern Dublin Specific Plan and General Plan Amendment and under a Year 2010 cumulative build-out scenario (Impacts 3.3/ A, B, C, D, and E). The significance criteria for freeway segments were operations that exceed level of service (LOS) E.

Mitigation measures (3.3/1.0 and 3.3/4.0) were adopted which reduced impacts on I-580 between Tassajara Road and Fallon Road and on I-680 north of I-580 to a level of insignificance. Other mitigations (3.3/2.0, 2.1, 3.0 and 5.0) were adopted to reduce

impacts on the remaining I-580 freeway segments and the I-580/680 interchange. Even with mitigations, however, significant cumulative impacts remained on I-580 freeway segments between I-680 and Dougherty Road and, at the build-out scenario of 2010, on other segments of I-580. Upon certification of the Eastern Dublin Specific Plan EIR and approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Considerations (Resolution No. 53-93), for these significant unavoidable cumulative impacts (Impacts 3.3/B and E).

All mitigation measures adopted upon approval of the Eastern Dublin Specific Plan EIR continue to apply to implementing actions and projects such as the proposed Fallon Village Project.

Intersections and Roads. The Eastern Dublin Specific Plan EIR evaluated levels of service and PM peak hour traffic volumes at 18 intersections with roads and I-580 ramps. The significance criteria for intersections were operations that exceed LOS D. Mitigation measures were identified for each intersection that was projected to exceed the LOS D standard in each scenario. The following scenarios were analyzed:

- 1) Year 2010 without the Eastern Dublin Project
- 2) Year 2010 with the Eastern Dublin Project
- 3) Cumulative Buildout with the Eastern Dublin Project

Mitigation measures (3.3/6.0 – 8.0,10 -12) for impacts 3.3/F, G, H, J, K and L were adopted to reduce impacts to each of these intersections to a level of insignificance. These mitigations include construction of additional lanes at intersections, coordination with Caltrans and the neighboring cities of Pleasanton and Livermore to restripe, widen or modify on-ramps and off-ramps and interchange intersections, and coordination with Caltrans to modify certain interchanges. Development projects within the Eastern Dublin Project area contribute a proportionate share to the multi-jurisdictional improvements through the Eastern Dublin traffic impact fee program and the Tri-Valley Transportation Development Fee program (discussed below).

Other mitigation measures (MMs 3.3/13.0 and 14.0) were adopted to reduce impacts on other identified intersections with Dublin Boulevard and Tassajara Road (Impacts 3.3/M, N).

All mitigation measures adopted upon approval of the Eastern Dublin GPA/ SP and Eastern Dublin Specific Plan EIR continue to apply to implementing actions and projects within Eastern Dublin, such as the proposed Fallon Village Project. Individual development projects within the GPA/SP contribute a proportionate share to fund these improvements through payment of traffic impact fees or construction of the required improvements for a credit against payment of such fees. Even with mitigations, however, significant cumulative impacts remained on several identified intersections: Santa Rita Road/I-580 Eastbound ramps (Impact 3.3/I), Dublin Boulevard/Hacienda Drive and Dublin Boulevard/Tassajara Road (Impact 3.3/M), Tassajara Road/Fallon Road and Tassajara Road/Gleason Road (Impact 3.3/N). Upon certification of the Eastern Dublin Specific Plan EIR and approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding

Consideration (Resolution No. 53-93), for these significant unavoidable year 2010 and cumulative impacts.

Transit, Pedestrians and Bicyclists. The Eastern Dublin EIR identified significant impacts related to transit service extensions and the provision of safe street crossings for pedestrians and bicycles (Impacts 3.3/O and P). Mitigation measures 3.3/15.0 – 15.3 and 16.0 – 16.1 were adopted which reduced these impacts to a level of insignificance. These mitigations generally require coordination with transit providers to extend transit services (for which the GPA/SP projects contribute a proportionate share through payment of traffic impact fees) and coincide pedestrian and bicycle paths with signals at major street crossings. All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP and Eastern Dublin EIR continue to apply to implementing actions and projects such as the proposed Fallon Village Project.

Fee Programs. Prior to approval of any development in Eastern Dublin, in January 1995 the City adopted (and has since updated) the Eastern Dublin Traffic Impact Fee which consisted of three "categories": Category 1 was, in general, to pay for required transportation improvements in the SP/GPA project area; Category 2 was, in general, to pay for required improvements in other areas of Dublin; and Category 3 was to pay for regional improvements to which development in Eastern Dublin should contribute. The improvements for which the fee is collected included those improvements assumed in the Eastern Dublin Specific Plan EIR, those improvements necessary for Eastern Dublin to develop, and those improvements identified in the Eastern Dublin Specific Plan EIR as mitigation measures. In June 1998, the City adopted the Tri-Valley Transportation Development Fee, in conjunction with the cities of Pleasanton, Livermore, San Ramon and Danville and the Counties of Alameda and Contra Costa to fund regional improvements. This fee replaced the Category 3 fee. In addition, the City has adopted a Freeway Interchange Fee to reimburse Pleasanton for funding construction of certain interchanges on I-580 that also benefit Eastern Dublin. All development projects in Eastern Dublin are required to pay these fees at building permit or construct the improvements included in the fee programs.

2002 SEIR

The following impacts were analyzed in the 2002 SEIR.

Intersections. The 2002 SEIR evaluated a.m. and p.m. peak hour levels of service at 17 intersections for Future Baseline (Existing plus Approved plus Pending) conditions and at 21 intersections for Future Baseline plus Project (Existing plus Approved plus Pending plus Project) conditions.

The traffic analysis contained in the 2002 SEIR used a combination of two traffic models: the "Dublin Model" and the Tri-Valley Model. The Dublin Model was used for the near-term forecasting and analysis of traffic conditions within the general Eastern Dublin area and included proposed, pending or approved projects in Eastern Dublin with and without the proposed Project. The Tri-Valley Model was used to assess cumulative traffic volumes for buildout conditions in the Tri-Valley

area to the year 2025. The Tri-Valley Model used land use assumptions that were consistent with *ABAG Projections '98*.

The significance criteria for intersections were operations that exceed LOS D. In addition, the significance criteria for Routes of Regional Significance described in this section were used. Mitigation measures SM-TRAFFIC-1, SM-TRAFFIC-2, SM-TRAFFIC-3, SM-TRAFFIC-4 and SM-TRAFFIC-5 for impacts TRAFFIC 1, TRAFFIC 2, TRAFFIC 3, TRAFFIC 4 and TRAFFIC 5 were adopted to reduce impacts to each of these intersections to a level of insignificance. These mitigations include construction of additional lanes, coordination with Caltrans and the neighboring city of Pleasanton to widen or modify on-ramps and off-ramps and interchange intersections, coordination with Caltrans to modify certain intersections and installation of traffic signals when they become warranted. They would continue to apply to the proposed Project as well. The Eastern Dublin Projects contribute a proportionate share to the multi-jurisdictional improvements through payment of traffic impact fees or construction of the required improvements for a credit against payment of such fees.

The 2002 SEIR analyzed a.m. and p.m. peak hour levels of service at 17 intersections for Cumulative Year 2025 conditions and at 21 intersections for Cumulative Year 2025 plus Project conditions using the Tri-Valley Transportation Model. In addition to the impacts identified by the Dublin Model, the Tri-Valley Transportation Model identified three additional intersections that would operate at unacceptable levels under the cumulative analysis. Mitigation measures SM-TRAFFIC-6, SM-TRAFFIC-7 and SM-TRAFFIC-8 were adopted for impacts TRAFFIC 6, TRAFFIC 7 and TRAFFIC 8 at each of these intersections. However, even with mitigations, significant cumulative impacts remained at the three identified intersections: Dougherty Road/Dublin Boulevard (Impact TRAFFIC 6), Hacienda Drive/Dublin Boulevard (Impact TRAFFIC 7) and Fallon Road/Dublin Boulevard (Impact TRAFFIC 8).

Roadway Segments. The 2002 SEIR analyzed future traffic volumes with and without Project traffic volumes on roadway segments. Mitigation measures SM-TRAFFIC-9 and SM-TRAFFIC-10 were adopted for impacts TRAFFIC-9 and TRAFFIC-10 to reduce the impacts at each of these roadway segments to a level of insignificance. These mitigation measures continue to apply to the current Project.

Freeways. The 2002 SEIR analyzed Year 2025 and Year 2025 plus Project traffic volumes on freeway segments. The significance criteria for freeway segments were operations that exceed level of service (LOS) E. Impact TRAFFIC-11 was identified on freeway segments of I-580 and I-680. Mitigation measures 3.3/2.0, 3.3/3.0 and 3.3/5.0 of the Eastern Dublin Specific Plan EIR remain applicable to this impact. However, even with these mitigation measures, impact TRAFFIC-11 remained a significant cumulative impact.

Transit Operations Impacts. The 2002 SEIR evaluated the impact on BART by estimating increased ridership with the development of the proposed project. Approximately 50 more riders were estimated to use BART. The mitigation

measures identified in the Eastern Dublin Specific Plan EIR remained applicable to the proposed Project and no additional mitigation measures were identified.

The 2002 SEIR estimated the number of monthly riders generated by the proposed Project. The mitigation measures identified in the Eastern Dublin Specific Plan EIR remained applicable to the proposed Project and no additional mitigation measures were identified.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

Introduction. The current Project proposes land uses that were not included or analyzed in the Eastern Dublin EIR or the 2002 SEIR. Specifically, the proposed Stage 1 Development Plan proposes 582 dwelling units over and above than those analyzed in the previous EIR as well as 1,081,725 square feet of general commercial, office and industrial uses greater than included in the existing Stage 1 Development Plan.

The traffic analysis used in the DSEIR employs the CCTA Travel Demand Model to assess potential supplemental traffic and circulation impacts, which is a new model from those previously used by the City of Dublin. Results from this model may lead to different results than previous analyses. The use of this model is described below.

This section assess whether significant new or intensified traffic impacts may result from increased regional traffic, from increases in densities within the proposed Project, or from the use of the new traffic model.

Standards of Significance. The following standards of significance are used in the DSEIR.

Intersections. An impact would be significant if an intersection previously mitigated to an acceptable level would now exceed acceptable levels. In addition, an impact would be significant if a new intersection is identified as exceeding acceptable levels and if such intersection was not previously identified in the Eastern Dublin Specific Plan EIR as a study intersection. The General Plan standard requires that the City strive for LOS D at intersections (General Plan Circulation and Scenic Highways Guiding Policy F.)

Routes of Regional Significance. With respect to routes of regional significance, an impact would be significant if a road has been identified since certification of the Eastern Dublin Specific Plan EIR as such a route and such routes would fail to comply with the applicable standard of the General Plan. The General Plan requires the City to make a good faith effort to maintain Level of Service D on arterial segments of, and at the intersections of, routes of regional significance (Dublin Boulevard, Dougherty Road, Tassajara Road and San Ramon Road) or implement transportation improvements or other measures to improve the level of service. If such improvements are not possible or sufficient, and the Tri-Valley Transportation Council cannot resolve the matter, the City may modify the level of service standard assuming other jurisdictions are not physically impacted (General Plan Circulation and Scenic Highways Guiding Policy E.

The maximum ADT threshold standards of the General Plan for two-lane roadways (15,000 vpd), four-lane roadways (30,000 vpd), six-lane roadways (50,000 vpd), and eight-lane roadways (70,000 vpd) are used to determine the through lane requirements.

Freeway Segments. The LOS for a freeway segment is based on peak hour traffic volumes (number of passenger cars per hour). There are six levels, ranging from LOS A being the best operating condition, to LOS F being the worst. LOS E represents "at capacity" operation. These levels of service are based on the volume-to-capacity ratio as established by the 2000 Highway Capacity Manual. When the volume exceeds capacity, stop-and-go conditions result, and operations are designated as LOS F. The standard for freeway impacts is based upon the Alameda County Congestion Management Agency (ACCMA) monitoring standards and is established at LOS E.

Public Transit. Public transit impacts would be significant if the demand for public transit service would be increased above that which could be accommodated by local transit operators or agencies.

Traffic Safety. CEQA allows for consideration of increased hazards on roadway facilities as part of the basis for identifying standards of significance in an EIR. A significant traffic safety impact would include a design feature, such as a sharp curve or dangerous intersection, that would not be consistent with City of Dublin engineering design standards or standards published by other traffic engineering professional organizations.

Analysis Scenarios. The following scenarios were analyzed:

1. Existing Conditions
2. Interim Year 2015 Conditions
3. Buildout Conditions
4. Buildout plus Project Conditions

Land use assumptions for scenarios 2, 3 and 4 are described below. The Interim Year 2015 Conditions scenario represents baseline conditions. Year 2015 was selected as the horizon year for baseline conditions as it coincides with approved and pending projects in Dublin, as well as the implementation of the initial phase of the proposed Project. This scenario includes trips from the initial phase of the Project in order to obtain the worst case scenario for Interim Year 2015 and determine if roadway improvements planned for the study area will be adequate to maintain acceptable levels of service at adjacent intersections in Year 2015. A total of 29 intersections were included in the study for the level of service analysis. In contrast, the 2002 SEIR included a total 21 study intersections. The additional intersections analyzed in this Draft SEIR include additional intersections on Hacienda Drive, Tassajara Road and Fallon Road, which could be impacted by the proposed Project.

Scenarios 3 and 4 are used in the analysis to determine cumulative traffic impacts of the full Buildout of the General Plans for the City of Dublin and surrounding communities (Scenario 3). Scenario 4 adds the buildout of the Project to Scenario 3.

Level of Service Analysis Methodology

Signalized Intersections. Peak hour intersection conditions are reported as volume-to-capacity (V/C) ratios with corresponding levels of service. Level of service ratings are qualitative descriptions of intersection operations and are reported using an A through F letter rating system to describe travel delay and congestion. Level of Service (LOS) A indicates free flow conditions with little or no delay, while LOS F indicates jammed conditions with excessive delays and long backups. The operating conditions at signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology adopted by the Contra Costa Transportation Authority (CCTA). This method provides an overall intersection level of service. Appendix 8.6 contains a detailed description of the methodology.

Unsignalized Intersections. Level of Service was evaluated using the 2000 Highway Capacity Manual (HCM) Unsignalized Intersections methodology at STOP-controlled intersections. The method ranks level of service on an A through F scale similar to that used for signalized intersections, using average delay in seconds for stopping movements as its measure of effectiveness. The methodology is also described in detail in Appendix 8.6 of this DSEIR.

CCTA Travel Demand Model. The new travel demand model of the Contra Costa Transportation Authority (CCTA) was used to forecast traffic conditions in the study area for future Year 2015 and General Plan Buildout Year 2025. The CCTA Model is based on ABAG *Projections 2000*. The CCTA Model represents an update to the Tri-Valley Model which the City used as the basis for the 2002 SEIR. The City of Dublin and other Tri-Valley jurisdictions no longer use the Tri-Valley Model as this model has become technologically and structurally outdated. For example, the Tri-Valley Transportation Council (TVTC), consisting of seven member-jurisdictions (including the Cities of Danville, Dublin, Livermore, Pleasanton and San Ramon, and the Counties of Alameda and Contra Costa), has recently retired the Tri-Valley Model and adopted the CCTA Model as the new official TVTC travel demand model. Therefore, for the purposes of this Draft SEIR, it was appropriate to use the CCTA Model for analysis of traffic impacts of the proposed Project so as to be consistent with current traffic forecasting practices in the Tri-Valley area. TJKM further refined the CCTA Model to reflect accurate information on future land use projections and street networks in the City of Dublin.

The CCTA Model is based on the San Francisco Bay Area Metropolitan Transportation Commission (MTC) travel demand model, with detailed focus on the area covering Contra Costa County and Tri-Valley. The CCTA Model serves as a valuable tool for transportation planning and traffic forecasting along the I-580 and I-680 transportation corridors. The model has been extensively used by local jurisdictions and congestion management agencies in Contra Costa and Alameda Counties for preparation of traffic impact studies and general plan updates. For example, the Alameda County Congestion Management Agency (ACCMA) is

currently using the CCTA Model for the Tri-Valley Triangle Study in the cities of Dublin, Livermore and Pleasanton.

The CCTA model was calibrated to account for local Project conditions. A model calibration is a process that includes revisions of network attributes and adjustments of the model estimated demands to better match the traffic counts. The roadway improvements listed above, except those outside of the City of Dublin, are funded by the Eastern Dublin Traffic Impact Fee, or will be constructed by developers as a condition of their respective development project. The City's fee program and mitigation measures under the 1992 EIR and 2002 SEIR ensure that necessary roadway improvements are in place to accommodate traffic from individual projects. Before performing the future demand forecasting, it was important to calibrate the model. The model was calibrated to the existing turn counts collected in the City of Dublin in a period ranging from Year 2002 to Year 2004. The network was modified to include all the future study intersections. Based on the collected counts, the a.m. and p.m. turning movement volumes were entered into the "existing condition" portion of the model. TJKM performed the model calibration for the study area by revising the network topology and attributes as well as the Origin-Destination (OD) demand. After the model was calibrated, the difference method was used to obtain future link and turn volumes based on the calibrated model.

The traffic analysis in this DSEIR includes a comprehensive analysis of affected roadways and transportation systems. The analysis includes all relevant components of the Caltrans *Guide for the Preparation of Traffic Impact Studies*.

Existing Conditions (Scenario 1). The existing a.m. and p.m. peak hour turning movement counts were collected for 21 intersections from February 2004 to June 10, 2004. The intersection of Fallon Road and Gleason Drive was counted in July of 2005. Exhibit 4.2.1 shows the existing lane geometry at the 21 existing study intersections. Exhibit 4.2.2 shows the existing peak hour turning movement volumes at the study intersections.

Table 4.2.1 summarizes the results of the intersection level of service analysis for existing conditions. Detailed calculations are contained in Appendix 8.6 of the this DSEIR. Currently, all 22 study intersections operate at acceptable levels of service during the peak hours.

Table 4.2.1. Existing Level of Service

ID	Signalized Intersections	Count Date	A.M. Peak Hour		P.M. Peak Hour	
			v/c	LOS	v/c	LOS
1	Dougherty Road/Dublin Boulevard	June 2004	0.55	A	0.83	D
2	Hacienda Drive/I-580 EB Ramps	June 2004	0.48	A	0.45	A
3	Hacienda Drive/I-580 WB Ramps	June 2004	0.38	A	0.50	A
4	Hacienda Drive/Dublin Boulevard	Feb 2004	0.34	A	0.46	A
5	Hacienda Drive/Central Parkway	Feb 2004	0.51	A	0.25	A
6	Hacienda Drive/Gleason Drive	Feb 2004	0.16	A	0.15	A
7	Santa Rita Road/I-580 EB Ramps	June 2004	0.52	A	0.58	A
8	Tassajara Road/I-580 WB Ramps	June 2004	0.37	A	0.39	A
9	Tassajara Road/Dublin Boulevard	June 2004	0.29	A	0.38	A
10	Tassajara Road/Central Parkway	June 2004	0.31	A	0.36	A
11	Tassajara Road/Gleason Drive	June 2004	0.38	A	0.46	A
12	Tassajara Road/Fallon Road	(Future Intersection)				
15	Fallon Road/Dublin Boulevard	(Future Intersection)				
16	Fallon Road/Gleason Drive	July 2005	0.10	A	0.25	A
17	Fallon Road/Antone Way	June 2004	0.06	A	0.25	A
18	Hacienda/Martinelli Way/Hacienda Crossings	June 2004	0.22	A	0.40	A
19	Croak Road/Dublin Boulevard	(Future Intersection)				
20	Fallon Road/Central Parkway	(Future Intersection)				
21	Fallon Road/Dublin Ranch Entrance	(Future Intersection)				
22	Croak Road/Central Parkway	(Future Intersection)				
23	Airway Boulevard/North Canyons Parkway	June 2004	0.22	A	0.41	A
24	Airway Boulevard/I-580 WB Ramps	June 2004	0.27	A	0.20	A
25	Airway Boulevard/I-580 EB Ramps	June 2004	0.66	B	0.44	A

26	Hopyard Road/I-580 EB Ramps	June 2004	0.60	A	0.64	B
27	Dougherty Road/I-580 WB Ramps	June 2004	0.50	A	0.46	A
28	Arnold Road/Dublin Boulevard	June 2004	0.24	A	0.40	A
29	Fallon Road/EDPO Drive	(Future Intersection)				
ID	Unsignalized Intersections*	Count Date	A.M. Peak Hour		P.M. Peak Hour	
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
13	El Charro Rd/I-580 EB Ramps	June 2004	5.8(9.4)	A (A)	30.5(101.1)	D (F)
14	Fallon Rd/I-580 WB Ramps	June 2004	7.9(12.2)	A (B)	12.1(14.6)	B (B)

Note: v/c = volume to capacity ratio; LOS = Level of Service;

X.X (X.X) = Overall Intersection Delay or LOS (Minor Movements Delay or LOS).

*HCM 2000 methodology does not report the overall intersection delay for one-way STOP intersections.

Interim Year 2015 Conditions (Scenario 2). The CCTA Model was used for the future Year 2015 forecasts. Under Interim Year 2015 conditions, the proposed Project consists of approximately 1,950 single-family dwelling units, 655 multi-family dwelling units and 350,000 square feet of retail development. This is the “initial phase” of development for purposes of the traffic analysis. In order to forecast traffic generated by land uses, the CCTA Model divides the region into traffic analysis zones (TAZs) which contain information on existing and/or projected land uses that are located within a particular TAZ. Each TAZ is connected to the adjacent street network via a connector, which provides access to and from the TAZ. Depending on the type of land uses allocated to each zone, the TAZ will generate a certain combination of outbound trips (trip production) and inbound trips (trip attraction) during the analysis period(s). For example, a residential TAZ would generate a net production of trips in the a.m. peak hour and a net attraction of trips in the p.m. peak hour. Conversely, a TAZ that contains office development would generate a net attraction of trips in the a.m. peak hour and a net production of trips in the p.m. peak hour.

The land uses for the TAZs within the City of Dublin in Year 2015 were obtained by a straight-line interpolation between existing Year 2004 land uses and the Buildout Year 2025 land uses, in consultation with City Staff. The CCTA Model land uses for Year 2025 were used in the remaining areas outside the City of Dublin as a conservative assumption. The TAZ map is contained in Appendix C of the traffic analysis.

Under Interim Year 2015 conditions, the network used in the analysis included all arterial extensions and improvements contemplated in the Tri-Valley Area, including the following:

1. Dublin Boulevard between Tassajara Road and North Canyons Parkway at Doolan Road.
2. Fallon Road between existing terminus at the Dublin Ranch Golf Course and Tassajara Road.
3. Central Parkway between Arnold Road and east of Fallon Road.
4. All local and collector roadways in Eastern Dublin within Dublin Ranch and areas to the west.
5. Planned improvements to the Dougherty Road/Dublin Boulevard intersection and adjacent roadway segments.
6. All improvements identified for the Dublin Transit Center and the IKEA retail center, which are included in the Eastern Dublin Traffic Impact Fee Program.
7. Windemere Parkway connection with Camino Tassajara in Contra Costa County.
8. El Charro Road between I-580 and Stanley Boulevard.
9. Busch Road connection with El Charro Road.
10. Stoneridge Drive connection with El Charro Road.
11. Jack London Boulevard extension between the Livermore Airport area and El Charro Road.
12. Widening of Route 84 (Isabel Avenue and Vallecitos Road) to six lanes north of Stanley Boulevard and four lanes south of Stanley Boulevard and on Vallecitos Road.

In addition, the following freeway and interchange improvements were also included:

1. The Phase I Fallon Road/I-580 interchange improvements currently planned by the Cities of Dublin and Pleasanton, and Caltrans.
2. I-580 interchange improvements proposed at Hacienda Drive and Dougherty Road, which are included in the Eastern Dublin Traffic Impact Fee Program.
3. The I-680/West Las Positas interchange in Pleasanton is not included.
4. The Isabel (Rt. 84)/I-580 interchange Stage I and II improvements. This includes the removal of ramps at Portola Avenue.
5. Improvements to I-580 interchanges in Livermore contemplated in the City of Livermore General Plan at N. Livermore Avenue, N. First Street, Vasco Road and Greenville Road.
6. Improvement of I-580 between Santa Rita Road/Tassajara Road and Vasco Road to include four mixed flow lanes, one HOV lane and one auxiliary lane in each direction.
7. Construction of the West Dublin/Pleasanton BART station.
8. No extension of BART facilities east of the existing Dublin/Pleasanton station.

The trip generation for the proposed Project under Interim Year 2015 conditions was estimated based on standard rates provided in *Trip Generation*, 7th Edition, published by the Institute of Transportation Engineers (ITE). Table 4.2.2 summarizes the trip generation estimation for the proposed Fallon Village Project, which is expected to generate 2,158 a.m. peak hour trips and 3,689 p.m. peak hour trips.

Table 4.2.2. Trip Generation-Year 2015

Use	Size	Units	ITE Code	Daily Rate	Trips	A.M. Street Peak						P.M. Street Peak					
						Rate	% In	% Out	In	Out	Total	Rate	% In	% Out	In	Out	Total
SFR	1,950	du	210	9.57	18,662	0.75	0.25	0.75	366	1097	1,463	1.01	0.63	0.37	1241	729	1,970
MFR	655	du	220	6.72	4,402	0.51	0.20	0.80	67	267	334	0.62	0.65	0.35	264	142	406
Retail	350	ksf	820	42.94	15,029	1.03	0.61	0.39	220	141	361	3.75	0.48	0.52	630	683	1,313
Total					38,093				653	1,505	2,158				2,135	1,554	3,689

Source: Trip Generation, 7th Edition, by ITE

SFR= Single Family Residential

MFR= Multi Family Residential

du= Dwelling units

ksf= Thousand square feet

Table 4.2.3 summarizes the results of the intersection level of service analysis for Interim Year 2015. Under this scenario, all 29 study intersections are expected to operate at acceptable levels of service during the a.m. and p.m. peak hours. **Exhibit 4.2.3** shows the turning movement volumes for Year 2015 conditions. Detailed level of service calculations for this scenario are contained in Appendix 8.6.

Table 4.2.3. Intersection Level of Service-Year 2015 Conditions

ID	Signalized Intersections	A.M. Peak Hour		P.M. Peak Hour	
		v/c	LOS	v/c	LOS
1	Dougherty Road/Dublin Boulevard	0.74	C	0.87	D
2	Hacienda Drive/I-580 EB Ramps	0.75	C	0.58	A
3	Hacienda Drive/I-580 WB Ramps	0.76	C	0.61	B
4	Hacienda Drive/Dublin Boulevard	0.78	C	0.68	B
5	Hacienda Drive/Central Parkway	0.78	C	0.33	A
	Mitigated	0.58	A	0.28	A
6	Hacienda Drive/Gleason Drive	0.52	A	0.26	A
7	Santa Rita Road/I-580 EB Ramps	0.72	C	0.88	D
8	Tassajara Road/I-580 WB Ramps	0.64	B	0.73	C
9	Tassajara Road/Dublin Boulevard	0.84	D	0.68	B
10	Tassajara Road/Central Parkway	0.57	A	0.56	A
11	Tassajara Road/Gleason Drive	0.72	C	0.49	A
12	Tassajara Road/Fallon Road	0.41	A	0.66	B
13	El-Charro Road/I-580 EB Ramps	0.75	C	0.80	C
14	Fallon Road/I-580 WB Ramps	0.69	B	0.67	B
15	Fallon Road/Dublin Boulevard	0.67	B	0.70	B
16	Fallon Road/Gleason Drive	0.63	B	0.53	A
17	Fallon Road/Antone Way	0.36	A	0.38	A
18	Hacienda/Martinelli Way/Hacienda Crossings	0.55	A	0.57	A
19	Croak Road/Dublin Boulevard	0.61	B	0.44	A

20	Fallon Road/Central Parkway	0.49	A	0.30	A
21	Fallon Road/Dublin Ranch Entrance	0.45	A	0.39	A
22	Croak Road/ Central Parkway	0.22	A	0.27	A
23	Airway Boulevard/North Canyons Parkway	0.62	B	0.60	A
24	Airway Boulevard/I-580 WB Ramps	0.41	A	0.22	A
25	Airway Boulevard/I-580 EB Ramps	0.45	A	0.53	A
26	Hopyard Road/I-580 EB Ramps	0.77	C	0.80	C
27	Dougherty Road/I-580 WB Ramps	0.44	A	0.65	B
28	Arnold Road/Dublin Boulevard	0.54	A	0.64	B
29	Fallon Road/EDPO Drive	0.49	A	0.42	A

Note: v/c = volume to capacity ratio; LOS = Level of Service

Source: TJKM Transportation Consultants

Buildout Conditions (Scenario 3). An analysis of traffic conditions at buildout of the Eastern Dublin area and surrounding communities without the proposed Project is as follows.

Methodology. The new traffic-forecasting model of the Contra Costa Transportation Authority (CCTA) was used for the future Year 2025 General Plan Buildout forecasts. TJKM, the City's traffic consultant, completed the final steps that were necessary for the model to be fully calibrated, as described above. This scenario assumes full Buildout of the General Plans in the cities of Dublin, Livermore and Pleasanton, and full Buildout of the Dougherty Valley area in Contra Costa County. The City of Dublin General Plan land uses were directly used for the Traffic Analysis Zones (TAZs) within the City of Dublin. The CCTA Model land uses outside the City of Dublin were based on ABAG's *Projections 2000*. The TAZ map for all Buildout scenarios is the same as the TAZ map for the Year 2015 scenarios. The detailed land uses by TAZ are shown in Table 1 of Appendix D of the traffic analysis.

Modeling Network. The modeling network for Year 2025 assumed the following arterial extensions and improvements, which were also assumed under the Interim Year 2015 conditions.

1. Dublin Boulevard between Tassajara Road and North Canyons Parkway at Doolan Road.
2. Fallon Road between existing terminus at the Dublin Ranch Golf Course and Tassajara Road.
3. Central Parkway between Arnold Road and east of Fallon Road.
4. All local and collector roadways in Eastern Dublin within Dublin Ranch and areas to the west.
5. Planned improvements to the Dougherty Road/Dublin Boulevard intersection and adjacent roadway segments.
6. All improvements identified for the Dublin Transit Center and the IKEA retail center, which are included in the Eastern Dublin Traffic Impact Fee program.

7. Windemere Parkway connection with Camino Tassajara in Contra Costa County.
8. El Charro Road between I-580 and Stanley Boulevard.
9. Busch Road connection with El Charro Road.
10. Stoneridge Drive connection with El Charro Road.
11. Jack London Boulevard extension between the Livermore Airport area and El Charro Road.
12. Widening of Route 84 (Isabel Avenue and Vallecitos Road) to six lanes north of Stanley Boulevard and four lanes south of Stanley Boulevard and on Vallecitos Road.

In addition, the following freeway and interchange improvements were included:

1. The Phase II Fallon Road/I-580 interchange improvements anticipated by the Cities of Dublin, Livermore and Pleasanton, and Caltrans.
2. I-580 interchange improvements proposed at Hacienda Drive and Dougherty Road, which are included in the Eastern Dublin Traffic Impact Fee program.
3. The I-680/West Las Positas interchange in Pleasanton is not included.
4. The Isabel (Rt. 84)/I-580 interchange Stage I and II improvements. This includes the removal of ramps at Portola Avenue.
5. Improvements to I-580 interchanges in Livermore contemplated in the City of Livermore General Plan at N. Livermore Avenue, N. First Street, Vasco Road and Greenville Road.
6. Improvement of I-580 between Santa Rita Road/Tassajara Road and Vasco Road to include four mixed flow lanes, one HOV lane and one auxiliary lane in each direction.
7. Construction of the West Dublin/Pleasanton BART station.
8. No extension of BART facilities east of the existing Dublin/Pleasanton station.

No extension of BART facilities east of the existing Dublin/Pleasanton station.

Trip Generation. The trip generation for the Project area was estimated based on the standard rates provided in Trip Generation, 7th Edition, published by the Institute of Transportation Engineers (ITE). The trip generation results for the Project area are shown in Table 4.2.4. As shown in Table 4.2.4, the Project area is expected to generate 3,031 a.m. peak hour trips and 5,181 p.m. peak hour trips under Buildout conditions without the proposed Project.

Table 4.2.4. Buildout Trip Generation Without Project

Use	Size	Units	ITE Code	Daily Rate	Trips	A.M. Street Peak						P.M. Street Peak					
						Rate	% In	% Out	In	Out	Total	Rate	% In	% Out	In	Out	Total
SFR	1,830	du	210	9.57	17,513	0.75	0.25	0.75	343	1029	1,372	1.01	0.63	0.37	1,164	684	1,848
MFR	696	du	220	6.72	4,677	0.51	0.20	0.80	71	284	355	0.62	0.65	0.35	280	151	431
Retail	581.1	ksf	820	42.94	24,952	1.03	0.61	0.39	365	233	598	3.75	0.48	0.52	1046	1,133	2,179
Industrial	840.4	ksf	130	6.96	5,849	0.84	0.82	0.18	579	127	706	0.86	0.21	0.79	152	571	723
Total					52,991				1,358	1,673	3,031				2,642	2,539	5,181

Source: Trip Generation, 7th Edition, by ITE

SFR= Single Family Residential

MFR= Multi Family Residential

du= Dwelling units

ksf= Thousand square feet

Level of Service Analysis. Table 4.2.7 summarizes the results of the intersection level of service analysis for Buildout conditions. These planned improvements will be funded by fees from private developers through the Eastern Dublin Traffic Impact Fee Program. **Exhibit 4.2.4** shows the Buildout turning movement volumes at the study intersections. Detailed levels of service calculations for this scenario are contained in Appendix 8.6 of this DSEIR.

All study intersections except Dougherty Road/Dublin Boulevard and Santa Rita Road/I-580 EB Ramps are expected to operate at acceptable levels of service during the a.m. and p.m. peak hours under Buildout conditions. These two intersections will operate at level of service E during the p.m. peak hour.

Additional improvements to reduce the impacts at the intersection of Dougherty Road/Dublin Boulevard to an acceptable LOS would require adding a fourth northbound left turn lane. Allowing four lanes of traffic to perform a left turn movement simultaneously would raise major concerns regarding the safety of such an operation. Moreover, additional improvements to reduce traffic impacts at this intersection are not feasible given the physical constraints at the intersection. It is recommended that the City monitor the intersection for peak hour volumes on a periodic basis and continue to obtain updated volume forecasts for future years.

Therefore, even without the proposed Project, traffic impacts at the Dougherty Road/Dublin Boulevard intersection are expected to operate at a cumulatively significant level.

The intersection of Santa Rita Road/I-580 EB Ramps is expected to operate at LOS E in the p.m. peak hour under Buildout conditions without the proposed Project which exceeds the City standards of significance. This intersection can be mitigated to operate at an acceptable LOS D in the p.m. peak hour by widening the eastbound off-ramp approach to include three left turn lanes, one through lane and one free right turn lane. Modifications to the striping on the northbound lanes of the Tassajara Road/I-580 overpass will be required to accept traffic from the third left

turn lane and maintain three northbound through lanes at the Tassajara Road / I-580 WB Ramps intersection.

In addition, the intersection of Hacienda Drive / Central Parkway is expected to operate with a heavy westbound left turn movement (approximately 800 vehicles in the a.m. peak hour) from Central Parkway onto southbound Hacienda Drive under Buildout conditions. Even though the overall levels of service are acceptable at this intersection, the traffic impact on the westbound approach should be improved by modifying this approach to include two left-turn lanes, one through lane and one right turn lane. This improvement would ensure traffic safety and provide adequate lane capacity at this intersection.

Table 4.2.5. Buildout Intersection Levels of Service Without Project

ID	Signalized Intersections	A.M. Peak Hour		P.M. Peak Hour	
		v/c	LOS	v/c	LOS
1	Dougherty Road/Dublin Boulevard	0.77	C	0.93	E
2	Hacienda Drive/I-580 EB Ramps	0.81	D	0.61	B
3	Hacienda Drive/I-580 WB Ramps	0.81	D	0.66	B
4	Hacienda Drive/Dublin Boulevard	0.84	D	0.81	D
5	Hacienda Drive/Central Parkway	0.88	D	0.43	A
	Mitigated	0.66	B	0.36	A
6	Hacienda Drive/Gleason Drive	0.51	A	0.42	A
7	Santa Rita Road/I-580 EB Ramps	0.84	D	0.92	E
	Mitigated	0.78	C	0.82	D
8	Tassajara Road/I-580 WB Ramps	0.75	C	0.70	B
9	Tassajara Road/Dublin Boulevard	0.88	D	0.81	D
10	Tassajara Road/Central Parkway	0.59	A	0.78	C
11	Tassajara Road/Gleason Drive	0.72	C	0.65	B
12	Tassajara Road/Fallon Road	0.47	A	0.79	C
13	El-Charro Road/I-580 EB Ramps	0.50	A	0.46	A
14	Fallon Road/I-580 WB Ramps	0.49	A	0.60	A
15	Fallon Road/Dublin Boulevard	0.75	C	0.79	C
16	Fallon Road/Gleason Drive	0.69	B	0.58	A
17	Fallon Road/Antone Way	0.42	A	0.43	A
18	Hacienda/Martinelli Way/Hacienda Crossings	0.67	B	0.71	C
19	Croak Road/Dublin Boulevard	0.64	B	0.47	A
20	Fallon Road/Central Parkway	0.57	A	0.38	A
21	Fallon Road/Dublin Ranch Entrance	0.46	A	0.46	A
22	Croak Road/ Central Parkway	0.23	A	0.33	A
23	Airway Boulevard/North Canyons Parkway	0.69	B	0.64	B
24	Airway Boulevard/I-580 WB Ramps	0.41	A	0.25	A
25	Airway Boulevard/I-580 EB Ramps	0.44	A	0.49	A
26	Hopyard Road/I-580 EB Ramps	0.76	C	0.86	D
27	Dougherty Road/I-580 WB Ramps	0.52	A	0.74	C
28	Arnold Road/Dublin Boulevard	0.56	A	0.65	B
29	Fallon Road/EDPO Drive	0.51	A	0.52	A

Note: v/c = volume to capacity ratio; LOS = Level of Service

Source: TJKM Associates, 2005

Supplemental Program-level impacts. Anticipated impacts of Project buildout include impacts to local roadways, impacts to nearby freeways and impacts to transit services. This is identified as Scenario 4 for purposes of the transportation analysis.

Roadway impacts

Estimated impacts of the proposed Project to local roadways are as follows.

Methodology. The CCTA Model was used for the future Year 2025 General Plan Buildout plus Project forecasts. This scenario adds traffic generated by the proposed Project to the Buildout conditions. The detailed land uses shown by TAZ are shown in Table 1 of Appendix E of the traffic analysis. The proposed Project would consist of approximately 2,340 single-family dwellings, 768 multi-family dwellings and 1,522,000 square feet of retail and 980,000 square feet of service land use. The modeling network assumed the same arterial extensions and improvements as assumed under the Interim Year 2015 and Buildout conditions.

Trip generation. The proposed Project trip generation was estimated based on standard rates provided in *Trip Generation*, 7th Edition, published by the Institute of Transportation Engineers (ITE). Table 4.2.6 summarizes the trip generation estimation for the proposed Fallon Village Project, which is expected to generate 5,233 a.m. peak hour trips and 10,008 p.m. peak hour trips.

Table 4.2.6. Trip Generation-Buildout Plus Proposed Project

Use	Size	Units	ITE Code	Daily Rate	Trips	A.M. Street Peak						P.M. Street Peak					
						Rate	% In	% Out	In	Out	Total	Rate	% In	% Out	In	Out	Total
SFR	2,340	du	210	9.57	22,394	0.75	0.25	0.75	439	1316	1,755	1.01	0.63	0.37	1489	874	2,363
MFR	768	du	220	6.72	5,161	0.51	0.20	0.80	78	313	391	0.62	0.65	0.35	310	167	477
Retail	1,522	ksf	820	42.94	65,355	1.03	0.61	0.39	956	612	1,568	3.75	0.48	0.52	2740	2968	5,708
Service	980	ksf	710	11.01	10,790	1.55	0.88	0.12	1337	182	1,519	1.49	0.17	0.83	248	1212	1,460
Total					103,699				2,810	2,423	5,233				4,787	5,221	10,008

Source: Trip Generation, 7th Edition, by ITE

SFR= Single Family Residential

MFR= Multi Family Residential

du= Dwelling units

ksf= Thousand square feet

Level of Service Analysis. Table 4.2.7 summarizes the results of the intersection level of service analysis for Buildout plus Project conditions. **Exhibit 4.2.5** shows the Buildout plus Project turning movement volumes at the study intersections. Detailed calculations are contained in Appendix 8.6.

Similar to the Year 2025 Buildout scenario, the following two intersections would operate at unacceptable levels of service (LOS E in the p.m. peak hour) under Buildout plus Project conditions: 1) Dougherty Road/Dublin Boulevard; and 2) Santa Rita Road/I-580 eastbound Ramps. An unacceptable LOS is considered a significant

impact. Future impacts at these two intersections would represent significant supplemental cumulative impacts.

Supplemental Program Impact TRA-1 (Project contribution to impact to Dublin/Dougherty intersection). In the year 2025, traffic generated by buildout of the proposed Project along with other buildout traffic, would cause t the Dougherty Road/Dublin Boulevard intersection to operate at an unacceptable level of service during the p.m. peak hour (*significant supplemental cumulative impact and mitigation required*).

This impact would be reduced but not to a less-than-significant level with adherence to the following measure.

Supplemental Mitigation SM-TRA-1 (Project contribution to impact to Dublin/Dougherty intersection). Project developers shall have the following obligations:

- a) Advance to the City applicable monies for acquisition of right-of-way and construction of the planned improvements at Dougherty Road/Dublin Boulevard. The amount of money advanced to the City shall be based on the developer's fair share of the deficit (spread over those projects which are required to make up the deficit) between funds available to the City from *Category 2 Eastern Dublin Traffic Impact Fee* funds and the estimated cost of acquiring the right-of-way and constructing the improvements. The City should provide credit for *Category 2 Eastern Dublin Traffic Impact Fees* to the developer for any advance of monies made for the improvements planned for the Dougherty Road/Dublin Boulevard intersection.
- b) Pay a pro-rata share of the cost to construct the planned improvements at Dougherty Road/Dublin Boulevard through payment of the Eastern Dublin Traffic Impact Fee. The City of Dublin will implement these improvements.

The planned improvements at the Dougherty Road /Dublin Boulevard intersection will upgrade the intersection to include the following lane geometries:

- Northbound Dougherty Road Approach: 3 left turn lanes; 3 through lanes; and 2 right turn lanes
- Southbound Dougherty Road Approach: 2 left turn lanes; 3 through lanes; and 1 shared through/right turn lane
- Eastbound Dublin Boulevard Approach: 2 left turn lanes; 3 through lanes; and 2 right turn lanes
- Westbound Dublin Boulevard Approach: 3 left turn lanes; 3 through lanes; and 1 right turn lane.

However, these improvements will not be sufficient to reduce the intersection impacts to an acceptable LOS during the p.m. peak hour. Additional improvements to reduce the impacts at the Dougherty Road /Dublin Boulevard intersection to an acceptable LOS would require adding a fourth northbound left turn lane and other improvements. Allowing four lanes of traffic to perform a left turn movement simultaneously would raise major concerns regarding the safety of such an

operation. Moreover, additional improvements to reduce traffic impacts at this intersection are not feasible given the physical constraints at the intersection. Adjacent properties to this intersection are already built out and efforts are now being made to acquire additional improvements identified in the above mitigation measure. It is recommended that the City monitor the intersection for peak hour volumes on a periodic basis and continue to obtain updated volume forecasts for future years. Such monitoring will be done to assist the City and the Project developer to comply with General Plan policies requiring implementation of transportation measures to improve levels of service. Such transportation measures to be considered at the Stage 2 Development Plan include requiring a comprehensive transportation demand management program and other trip reduction measures of the ACCMA Congestion Management Program. In addition, current and future phases of the I-580 Smart Corridor Project would likely relieve some congestion at the Dougherty Road/Dublin Boulevard intersection through ITS (Intelligent Transportation Systems) measures and discourage traffic from diverting off of the freeway due to congestion or incidents.

Therefore, this impact at the Dougherty Road/Dublin Boulevard intersection would remain a *significant and unavoidable impact*.

Supplemental Impact TRA-2 (Project contribution to impact to Santa Rita Road/I-580 eastbound ramps). In the year 2025, traffic generated by buildout of the proposed Project along with other buildout traffic, would cause the Santa Rita Road/I-580 EB Ramps intersection to operate at an unacceptable level of service during the p.m. peak hour (significant supplemental cumulative impact and mitigation required).

This impact could be reduced to a less-than-significant level by adherence to the following measure.

Supplemental Mitigation SM-TRA-2 (Project contribution to impact to Santa Rita Road/I-580 eastbound ramps). Project developers shall contribute a pro-rata share of the cost to widen the I-580 eastbound off-ramp approach at Santa Rita Road to include a third eastbound left turn lane.

The City of Dublin will implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement will occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.

Supplemental Impact TRA-3 (Project contribution to impact at Central Parkway and Hacienda Drive). In the year 2025, with traffic generated by buildout of the proposed Project along with other buildout traffic, the heavy volumes anticipated for the westbound left turn movement (approximately 800 vehicles in the a.m. peak hour) from Central Parkway onto southbound Hacienda Drive would create safety concerns during the a.m. peak hour (significant supplemental cumulative impact and mitigation required).

This impact could be reduced to a less-than-significant level by adherence to the following measure.

Supplemental Mitigation SM-TRA-3 (Project contribution to impact at Central Parkway and Hacienda Drive). Project developers shall contribute a pro-rata share of the cost to modify the westbound approach on Central Parkway at Hacienda Drive to include two left turn lanes, one through and one right turn lane.

The City of Dublin will implement this mitigation when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects.

Table 4.2.7. Intersection Levels of Service at Buildout Plus Proposed Project

ID	Signalized Intersections	A.M. Peak Hour		P.M. Peak Hour	
		v/c	LOS	v/c	LOS
1	Dougherty Road/Dublin Boulevard	0.77	C	0.93	E
2	Hacienda Drive/I-580 EB Ramps	0.81	D	0.60	A
3	Hacienda Drive/I-580 WB Ramps	0.79	C	0.65	B
4	Hacienda Drive/Dublin Boulevard	0.86	D	0.84	D
5	Hacienda Drive/Central Parkway	0.86	D	0.41	A
	Mitigated	0.65	B	0.35	A
6	Hacienda Drive/Gleason Drive	0.54	A	0.41	A
7	Santa Rita Road/I-580 EB Ramps	0.81	D	0.95	E
	Mitigated	0.75	C	0.84	D
8	Tassajara Road/I-580 WB Ramps	0.71	C	0.71	C
9	Tassajara Road/Dublin Boulevard	0.89	D	0.80	C
10	Tassajara Road/Central Parkway	0.58	A	0.76	C
11	Tassajara Road/Gleason Drive	0.71	C	0.65	B
12	Tassajara Road/Fallon Road	0.50	A	0.82	D
13	El-Charro Road/I-580 EB Ramps	0.59	A	0.49	A
14	Fallon Road/I-580 WB Ramps	0.64	B	0.66	B
15	Fallon Road/Dublin Boulevard	0.76	C	0.89	D
16	Fallon Road/Gleason Drive	0.74	C	0.56	A
17	Fallon Road/Antone Way	0.45	A	0.45	A
18	Hacienda/Martinelli Way/Hacienda Crossings	0.72	C	0.75	C
19	Croak Road/Dublin Boulevard	0.65	B	0.61	B
20	Fallon Road/Central Parkway	0.57	A	0.41	A
21	Fallon Road/Dublin Ranch Entrance	0.50	A	0.53	A
22	Croak Road/ Central Parkway	0.24	A	0.30	A
23	Airway Boulevard/North Canyons Parkway	0.69	B	0.70	B
24	Airway Boulevard/I-580 WB Ramps	0.42	A	0.25	A
25	Airway Boulevard/I-580 EB Ramps	0.46	A	0.57	A

26	Hopyard Road / I-580 EB Ramps	0.76	C	0.87	D
27	Dougherty Road / I-580 WB Ramps	0.51	A	0.74	C
28	Arnold Road / Dublin Boulevard	0.56	A	0.65	B
29	Fallon Road / EDPO Drive	0.54	A	0.49	A

Note: v/c = volume to capacity ratio; LOS = Level of Service
Source: TJKM Associates 2005

Freeway segment analysis

Evaluation of freeway level of service is a different process than intersection levels of service. Level of service for freeways is based upon peak hour volumes (number of passenger cars per hour). In practice as in theory, volume, density and speed are directly correlated, and the analyst can calculate any of these factors knowing the other two. Traffic flow is used as the basis for freeway levels of service and for calculating the impacts of the Project on I-580 and I-680 operations in Year 2030. Caltrans currently uses Year 2030 as the horizon year for analysis of freeway conditions.

The CCTA Model was used in the study to forecast the peak hour volumes on various segments of I-580, I-680 and SR 84 under two scenarios: 1) Year 2025 Buildout; and 2) Year 2025 Buildout plus Project. The forecasts for Year 2030 conditions were derived by applying a 10% increase to the forecasted volumes for the Year 2025 conditions.

The 10 percent increase is based on an assumed growth rate of two percent per year for a five-year period. This figure was derived by examining both past and projected growth rates along the I-580 corridor. For the period 1994 to 2004 annual traffic increases on I-580 at the Project site were 2.47 percent, based on annual count information available from Caltrans. There is a 2.13 percent annual growth rate in the I-580 corridor between 2003 (measured counts) and 2025 (CCTA model). Two percent was selected for the next five years (2025 to 2030) based on the premises that the rate of growth is slightly declining and the I-580 corridor is experiencing increasing levels of congestion.

A maximum service flow rate of 2,300 vehicles per hour was assumed for each lane of the freeway. A maximum capacity of 1,000 vehicles per hour was assumed for auxiliary lanes. Even though I-580 is expected to have HOV (High Occupancy Vehicle) lanes in both directions within the study area, the volumes and capacities of the HOV lanes were not considered in the level of service calculations. Table 4.2.8 summarizes the results of the Year 2030 level of service analysis on I-580, I-680 and SR 84 with and without the Project.

Table 4.2.8. Year 2030 Freeway Analysis

	No of Lanes	Capacity	Year 2030 (No Project)				Year 2030 with Project			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Vol.	LOS	Vol.	LOS	Vol.	LOS	Vol.	LOS
I-580, East of I-680										
Eastbound	4	9,200	6617	D	6806	D	6734	D	6798	D
Westbound	5	11,500	7888	D	8445	D	7952	D	8510	D
I-580, Dougherty Road to Hacienda Drive										
Eastbound	6 + aux.	14,800	11432	D	11211	D	11656	D	11198	D
Westbound	4+ aux.	10,200	10540	F	10798	F	10537	F	10931	F
I-580, Hacienda Drive to Tassajara Road										
Eastbound	5	11,500	9510	D	11520	F	8839	D	11566	F
Westbound	4+ aux.	10,200	11351	F	10438	F	11253	F	10503	F
I-580, Tassajara Road to Fallon Road										
Eastbound	4+ aux.	10,200	8337	D	10261	F	8775	D	10350	F
Westbound	4+ aux.	10,200	8957	D	8116	D	8943	D	8244	D
I-580, Fallon Road to Airway Boulevard										
Eastbound	4+aux.	10,200	7994	D	10598	F	8070	D	10780	F
Westbound	4+aux.	10,200	8703	D	7797	D	8891	D	7795	D
I-680, Alcosta Boulevard to I-580										
Northbound	4	9,200	6509	D	7788	D	6477	D	7835	D
Southbound	4	9,200	9257	F	8932	E	9423	F	8947	E
I-680, South of I-580										
Northbound	3	6,900	6009	D	6975	F	5931	D	6913	F
Southbound	3+aux.	7,900	7374	E	6960	E	7556	E	6971	E
SR 84, South of Stanley Blvd.										
Northbound	2	4,000	3079	D	2999	D	3029	D	2830	D
Southbound	2	4,000	2780	D	3333	D	2736	D	3366	D

Source: 2000 Highway Capacity Manual, Chapter 23, Exhibit 23.2, LOS Criteria for Basic Freeway Segments

Maximum Service Flow Rate for freeway segments=2,300 vehicles/hr/lane, aux.=Auxiliary Lane
 If number of lanes on freeway segment= N+aux., capacity of segment=(N*2300+1000) vehicles/hr
 For SR 84, Exhibit 21-2, LOS Criteria for Multilane Highways (2000 HCM) was used assuming a capacity of 2,000 vehicles/hr/lane

Year 2030 Without Project. As shown in Table 4.2.8, certain segments of I-580 and I-680 in the study area are expected to operate at LOS F during the a.m. or p.m. peak hour under Year 2030 without Project conditions. For example, I-580 is expected to operate at LOS F in the p.m. peak commute direction (eastbound) from Hacienda Drive to Airway Boulevard. In the westbound direction, I-580 is expected to operate at LOS F from Tassajara Road to Dougherty Road during the a.m. and p.m. peak hours.

Southbound I-680 is expected to operate at LOS F from Alcosta Boulevard to I-580 during the a.m. peak hour under Year 2030 without Project conditions. Similarly, I-680 would operate at LOS F in the northbound direction south of I-580 during the p.m. peak hour.

The analysis assumes six lanes of travel on SR 84 between I-580 and Stanley Boulevard and four lanes south of Stanley Boulevard in Year 2030. As shown in Table 4.2.8, SR 84 south of Stanley Boulevard is expected to operate at an acceptable LOS D under Year 2030 without Project conditions.

Year 2030 With Project. Project-related traffic added to the freeway system would result in a cumulatively significant supplemental impact, as follows.

Supplemental Impact TRA-4 (cumulative impacts to local freeways). In the Year 2030 with traffic generated by buildout of the proposed Project along with other buildout traffic, freeway segments on I-580 and I-680 in the Project area would operate at unacceptable levels of service during the a.m. and p.m. peak hours (significant supplemental cumulative impact and mitigation required).

With the proposed Project traffic added to Year 2030 No Project mainline freeway volumes, projected LOS on I-580 and I-680 would remain unchanged. However, with a projected LOS F on various segments of I-580 and I-680, Project trips would be adding to an already deficient condition. These specific segments would not meet the ACCMA monitoring standard of LOS E during the a.m. or p.m. peak hour. This is considered a *significant supplemental cumulative impact*.

The only mainline freeway improvement identified in the Eastern Dublin Specific Plan is the widening of the I-580 freeway to provide a fifth auxiliary lane in each direction between Tassajara Road and Fallon Road. The eastbound auxiliary lane on this I-580 segment was recently constructed as part of the Tassajara Road/Santa Rita Road interchange improvement project, which was sponsored by the City of Dublin. In the westbound direction, a partial auxiliary lane (400-meter long) was constructed at the Tassajara Road westbound off-ramp. Additionally, the Fallon Road/El Charro Phase I interchange project, which is currently sponsored by the City of Dublin, is scheduled for construction in 2006. This project is proposed to include a partial westbound auxiliary lane (400-meter long) at the Fallon Road westbound off-ramp.

Although efficiency improvements (such as HOV Lanes) and expanded public transportation could be added in the I-580 corridor, little or no additional freeway capacity for single-occupant vehicles is planned. Actions to encourage alternative

travel modes include advocating for HOV lanes on I-580, extending BART to Livermore, implementing the I-580 Smart Corridor approach (including adaptive signal timing, transit priority systems, incident management, and ramp metering), and supporting other major investments in transit. In addition, the City of Dublin plans to construct the Dublin Boulevard extension to North Canyons Parkway in Livermore as a six-lane parallel arterial that will provide additional lane capacity along the I-580 corridor.

In advocating HOV lanes on I-580 and other projects listed above, the City of Dublin will coordinate with other local jurisdictions and attempt to obtain additional funds (e.g., from State and federal sources) to implement these projects. Moreover, the City of Dublin will support advancing the funding priority of the HOV lanes on I-580 through participation in the Tri-Valley Transportation Council. An interim HOV lane project is planned for implementation in year 2009 in the eastbound direction of I-580 from Santa Rita Road to Greenville Road. Ultimately, permanent HOV lanes will be constructed in both directions of I-580 between I-680 and Greenville Road.

Mitigation Measure 3.3/2.0 of the Eastern Dublin EIR, which is applicable to the Project, requires participation in a Transportation Systems Management program, which would include strategies to reduce single-occupant vehicles. Moreover, as part of Mitigation Measures 3.3/3.0 and 3.3/5.0 of the Eastern Dublin EIR, the Project shall contribute a proportionate share to the construction of auxiliary lanes on I-580 by paying a regional fee, which the City has implemented through Category 3 Eastern Dublin Traffic Impact Fee, followed by the TVTD Fee (see pages 3.6-6 and 3.6-12). Both the Category 3 Eastern Dublin Traffic Impact Fee and the TVTD Fee (which has substituted for the Category 3 Eastern Dublin Traffic Impact Fee) include HOV lanes on I-580 from Tassajara Road to Vasco Road, as specified in the TVTD Fee Strategic Expenditure Plan.

The Project will be required to pay for its proportionate share of impacts to I-580 and I-680 improvements, by payment of TVTD Fees. The Project will also pay its proportionate share toward transit improvements in the Tri-Valley area by payment of the TVTD Fee; one of the improvements to be funded by the TVTD Fees is express bus service from Livermore to the East Dublin/Pleasanton BART station. (See Resolution 89-98, adopting TVTD Fee [available in the City Clerk's office].)

Mitigation Measure 3.3/3.0 of the Eastern Dublin EIR remains applicable to the impact on I-580. This mitigation measure requires the City of Dublin to coordinate with Caltrans and the City of Pleasanton to construct auxiliary lanes (for a total of 10 lanes) on I-580 between Tassajara Road and Airway Boulevard. Mitigation Measure 3.3/5.0 of the Eastern Dublin EIR is also applicable to this impact. It requires the Project to contribute a proportionate share to the construction of auxiliary lanes (for a total of 10 lanes) on I-580 east of Airway Boulevard, as implemented by Caltrans..

In an effort to improve traffic flow on I-580 in the Dublin/Pleasanton area, the eastbound on-ramps at Hopyard Road, Hacienda Drive and Santa Rita Road were metered two years ago. Field observations and traffic data collected on I-580 before and after ramp metering was implemented suggest that mainline traffic flow in this

area has improved due to ramp metering. Furthermore, the cities of Dublin, Livermore and Pleasanton are currently coordinating efforts with Caltrans to fund and implement ramp metering in both directions of I-580 between Foothill Road/San Ramon Road and Greenville Road within the next few years. This comprehensive ramp metering plan for the Tri-Valley, coupled with the planned HOV lanes in this area, are expected to provide improvements to mainline traffic flow on I-580.

As shown on Table 4.2.8, with the proposed Project trips added to Year 2030 No Project volumes, projected LOS for both directions of travel on SR 84 south of Stanley Boulevard would remain unchanged at LOS D during the a.m. and p.m. peak hours. Therefore, the Project would have a less-than-significant impact on SR 84 in the vicinity of the Project under Year 2030 conditions.

Even though the above improvements will improve traffic conditions on I-580 and I-680 in the Tri-Valley, they will not mitigate the impact of projected traffic demand on these freeways to a less-than-significant level. Therefore, this impact remains *significant and unavoidable*.

Consistency with Alameda County Congestion Management Plan

The proposed Project is expected to generate more than 100 p.m. peak hour trips over the City of Dublin General Plan Buildout. As a result, the Alameda County Congestion Management Program (CMP) requires the City to conduct a traffic impact analysis of the Project using the Alameda Countywide Transportation Demand Model for Year 2010 and 2025 conditions. The Alameda County Congestion Management Agency (ACCMA) requires that Potential impacts of the Project on adjacent Metropolitan Transportation System (MTS) roadway and transit systems be addressed as specified in the 2003 CMP.

The MTS roadway system in the vicinity of the Project includes I-580, I-680, SR 84, Dublin Boulevard, Tassajara Road, Santa Rita Road, Fallon Road and El Charro Road. The transit system in the Project area includes BART and LAVTA.

Comparison of Traffic Volumes to the Countywide Transportation Demand Model.

Project impacts were analyzed in this study based on the CCTA Model under Interim Year 2015 and Buildout Year 2025 scenarios. Year 2015 was determined to be the appropriate interim year for analysis based on implementation projections for the initial phases of the proposed Project. The majority of the Project is not expected to be implemented by Year 2010 and, hence, it is appropriate to use Year 2015 to analyze intermediate Project impacts.

The 2015 CCTA Model volumes within the study area were compared to the 2010 Countywide Transportation Demand Model volumes during the a.m. and p.m. peak hours, as shown on Table 4.2.9. A total of 102 pairs of volumes were compared between the two models on I-580, I-680, SR 84, Dublin Boulevard, Fallon Road, El Charro Road, Tassajara Road, Santa Rita Road, Hacienda Drive, and Dougherty Road. Of the 102 pairs of volumes that were compared, the CCTA Model volumes were found to be higher in 89 instances (or 87% of the time), with only 13 Countywide Model volumes found to be higher, as shown in bold in Table 4.2.7. The

higher Countywide Model volumes appear to be concentrated on Dougherty Road south of Dublin Boulevard and on SR 84 south of Stanley Boulevard.

Under Year 2025, of the 110 pairs of volumes that were compared, the Countywide Model volumes were only found to be higher in 17 instances, which are shown in bold in Table 4.2.10. The CCTA Model volumes were found to be higher in 93 instances, or 85% of the time. The higher Countywide Model volumes appear to be concentrated on Tassajara Road between Dublin Boulevard and Central Parkway. However, the volumes on Tassajara Road decrease more than expected north of Central Parkway in the Countywide Model. The higher Countywide Model volumes also appear to be concentrated on Dougherty Road north and south of Dublin Boulevard.

The Countywide Transportation Demand Model has a regional focus, larger traffic analysis zones, less elaborate street network and fewer centroid connectors within the Tri-Valley area. Therefore, it can be expected that traffic loading onto specific segments of roadways will be more variable than in more refined models in Dublin and the Tri-Valley, such as the CCTA Model. In general, as shown in Tables 4.2.9 and 4.2.10, traffic volumes generated from the more refined CCTA Model are more conservative and, therefore, those volumes were used to analyze Project impacts on adjacent MTS roadways under Year 2015 and Year 2025 Buildout conditions, as indicated below.

MTS Arterial Impacts. Table 4.2.11 summarizes the results of the analysis of Project impacts on various segments of Dublin Boulevard, Tassajara Road, Santa Rita Road, Fallon Road and El Charro Road in the vicinity of the Project. The analysis consists of measuring the levels of service on these roadway segments during the p.m. peak hour under Year 2015 and 2025 traffic conditions with and without the Project. The LOS analysis is based on the volume-to-capacity ratio for roadway segments.

As shown in Table 4.2.11, all study segments are expected to operate at acceptable levels of service (LOS D or better) in the p.m. peak hour under Year 2015 and 2025 conditions with and without the Project. Therefore, the Project would have *no significant impact* on the MTS arterial system in the vicinity of the Project under Year 2015 and 2025 conditions.

Freeway / State Highway Impacts. As required by the 2003 CMP, Project impacts on I-580, I-680 and SR 84 were analyzed based on freeway capacity standards described in the 1985 Highway Capacity Manual. Tables 4.2.12 and 4.2.13 summarize the results of the analysis of Project impacts on various segments of I-580, I-680 and SR 84 in the vicinity of the Project. The analysis consists of measuring the levels of service on these freeway and State highway segments during the p.m. peak hour under Year 2015 and 2025 traffic conditions with and without the Project. The LOS analysis is based on the volume-to-capacity ratio for basic freeway sections and multilane highways.

As shown in Tables 4.2.12 and 4.2.13, specific segments of I-580 and I-680 are expected to operate at LOS F in the p.m. peak hour under Year 2015 and 2025 conditions with and without the Project. In general, with the Project trips added to

No Project mainline freeway volumes, projected LOS on I-580 and I-680 would remain unchanged. However, with a projected LOS F on various segments of I-580 and I-680, Project trips would be adding to an already deficient condition. These specific segments would not be consistent with the ACCMA monitoring standard of LOS E during the a.m. or p.m. peak hour. This is considered a *significant supplemental cumulative impact*.

Supplemental Impact TRA-5 (consistency with Alameda County Congestion Management Plan). In the Years 2015 and 2025, traffic generated by the proposed Project along with other background traffic on I-580 and I-680 would exceed ACCMA monitoring standards for volumes along these freeways (*significant supplemental cumulative impact and mitigation required*).

The Project developers will be required to pay the Tri-Valley Transportation Development (TVTD) Fee for their proportionate share of I-580 and I-680 improvements. Project developers will also pay a proportionate share toward public transportation improvements (e.g., west Dublin/Pleasanton BART Station and Express Bus Service from Livermore to East Dublin/Pleasanton BART Station) by payment of the TVTD Fee. Payment of the TVTD Fee, coupled with other improvements, as specified above in the "Freeway Segment Analysis" section, will help improve traffic flows on I-580 and I-680 in the Tri-Valley area. However, since sufficient right-of-way does not exist to add additional mainline mixed-flow lanes to accommodate expected cumulative traffic, this impact would be *significant and unavoidable*.

SR 84 south of Stanley Boulevard is expected to operate at acceptable LOS C or D in the a.m. and p.m. peak hours under Year 2015 and 2025 conditions with and without the Project, as shown in Tables 4.2.10 and 4.2.11. Therefore, the Project would have a *less-than-significant impact* on SR 84 in the vicinity of the Project under Year 2015 and 2025 conditions.

**Table 4.2.9. Comparison of Year 2015 CCTA Model Forecasts with
Year 2010 ACCMA Model Forecasts**

Location	CCTA Model (Year 2015)		CMA Model (Year 2010)		AM Peak	PM Peak
	AM Peak	PM Peak	AM Peak	PM Peak	% Difference from CMA Model	
	1	1'	2	2'	(1-2)/2 * 100	(1'-2')/2' * 100
I-580						
East of Fallon						
-Eastbound	8.201	11.319	4.512	9.494	82%	19%
-Westbound	9.725	8.237	9.659	5.313	1%	55%
Between Tassaiara and Fallon						
-Eastbound	8.193	10.818	4.508	8.738	82%	24%
-Westbound	9.571	8.327	9.086	5.257	5%	58%
Between Hacienda and						
-Eastbound	8.396	10.380	3.797	9.118	121%	14%
-Westbound	10.303	9.170	8.677	4.735	19%	94%
Between Dougherty and						
-eastbound	10.028	9.982	5.313	10.200	89%	-2%
-westbound	9.387	9.238	8.656	6.350	8%	45%
West of Dougherty						
-eastbound	10.732	10.816	4.731	7.655	127%	41%
-westbound	10.042	10.082	3.123	6.238	222%	62%
I-680						
Alcosta Boulevard to I-580						
-northbound	5.757	7.092	4.842	6.230	19%	14%
-southbound	8.304	7.865	6.215	6.289	34%	25%
South of I-580						
-northbound	5.236	6.339	3.652	5.736	43%	11%
-southbound	6.740	6.225	5.912	5.446	14%	14%
SR 84						
South of Stanley Boulevard						
-northbound	1.127	1.007	2.288	1.894	-51%	-47%
-southbound	948	1.180	1.706	2.453	-44%	-52%
Dublin Boulevard						
East of Fallon						
-eastbound	992	2.308				
-westbound	2.464	1.217				
Between Tassaiara and Fallon						
-eastbound	414	1.525	0	390		304%
-westbound	2.458	1.050	288	0	753%	
Between Hacienda and						
-eastbound	693	2.067	57	356	1116%	481%
-westbound	2.482	1.198	643	27	286%	4337%
Between Dougherty and						
-eastbound	2.059	2.201	982	969	110%	127%
-westbound	2.385	3.046	979	1.254	144%	143%
West of Dougherty						
-eastbound	1.618	1.999	817	1.187	98%	68%
-westbound	1.443	2.981	1.804	1.879	-20%	59%

**Table 4.2.9 (con't.). Comparison of Year 2015 CCTA Model Forecasts with
Year 2010 ACCMA Model Forecasts**

Location	CCTA Model (Year 2015)		CMA Model (Year 2010)		AM Peak	PM Peak
	AM Peak	PM Peak	AM Peak	PM Peak	% Difference from CMA Model	
	1	1'	2	2'	$(1-2)/2 * 100$	$(1'-2')/2' * 100$
Fallon Road						
Between I-580 and Dublin						
-northbound	1.619	1.957	759	331	113%	491%
-southbound	2.294	1.758	419	751	447%	134%
Between Dublin and Central						
-northbound	442	1.591	524	529	-16%	201%
-southbound	2.032	1.234	472	558	331%	121%
Between Central and Gleason						
-northbound	1.155	1.139	172	119	572%	857%
-southbound	1.275	1.612	158	126	707%	1179%
North of Gleason						
-northbound	456	1.099				
-southbound	1.208	1.130				
El-Charro Road						
South of I-580						
-northbound	1.033	2.543	298	388	247%	555%
-southbound	2.038	1.996	69	108	2854%	1748%
Tassaiara Road						
Between I-580 and Dublin						
-northbound	1.954	2.527	939	1,602	108%	58%
-southbound	3.396	3.475	1,383	938	146%	270%
Between Dublin and Central						
-northbound	754	2.158	1,092	1,699	-31%	27%
-southbound	2.692	1.612	1,834	1,095	47%	47%
Between Central and Gleason						
-northbound	513	2.249	396	863	30%	161%
-southbound	2.798	1.434	930	417	201%	244%
North of Gleason						
-northbound	318	1.878	207	436	54%	331%
-southbound	2.248	1.110	494	196	355%	466%
Santa Rita Road						
South of I-580						
-northbound	2.084	1.716	1,330	1,243	57%	38%
-southbound	2.826	1.601	1,472	1,481	92%	8%
Hacienda Drive						
South of Dublin Boulevard						
-northbound	1.789	2.284	964	734	86%	211%
-southbound	2.106	2.088	530	1,143	297%	83%
Between Dublin and Central						
-northbound	1.141	2.158	496	343	130%	529%
-southbound	1.395	1.612	204	628	584%	157%
Between Central and Gleason						
-northbound	1080	2.249	157	101	588%	2127%
-southbound	707	1434	83	178	752%	706%
Dougherty Road						
South of Dublin Boulevard						
-northbound	2.158	3.036	2,810	3,342	-23%	-9%
-southbound	2.923	2.508	2,163	2,637	35%	-5%
North of Dublin Boulevard						
-northbound	1,395	2,067	1,408	1,923	-1%	7%
-southbound	2,379	1,472	1,751	1,625	36%	-9%

Source: TJKM Associates, 2005

**Table 4.2.10. Comparison of CCTA Model With ACCMA Model
Forecasts For Year 2025**

Location	CCTA Model		CMA Model		AM Peak	PM Peak
	AM Peak	PM Peak	AM Peak	PM Peak	% Difference from CMA Model	
	1	1'	2	2'	$(1-2)/2 * 100$	$(1'-2')/2' * 100$
I-580						
East of Fallon						
-Eastbound	7,336	9,800	5,886	9,392	25%	4%
-Westbound	8,082	7,086	9,310	6,583	-13%	8%
Between Tassajara and Fallon						
-Eastbound	7,977	9,409	5,432	9,725	47%	-3%
-Westbound	8,130	7,494	9,171	6,054	-11%	24%
Between Hacienda and Tassajara						
-Eastbound	8,935	10,514	4,821	9,782	85%	7%
-Westbound	10,230	9,548	9,026	5,795	13%	65%
Between Dougherty and						
-eastbound	10,596	10,180	5,992	10,889	77%	-7%
-westbound	9,579	9,937	8,812	7,104	9%	40%
West of Dougherty						
-eastbound	9,067	9,392	4,863	6,696	86%	40%
-westbound	10,114	10,636	8,652	7,684	17%	38%
I-680						
Alcosta Boulevard to I-580						
-northbound	5,888	7,122	5,188	6,500	13%	10%
-southbound	8,566	8,133	6,300	6,554	36%	24%
South of I-580						
-northbound	5,391	6,284	4,493	5,955	20%	5%
-southbound	6,869	6,337	5,862	5,561	17%	14%
SR 84						
South of Stanley Boulevard						
-northbound	2,753	2,572	2,660	1,738	3%	48%
-southbound	2,487	3,060	1,674	2,984	48%	3%
Dublin Boulevard						
East of Fallon						
-eastbound	2,114	2,600	206	1,420	926%	83%
-westbound	2,518	1,979	1,500	2	68%	98850%
Between Tassajara and Fallon						
-eastbound	1,115	1,791	0	1,277	--	40%
-westbound	2,577	2,003	1,524	0	69%	
Between Hacienda and Tassajara						
-eastbound	918	2,459	133	1,929	590%	27%
-westbound	2,496	1,719	2,187	75	14%	2192%
Between Dougherty and						
-eastbound	2,186	2,035	1,186	1,738	84%	17%
-westbound	1,983	2,527	2,023	1,495	-2%	69%
West of Dougherty						
-eastbound	1,951	2,283	929	1,573	110%	45%
-westbound	2,011	2,815	2,509	2,016	-20%	40%

**Table 4.2.10 (con't.). Comparison of CCTA Model With ACCMA Model
Forecasts For Year 2025**

Location	CCTA Model		CMA Model		AM Peak	PM Peak
	AM Peak	PM Peak	AM Peak	PM Peak	% Difference from CMA Model	
	1	1'	2	2'	(1-2)/2 * 100	(1'-2')/2' * 100
Fallon Road						
Between I-580 and Dublin Boulevard						
-northbound	2,319	2,288	1,060	1,292	119%	77%
-southbound	2,474	2,405	1,182	681	109%	253%
Between Dublin and Central						
-northbound	628	1,999	1,315	1,777	-52%	12%
-southbound	2,336	1,308	1,665	1,308	40%	0%
Between Central and Gleason						
-northbound	1,629	1,510	311	221	424%	583%
-southbound	1,492	1,687	329	236	353%	615%
North of Gleason						
-northbound	603	1,401	72	24	738%	5738%
-southbound	1,477	1,168	63	72	2244%	1522%
El-Charro Road						
South of I-580						
-northbound	1,309	2,466	796	982	64%	151%
-southbound	1,998	2,102	602	1234	232%	70%
Tassaiara Road						
Between I-580 and Dublin Boulevard						
-northbound	2,271	2,708	1,517	2,426	50%	12%
-southbound	3,585	3,327	2,375	1,847	51%	80%
Between Dublin and Central						
-northbound	985	2,671	1,741	3,263	-43%	-18%
-southbound	2,706	2,207	3,130	2,106	-14%	5%
Between Central and Gleason						
-northbound	739	2,811	522	1,524	42%	84%
-southbound	2,839	1,983	1,303	588	118%	237%
North of Gleason						
-northbound	511	2,670	278	965	84%	177%
-southbound	2,839	1,593	848	294	235%	442%
Santa Rita Road						
South of I-580						
-northbound	2,233	2,248	1,875	2,181	19%	177%
-southbound	2,669	1,884	2,267	1,918	18%	177%
Hacienda Drive						
South of Dublin Boulevard						
-northbound	1,808	2,529	997	1,535	81%	65%
-southbound	2,546	2,910	1,198	1,117	113%	161%
Between Dublin and Central						
-northbound	1,311	1,960	478	318	174%	516%
-southbound	1,974	1,635	219	608	801%	169%
Between Central and Gleason						
-northbound	593	1,179	150	145	295%	713%
-southbound	1,165	897	245	173	376%	418%
Dougherty Road						
South of Dublin Boulevard						
-northbound	2,435	3,425	2,980	4,051	-18%	-15%
-southbound	3,038	2,673	2,767	3,129	10%	-15%
North of Dublin Boulevard						
-northbound	1,417	2,202	1,891	2,685	-25%	-18%
-southbound	2,283	1,492	2,422	2,448	-6%	-39%

Source: TJKM Associates, 2005

Table 12. Year 2015 and Year 2025 P.M. Peak Hour MTS Arterial Levels of Service

Location	# of Lanes	Capacity	Year 2015 No Project			Year 2015 plus Project			# of Lanes	Capacity	Year 2025 No Project			Year 2025 plus Project		
			P.M. Peak Volume	V/C	LOS	P.M. Peak Volume	V/C	LOS			P.M. Peak Volume	V/C	LOS	P.M. Peak Volume	V/C	LOS
Dublin Boulevard																
Between Tassajara and Fallon																
Eastbound	3	3,000	1659	0.55	A	1,658	0.56	A	3	3,000	2,171	0.72	C	2,170	0.72	C
Westbound	3	3,000	552	0.18	A	827	0.28	A	3	3,000	1,146	0.38	A	1,716	0.57	A
Between Hacienda and Tassajara																
Eastbound	3	3,000	2025	0.68	B	2,067	0.69	B	3	3,000	2,381	0.79	C	2,430	0.81	D
Westbound	3	3,000	1093	0.36	A	1,198	0.40	A	3	3,000	1,599	0.53	A	1,752	0.58	A
Between Dougherty and Hacienda																
Eastbound	3	3,000	2343	0.78	C	2,396	0.80	D	3	3,000	2,471	0.82	D	2,527	0.84	D
Westbound	3	3,000	1946	0.65	B	2,000	0.67	B	3	3,000	1,980	0.66	B	2,035	0.68	B
Fallon Road																
Between I-580 and Dublin																
Northbound	3	3,000	1997	0.67	B	2,061	0.69	B	4	4,000	2,217	0.55	A	2,288	0.57	A
Southbound	3	3,000	1868	0.62	B	2,104	0.71	C	4	4,000	2,136	0.53	A	2,406	0.60	B
Between Dublin and Central																
Northbound	2	2,000	1608	0.80	D	1,591	0.80	D	3	3,000	2,020	0.67	B	1,999	0.67	B
Southbound	2	2,000	1409	0.70	C	1,234	0.62	B	3	3,000	1,493	0.50	A	1,308	0.44	A
Tassajara Road																
Between I-580 and Dublin																
Northbound	4	4,000	2476	0.62	B	2,527	0.64	B	4	4,000	2,654	0.66	B	2,709	0.68	B
Southbound	4	4,000	3476	0.87	D	3,475	0.87	D	4	4,000	3,331	0.83	D	3,330	0.83	D
Between Dublin and Central																
Northbound	3	3,000	2072	0.69	B	2,158	0.72	C	3	3,000	2,565	0.86	D	2,671	0.89	D
Southbound	3	3,000	1590	0.53	A	1,612	0.54	A	3	3,000	2,177	0.73	C	2,207	0.74	C
Santa Rita Road																
South of I-580																
Northbound	3	3,000	1585	0.53	A	1,716	0.58	A	3	3,000	2,077	0.69	B	2,248	0.75	C
Southbound	3	3,000	1613	0.54	A	1,601	0.54	A	3	3,000	1,898	0.63	B	1,884	0.63	B
El Charro Road																
South of I-580																
Northbound	3	3,000	2606	0.87	D	2,543	0.85	D	3	3,000	2,527	0.84	D	2,466	0.82	D
Southbound	3	3,000	1927	0.64	B	1,996	0.67	B	3	3,000	2,029	0.68	B	2,102	0.70	C

LOS Range: A~ 0.00-0.59
 B~ 0.60-0.69
 C~ 0.70-0.79
 D~ 0.80-0.89
 E~ 0.90-0.99
 F~ 1.00+

Table 4.2.12. Year 2015 Freeway Analysis

	No of Lanes	Capacity	Year 2015 (No Project)				Year 2015 with Project			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Vol.	LOS	Vol.	LOS	Vol.	LOS	Vol.	LOS
I-580, East of I-680										
Eastbound	4	8,000	5,851	C	6,018	C	5,954	C	6,010	C
Westbound	5	10,000	6,817	C	6,618	C	6,872	C	6,670	C
I-580, Dougherty Road to Hacienda Drive										
Eastbound	6 + aux.	13,000	9,835	C	9,993	C	10,028	D	9,982	C
Westbound	4+ aux.	9,000	9,389	F	9,126	F	9,387	F	9,238	F
I-580, Hacienda Drive to Tassajara Road										
Eastbound	5	10,000	9,033	D	10,339	F	8,396	D	10,380	F
Westbound	4+ aux.	9,000	10,393	F	9,113	F	10,303	F	9,170	F
I-580, Tassajara Road to Fallon Road										
Eastbound	4+ aux.	9,000	7,016	D	8,935	F	7,384	D	9,101	F
Westbound	4+ aux.	9,000	8,056	D	7,178	D	8,044	D	7,291	D
I-580, Fallon Road to Airway Boulevard										
Eastbound	4+aux.	9,000	7,162	D	9,315	F	7,230	D	9,476	F
Westbound	4+aux.	9,000	7,662	D	7,050	D	7,828	D	7,048	D
I-680, Alcosta Boulevard to I-580										
Northbound	4	8,000	5,785	C	7,050	D	5,757	C	7,092	D
Southbound	4	8,000	8,069	F	7,852	E	8,304	F	7,865	E
I-680, South of I-580										
Northbound	3	6,000	5,305	D	6,305	F	5,236	D	6,339	F
Southbound	3+aux.	7,000	6,577	E	6,198	D	6,740	E	6,225	D
SR 84, South of Stanley Blvd.										
Northbound	2	4,000	2,627	D	2,842	D	2,584	C	2,681	D
Southbound	2	4,000	2,616	D	2,927	D	2,575	C	2,956	D

Source: 1985 Highway Capacity Manual, Table 3-1, Levels of Service for Basic Freeway Sections
 Maximum Service Flow rate for freeway segments=2000 vehicles/hr/lane, aux.=Auxiliary Lane
 If number of lanes on freeway segment= N+aux., capacity of segment=(N*2000+1000) vehicles/hr
 For SR 84, Table 7-1, LOS Criteria for Multilane Highways (1985 HCM) was used assuming a capacity of 2,000 vehicles/hr/lane

Table 4.2.13. Year 2025 Freeway Analysis

	No of Lanes	Capacity	Year 2025 (No Project)				Year 2025 with Project			
			AM Peak		PM Peak		AM Peak		PM Peak	
			Vol.	LOS	Vol.	LOS	Vol.	LOS	Vol.	LOS
I-580, East of I-680										
Eastbound	4	8,000	6,016	C	6,188	D	6,122	C	6,180	D
Westbound	5	10,000	7,171	C	7,677	C	7,229	C	7,737	D
I-580, Dougherty Road to Hacienda Drive										
Eastbound	6 + aux.	13,000	10,392	D	10,191	D	10,596	D	10,180	D
Westbound	4+ aux.	9,000	9,581	F	9,816	F	9,579	F	9,937	F
I-580, Hacienda Drive to Tassajara Road										
Eastbound	5	10,000	8,645	D	10,472	F	8,035	D	10,514	F
Westbound	4+ aux.	9,000	10,319	F	9,489	F	10,230	F	9,548	F
I-580, Tassajara Road to Fallon Road										
Eastbound	4+ aux.	9,000	7,579	D	9,328	F	7,977	D	9,409	F
Westbound	4+ aux.	9,000	8,142	D	7,378	D	8,130	D	7,494	D
I-580, Fallon Road to Airway Boulevard										
Eastbound	4+aux.	9,000	7,267	D	9,634	F	7,336	D	9,800	F
Westbound	4+aux.	9,000	7,911	D	7,088	D	8,082	D	7,086	D
I-680, Alcosta Boulevard to I-580										
Northbound	4	8,000	5,917	C	7,080	D	5,888	C	7,122	D
Southbound	4	8,000	8,415	F	8,120	F	8,566	F	8,133	F
I-680, South of I-580										
Northbound	3	6,000	5,462	D	6,341	F	5,391	D	6,284	F
Southbound	3+aux.	7,000	6,703	E	6,327	D	6,869	E	6,337	D
SR 84, South of Stanley Blvd.										
Northbound	2	4,000	2,799	D	2,726	D	2,753	D	2,572	C
Southbound	2	4,000	2,527	C	3,030	D	2,487	C	3,060	D

Source: 1985 Highway Capacity Manual, Table 3-1, Levels of Service for Basic Freeway Sections
 Maximum Service Flow rate for freeway segments=2000 vehicles/hr/lane, aux.=Auxiliary Lane
 If number of lanes on freeway segment= N+aux., capacity of segment=(N*2000+1000) vehicles/hr
 For SR 84, Table 7-1, LOS Criteria for Multilane Highways (1985 HCM) was used assuming a capacity of 2,000 vehicles/hr/lane.

Transit systems impacts

BART. The potential impact of Project construction on BART was evaluated by estimating increased ridership with the development of the proposed Project. Future ridership projections used in the Eastern Dublin EIR were based on the assumption that the East Dublin/Pleasanton station would be the only station constructed in the Tri-Valley area. However, it is expected that the currently planned West Dublin/Pleasanton BART station would also be available in the Tri-Valley area at the time when the proposed Project is constructed. The Project consists of residential, commercial, and industrial uses. It is anticipated that a small percentage of commercial and retail employees/visitors would use BART to and from the site. These riders would be in the reverse commute direction (eastbound) coming to the Project and capacity would be available to accommodate the added riders generated by these uses.

Additional riders generated by the residential uses were calculated based on the methodology used in the DEIR for the Dublin Transit Center, July 2001. For the Transit Center, it is assumed that 32.1 percent of households would use BART since the residential portion of that Project is located within the Transit Center area (Draft EIR for Dublin Transit Center, SCH No. 20001120395 [July 2001], available at the City of Dublin). However, since the proposed Project would not be in the immediate vicinity of a BART station, it is assumed that approximately two percent of the Project households would use BART, which is consistent with current BART ridership estimates within the Tri-Valley area containing the cities of Dublin, Pleasanton, Livermore, and part of San Ramon. TJKM calculated this two percent ridership estimate, and the calculation sheets are available at the City of Dublin. Approximately 62 additional riders are estimated to use BART due to the proposed Project as calculated below.

Residential: $3,108 \text{ dwelling units} \times 1 \text{ Adult/unit} \times 2\% \times 2 \text{ trips per day} = 124 \text{ trips/day}$ (62 riders inbound to BART during the a.m./62 riders outbound to BART during the p.m.)

Currently, BART runs four 8-car trains to/from the Dublin/Pleasanton Station during the peak hours. Each train has a capacity of 560 seats, which translates into 2,240 seats during the peak hour. At this station, approximately 1,063 riders enter the station during the AM peak hour and 325 exit the station (total of 1,388 riders). BART assumes a ridership load capacity of 1.35 persons per seat during the peak commute periods to account for sitting and standing passengers. During the p.m. peak hour, BART ridership is lower with a total of 1,266 riders (entering and exiting).

Adding 62 more entering riders during the a.m. peak hour would result in 1,125 riders to the peak commute direction (westbound). With the added ridership from the proposed Project, it is determined that the seating capacity would be 0.50 persons per seat ($1,125 \text{ riders} / 2,240 \text{ seats}$), which is below BART's load capacity. During the p.m. peak hour, the capacity would be even lower with the additional 62 riders generated by the proposed Project. *No supplemental impacts* are therefore anticipated to the BART system.

This analysis is conservative in that it assumes that all of the riders would use BART during the peak one hour of the morning and evening commutes.

The Eastern Dublin EIR concluded that the GPA/SP Project would create a need for substantial expansion of existing transit systems (BART and LAVTA), resulting in a significant impact (IM 3.3/O). The impact of the Project on BART was adequately analyzed in the Eastern Dublin EIR. Mitigation measures of the Eastern Dublin EIR remain applicable to the Project (MM 3.3/15.2 and 3.3/15.3). The Project will contribute towards the construction of park and ride lots, through payment of the Eastern Dublin Traffic Impact Fee and to improvements to transit service through payment of the TVTD Fee.

LAVTA. Several bus lines currently provide service to east Dublin, including lines 12, 12X, 10A, 1A, 1B, and 20X. None of these lines, however, provide service immediately adjacent to the proposed Project (Fallon Road and Dublin Boulevard) simply because roadways do not exist. It is assumed that LAVTA would introduce new bus lines or reroute existing bus lines to accommodate the riders from the Project as it becomes built. It is also expected that LAVTA would provide sufficient capacity to accommodate riders, as needed.

A calculation is provided to estimate the number of monthly riders estimated to be generated by the proposed Project. Two percent of the residential uses are expected to use transit:

$3,108 \text{ dwelling units} \times 2\% \times 2 \text{ trips/day} \times 20 \text{ working days per month} = 2,486$
monthly riders.

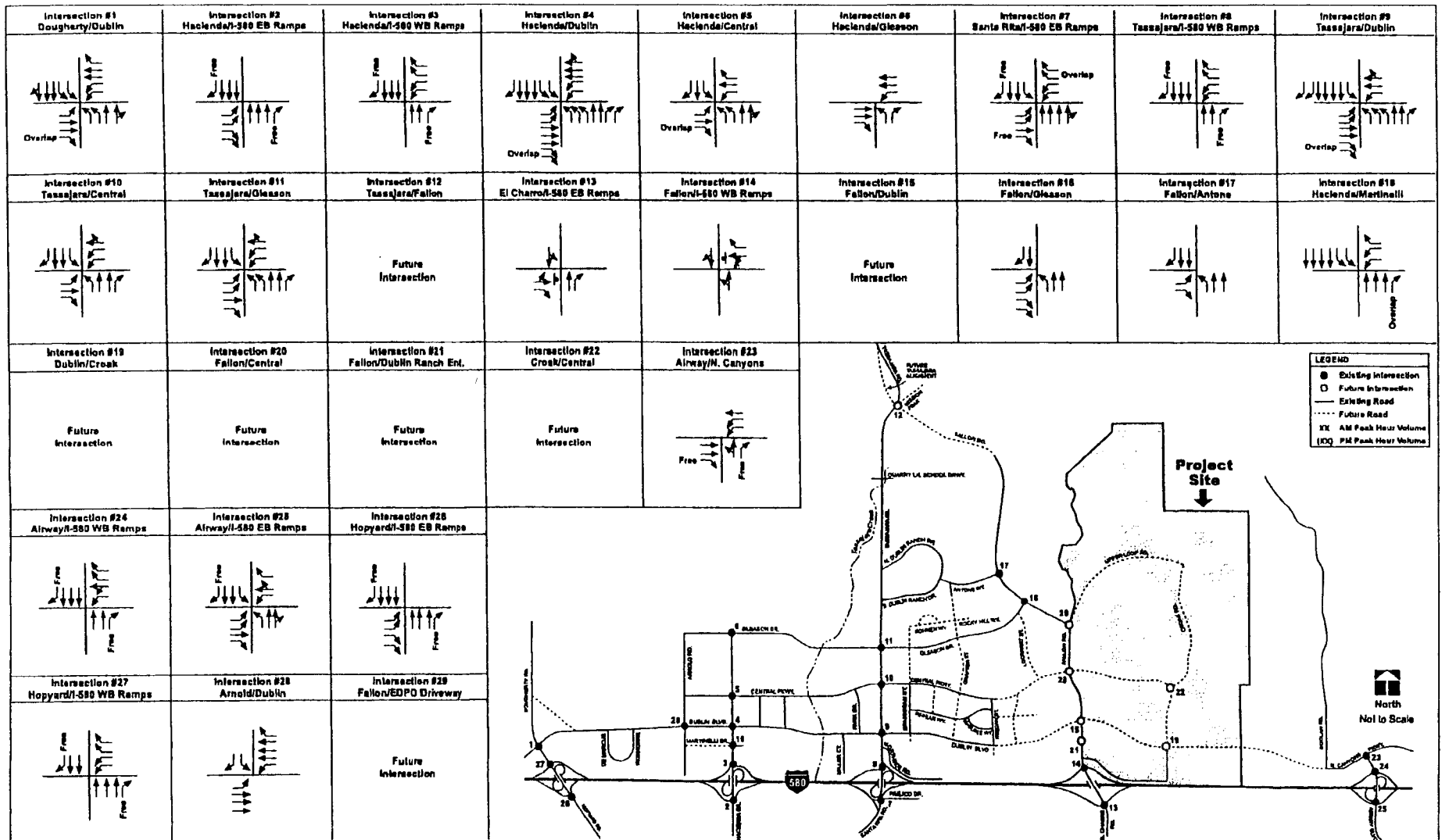
It is expected that the commercial and industrial employees/visitors would generate a minimal number of riders.

The impacts of the Eastern Dublin General Plan Amendment and Specific Plan, of which the proposed Project is a part, on the need for expanded transit were adequately analyzed in the Eastern Dublin EIR (see Chapter 3.3 of Eastern Dublin EIR) and, mitigation measures were imposed to reduce the impact to a less than significant level. (See MM 3.3/15.0 [provide transit service within 0.25 mile]; MM 3.3/15.1 [provide transit service at minimum frequency of 30 minutes during peak hours]; MM 3.3/15.2 [GPA/SP Project to contribute to capital and operating costs of transit service extensions]; and MM 3.3/15.3 [coordinate with BART and LAVTA to provide bus service to BART station].) These mitigation measures remain applicable to the Project and *no supplemental impacts* would result from approval of the proposed Project.

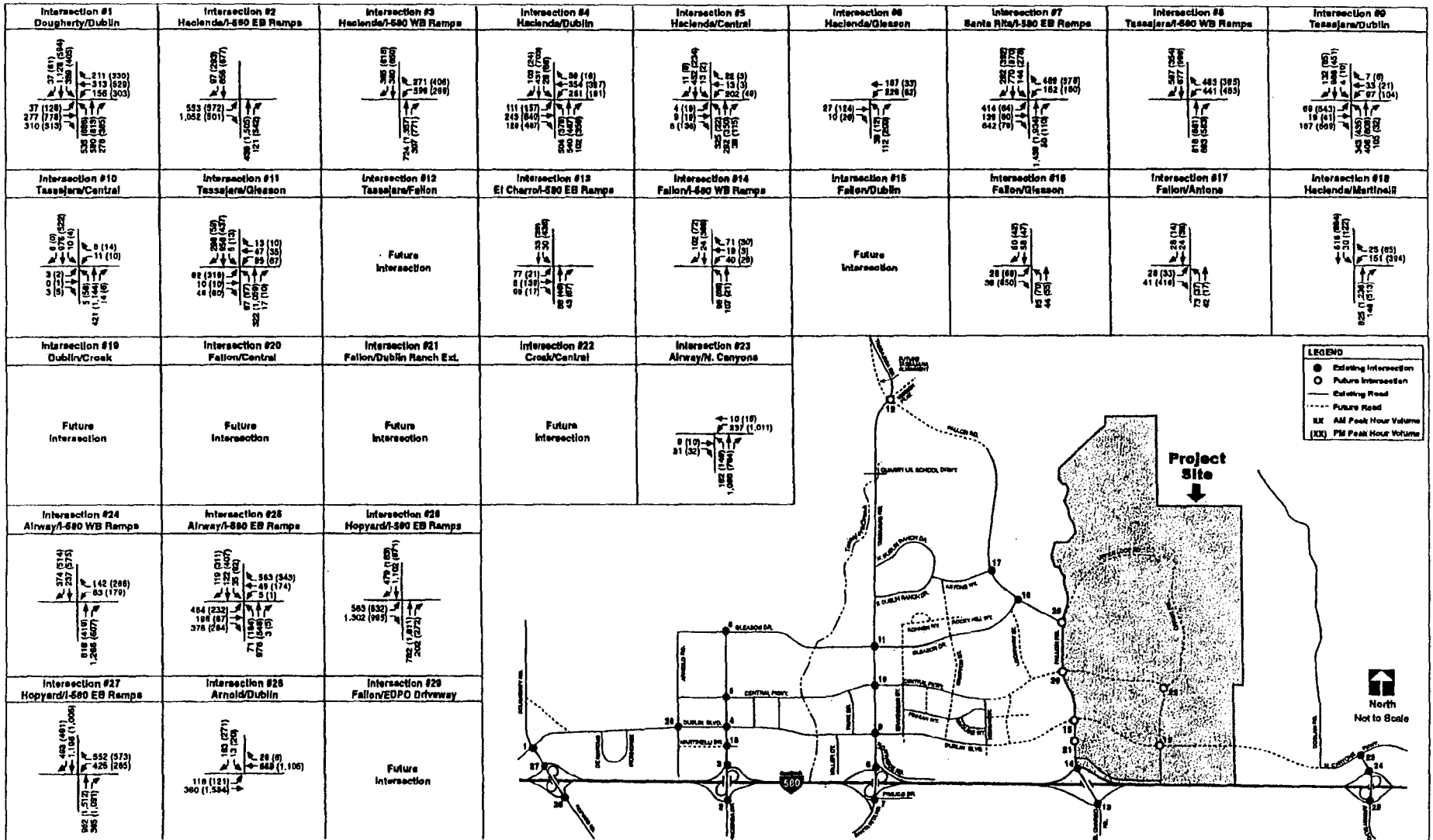
Supplemental Development-Level (Project-Level) Impacts. The Braddock & Logan Stage 2 PD plan and vesting tentative map proposals (i.e., the development level applications made to the City) includes detailed information about traffic and transportation impacts. In particular, that information shows that primary access to and through the development area would be from Croak Road from the south and via “the Upper Loop Road” from the west. The Upper Loop Road would connect to

the existing City road network near the northwest corner of the Project Area. Interim improvements to existing Croak Road would be used as a secondary access for the first phases of the development. Trails are proposed along the Open Space Corridor and along major streets.

All supplemental impacts associated with the approval of the Stage 2 Development Plan have been addressed in the Program level analysis and there would be *no supplemental impacts* for the Stage 2 Development Plan portion of the proposed Project.

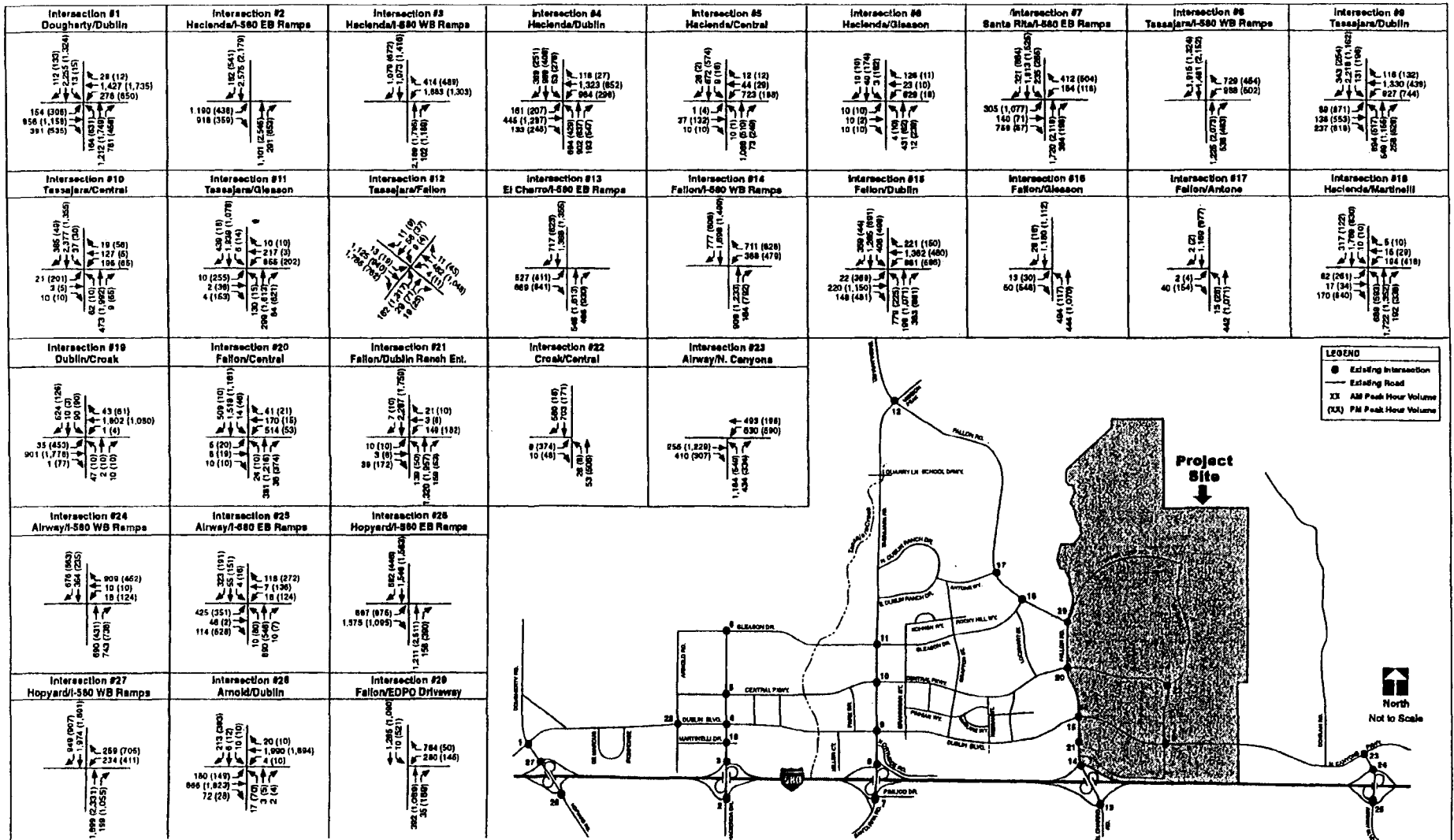


SOURCE: TJKM Traffic Consultants, 7-5-2005.



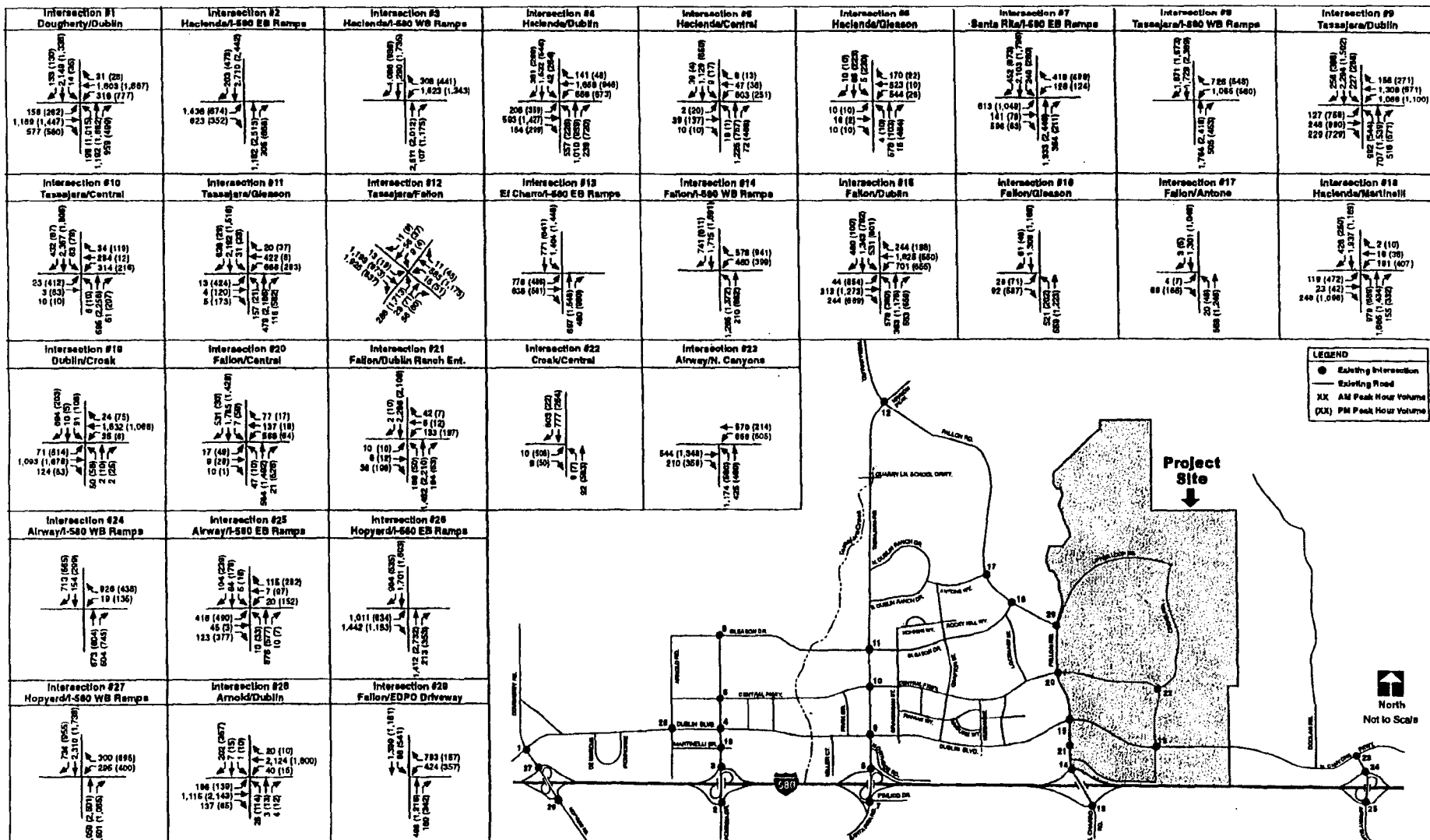
SOURCE: TJKM Traffic Consultants, 7-18-2005.

Exhibit 4.2.2
EXISTING PEAK HOUR
TURNING MOVEMENT VOLUMES



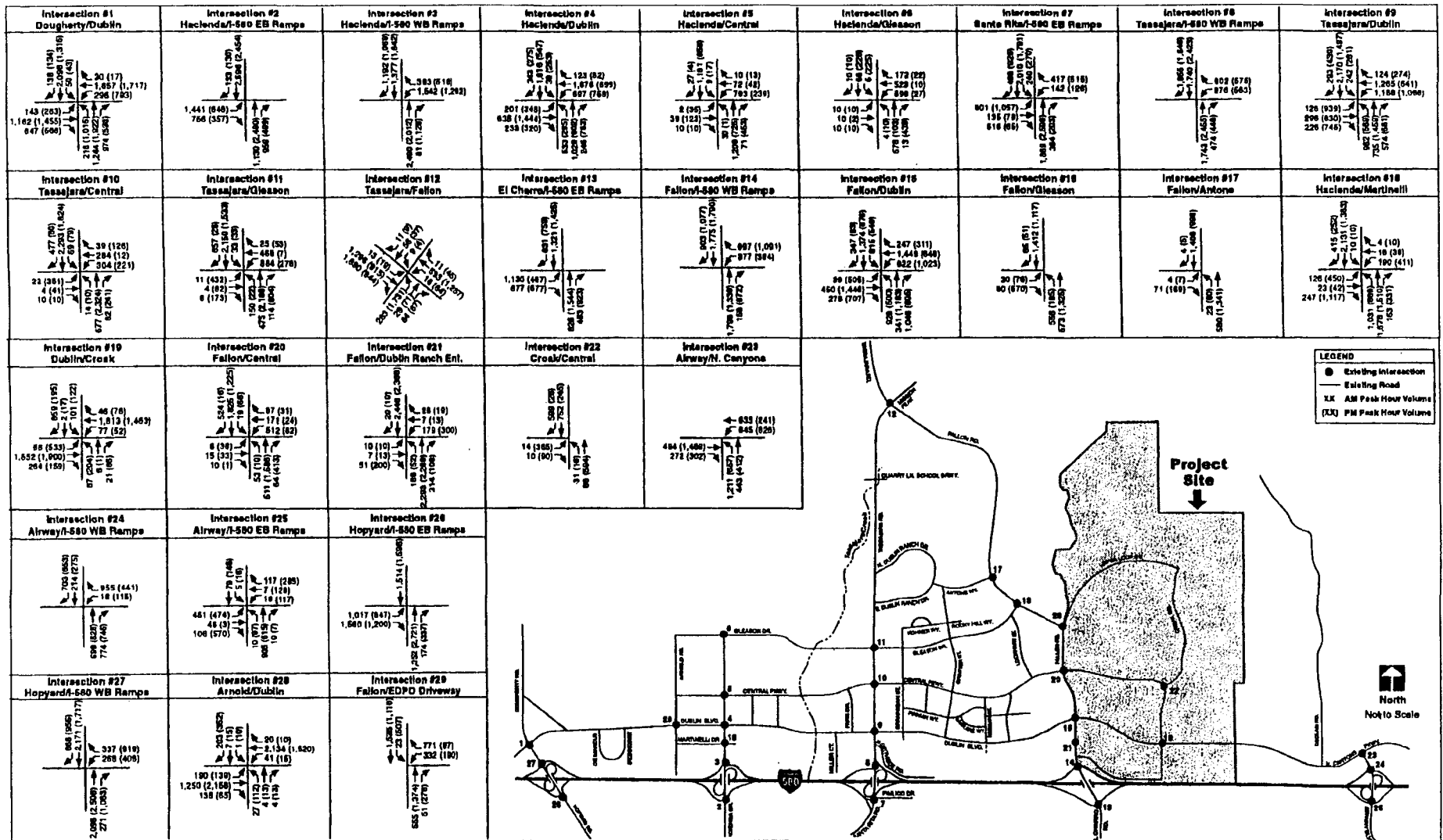
SOURCE: TJKM Traffic Consultants, 7-18-2005.

Exhibit 4.2.3
 YEAR 2015 PEAK HOUR
 TURNING MOVEMENT VOLUMES



SOURCE: TJKM Traffic Consultants, 7-18-2005.

Exhibit 4.2.4
BUILDOUT PEAK HOUR
TURNING MOVEMENT VOLUMES



SOURCE: TJKM Traffic Consultants, 7-18-2005.

Exhibit 4.2.5
 BUILDOUT + PROJECT PEAK HOUR
 TURNING MOVEMENT VOLUMES

4.3 COMMUNITY SERVICES AND FACILITIES

INTRODUCTION

This section of the DSEIR examines the possibility of supplemental impacts in regard to police and fire services and schools with regard to the proposed Project

POLICE SERVICES

Police services within the Eastern Dublin area were analyzed in Section 3.4 of the Eastern Dublin EIR. Since the proposed Stage 1 Development Plan did not change from land uses assumed and analyzed in 1993 to the 2002 SEIR, the 2002 SEIR did not analyze potential impacts to police services.

ENVIRONMENTAL SETTING

Police services for the Eastern Dublin area is provided by the Dublin Police Department. The Dublin Police Department provides full municipal law enforcement services to the City of Dublin from a central station at the Dublin Civic Center complex. The Dublin Police Department is staffed by personnel from the Alameda County Sheriff's Office operating under contract as Dublin police officers. The City of Dublin owns the Department's facilities and equipment. Services provided by the Police Department include patrol of the community, crime prevention and investigation, emergency response, traffic control and school services.

Existing staffing in the Department as of June 2005 includes 48 sworn officers and 8 civilian staff based in the Dublin Civic Center at 100 Civic Plaza.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR identifies two impacts related to the provision of police services. Impact IM/3.4A notes that there would be a demand for increased police services with implementation of the Eastern Dublin General Plan Amendment and Specific Plan. Impact IM 3.4/B identifies an impact related to the hilly topography of the Eastern Dublin area that could present accessibility and crime-prevention issues with regard to providing police services. Adherence to Mitigation Measures 3.4/1.0 through 3.4/5.0 would reduce impacts to the Dublin Police Department to a level of insignificance. These measures call for the Department to add additional personnel and reorganize police beats to accommodate planned growth, coordinate timing and phasing of growth in Eastern Dublin to allow the Police Department to plan for providing increased services, incorporating crime prevention elements into individual project design, to have the Dublin Police Department prepare a budget strategy for accommodating planned growth and to have the Police Department review individual development projects for adequate security, access and adequate emergency response times.

The additional residential dwelling units proposed as part of the Project were assumed in the Eastern Dublin EIR analysis. No further analysis or mitigation is therefore required.

Development within the Project area will be required to pay the City of Dublin Public Facilities fee, which funds police facilities among other public facilities.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

Since both the 1993 and 2002 Project approvals, the currently proposed Stage 1 Development Plan proposes approximately 1,081,725 gross square feet of office and commercial space greater than the existing Stage 1 Development Plan or as analyzed in the Eastern Dublin EIR. This additional square footage would be sited in the existing Future Study Area portion of the Project area. This land use increase is analyzed below.

Significance criteria. A significant impact would result if the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts.

Supplemental Program-level impacts. The addition of 1,081,725 square feet of non-residential land within the Project area would result in an increased number of calls for service to the Dublin Police Department, primarily related to traffic violations and burglary/theft. This additional amount of development may require additional police personnel and related equipment and may require the Department to reorganize patrol beats to cover this additional amount of development. However, the addition of the non-residential square footage, in and of itself, would not cause the need to construct new or expanded Police buildings or other facilities that would result in a supplemental impact. Therefore, there would be *no supplemental impacts* regarding police services at the Project level.

Supplemental Development-level impacts. The amount of additional non-residential square footage would not be located in the proposed Stage 2 (Development portion) of the Project area. The Development portion of the Project area would contain primarily residential and open space land uses. Therefore, there would be no supplemental impacts to the Dublin Police Department.

FIRE SERVICES

Fire services within the Eastern Dublin area were analyzed in Section 3.4 of the Eastern Dublin EIR. Since the proposed Stage 1 Development Plan did not change from land uses assumed and analyzed in 1993 to the 2002 SEIR, the 2002 EIR did not analyze potential impacts to fire services.

ENVIRONMENTAL SETTING

Fire services for the Eastern Dublin area is provided by the Alameda County Fire Department which provides fire suppression, prevention, code compliance, training

and emergency service response within the community. The City of Dublin contracts with Alameda County to provide fire staffing and equipment.

The Fire Department recently completed and now occupies Fire Station 18, located just west of the Project area at 4800 Fallon Road in Dublin. Station 18 is manned on a 24-hour basis with one engine company and four firefighters. Back up service to the Project area would be provided by Fire Station 17, located at 6200 Madigan Road in Dublin.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR contains three impacts related to the provision of fire service to the Eastern Dublin area. Impact IM/3.4 C identifies and increased demand for fire services with implementation of the Eastern Dublin General Plan Amendment and Specific Plan. Impact IM 3.4/D identifies an impact related to providing fire response to outlying area of the Eastern Dublin area. Finally, Impact IM 3.4/E identifies an impact regarding exposure to wildland fires. Adherence to Mitigation Measures 3.4/6.0 through 3.4/13.0 would reduce fire service impacts to a level of insignificance. These measures call for adherence to EDSP policies regarding timing of new development in Eastern Dublin to be consistent with the timing of new fire stations, the establishment of appropriate funding mechanisms for new fire stations and other capital improvements, the acquisitions of new fire station sites in Eastern Dublin, incorporate fire safety components into future individual development projects, provide for maintenance of high fire danger areas of Eastern Dublin, development of fire breaks and trails to allow for emergency equipment access and preparation of a wildfire management plan for new development in Eastern Dublin.

The additional residential dwellings included in the proposed Project were assumed in the Eastern Dublin EIR analysis. No further analysis is therefore required.

Development within the Project area will be required to pay the City of Dublin Public Facilities fee, which funds fire facilities among other public facilities.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

Since both the 1993 and 2002 Project approvals, the currently proposed Stage 1 Development Plan proposes approximately 1,081,725 gross square feet of office and commercial space greater than the existing Stage 1 Development Plan or as analyzed in the Eastern Dublin EIR. This additional square foot age would be sited in the existing Future Study Area portion of the Project area. This land use increase is analyzed below.

Significance criteria. A significant impact would result if the Project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts.

Supplemental Program-level impacts. The addition of 1,081,725 square feet of non-residential land within the Project area would result in an increased number of calls

for service to the Alameda County Fire Department, primarily related to fire and emergency service calls. According to a recent discussion with the Dublin Fire Marshal, the amount of additional non-residential development can be accommodated with existing personnel and facilities (person. comm. with Theresa Johnson, Dublin Fire Marshal, 6/19/05). Therefore, the addition of the non-residential square footage would not cause the need to construct new or expanded Fire Department facilities that would result in a supplemental impact. Therefore, there would be *no supplemental impacts* regarding fire services at the Program level.

Supplemental Development-level impacts. The amount of additional non-residential square footage would not be located in the proposed Stage 2 (Development portion) of the Project area. The Development portion of the Project area would contain primarily residential and open space land uses. Therefore, there would be no supplemental impacts to the Alameda County Fire Department at the Development level of the proposed Project.

SCHOOLS

The need for new school facilities was analyzed in Chapter 3.4 of the Eastern Dublin EIR and Chapter 3.5 of the 2002 SEIR. This supplement examines whether student generation rates and the related need for different levels of school facilities to accommodate future development of the Project area have changed substantially since certification of the 2002 SEIR.

ENVIRONMENTAL SETTING

The Project area has recently been detached from the Livermore Valley Joint Unified School District (LVJUSD) and attached to the Dublin Unified School District (DUSD). This action was taken consistent with Dublin General Plan Policies 4.1.B and 4.1.F, and EDSP Program 8A providing that the DUSD operate school facilities located within the Dublin city limits. The Project area is now served by DUSD.

Enrollment in DUSD schools in October 2004 was 4,623 kindergarten through 12th grade students. DUSD maintains five elementary schools, a middle school, a high school, and a continuation high school. The high school and middle school levels have experienced the highest levels of growth over the past five years with an average annual increase of 2.8 percent per year. In total, the DUSD grew by 17.4 percent over the past five years. (*Dublin Unified School District, Demographic Study and Facilities Plan*, Shilts Consultants, Inc., October 2004).

The Project area is served by Dublin High School and Valley Continuation High for grades 9-12 and Fallon Middle School for grades 6-8. Fallon Middle School, with a capacity of 1,258 students, is being constructed at this time and is expected to open September 2005 and is planned to be a K-8 facility through at least 2010. Dublin High School is proposed to be expanded and modernized from a 1,216 student capacity to accommodate 2,500 students. Green Elementary School is scheduled to open in 2007-08, and three other elementary schools are planned to open between 2009 and 2013 within the East Dublin area. (*Dublin Unified School District, Demographic Study and Facilities Plan*, Shilts Consultants, Inc., October 2004). The current capacities and

enrollment of these existing schools are indicated in Table 4.3.1, below. Elementary schools proposed within the Project area are anticipated to serve the needs of students within grades K-5, however, service boundaries of the future elementary schools may necessitate elementary students to attend schools outside of the Project area.

The District has an informal policy that limits Eastern Dublin elementary students to attend only Eastern Dublin elementary schools, while western and central Dublin elementary students may only attend western and central Dublin elementary schools. However, Dublin considers schools capacity / demand adequacy on a district-wide basis, therefore capacity shortfalls in one school can be offset by utilizing excess capacity at another school serving the same grade levels.

The existing 2002 Stage 1 Development Plan includes a 10-acre (net) elementary school site and a 14.6-acre middle school site. This plan also shows two partial elementary school sites totaling 7.3-acres. These remnant sites were to be combined with additional acreage beyond the boundary of the Project area Stage 1 Development Plan to result in full elementary school sites.

While Dougherty Elementary School, the nearest elementary serving the Project Planning Area, and Wells Middle School, are over-enrolled, this over-capacity is a temporary condition until the Fallon Middle School opens in September 2005. All elementary and middle school students not housed at Dougherty Elementary and Wells Middle School will attend Fallon Middle School, which will function as a K-8 facility until another elementary school or a solely middle school facility is required by student demand. Dublin High School also is over-enrolled, and is proposed for expansion in 2007. Future development of school facilities (new construction or expansion) will be based upon the timing and phasing of residential development, resulting student demands, and available funding. Other schools will be on-line prior to students occupying the Project area.

Table 4.3.1. Existing School Capacities and Enrollment

School/Grades	Existing Capacity	October 2004 Enrollment	Excess Capacity
Dougherty Elementary School, K-5	540	731	(191)
Wells Middle School	1,000	1,030	(30)
Dublin High School, 9-12	1,216	1,313	(97)
Valley Continuation High School	240	88	152

Source: *School Facility Needs Analysis, Dublin Unified School District, Shilts Consultants, Inc., July 2004.*

Regulatory framework

Recognizing that Eastern Dublin development would generate substantial new demand for schools, the EDSP established Goals, Policies and Action Programs to guide cooperation between the City, the DUSD and the project developers in producing new school facilities. These policies included direction to consult with the School District, ensure that adequate facilities were built generally coincident with the construction of new homes and to encourage the School District to take advantage of state schools funding.

At the time the EDSP was adopted the Project area was in the area served by Livermore Valley Joint Unified School District (LVJUSD). The EDSP and Eastern Dublin EIR supported the detachment from the LVJUSD and attachment to the Dublin Unified School District (DUSD). On April 26, 2005 the DUSD board approved the attachment.

According to Dublin Unified School District staff, the reorganization is in process as of June, 2005 and is anticipated to be completed later in 2005 (personal communication with Kim McNeeley, Dublin Unified School District, June 2005).

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR projected the demand for school facilities that would be generated by development under the GPA/SP. At the time the EIR was certified, the DUSD had not adopted student generation standards for all levels of school facilities. The LVJUSD, however, had adopted generation rates for single- and multi-family development at all school levels from kindergarten through 12th grade. (Eastern Dublin EIR response to comment 16-12). These rates were used in the EIR analysis to ensure a conservative and consistent projection of new student yield from future development of the GPA/SP area.

Based on projected student generation, the Eastern Dublin EIR identified potentially significant impacts related to the demand for new school facilities and the potential for overcrowding if the demand was not met (Impacts 3.4/F, G, H). The EIR also identified impacts on financing school facilities (Impacts 3.4/I and J). Mitigation measures were adopted to reserve school sites on the GPA/SP land use maps, to coordinate new development with school district facilities planning, and to encourage the broadest possible funding mechanisms for new school facilities (MM 3.4/13.0 – 19.0). These mitigation measures reduced the impacts to a level of insignificance. All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply to projects such as this proposed GPA, SPA and Stage 1 and Stage 2 Development Plan zoning amendment

The 2002 Project proposed the same type and intensity of potential development assumed in the Eastern Dublin EIR. The 2002 Supplement analyzed whether demand for new school facilities had changed significantly since certification of the Eastern Dublin EIR and assessed the ability to fund new facilities given changes in the law occurring since certification of the Eastern Dublin EIR. The 2002 SEIR found that the number of students likely to come from the Project area would be fewer than the number analyzed in the Eastern Dublin EIR and concluded that no supplemental impacts were expected due to revised student generation rates and no supplemental mitigation measures were required. The 2002 SEIR also evaluated the potential impact of the enactment of SB 50, the "Leroy F. Greene School Facilities Act of 1998", on school construction financing and found that no supplemental mitigation measures were required.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The number of dwelling units included in proposed Project are consistent with the total number of dwelling units evaluated in the Eastern Dublin EIR. The Project does however include 562 more units than were evaluated in the 2002 SEIR. The Initial Study for the Project determined that the additional units within the Project area and changed student generation factors could potentially generate a new project impact. Further, the Initial Study found that changes in the location and sizes of proposed school sites could potentially create new impacts.

Significance criteria. Implementation of the Project would be considered to have a significant impact on schools if it were to result in:

- Substantial adverse physical impacts associated with the provision of new or physically altered school facilities,
- The need for new or physically altered school facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios or other performance objectives for schools.
- In addition to the above, implementation would have a significant schools impact if the regulatory standards previously relied upon have changed since the certification of the Eastern Dublin EIR and the Eastern Dublin Properties Stage 1 Development Plan and Annexation SEIR.

Supplemental Project-level impacts. The addition of new dwelling units not analyzed in the 2002 SEIR may result in potentially significant impacts to the Dublin Unified School District.

Supplemental Program Impact SCH-1 (change in student generation rates and number of students). Proposed changes to the Project, to increase the number of dwelling units not analyzed in the 2002 SEIR, and to student generation rates used by the Dublin Unified School District, could result in inadequate school facilities to serve the proposed Project (*no supplemental impact*).

Table 4.3.2 compares student generation rates used in the Eastern Dublin EIR and 2002 SEIR to student generation rates currently used by the DUSD. This table shows that, at all levels, current student generation rates are well below the rates used in the Eastern Dublin EIR analysis.

Table 4.3.2. Comparison of Eastern Dublin EIR, 2002 SEIR, and Current Student Generation Rates

Residential Use	Grade Level	Eastern Dublin EIR Rates ¹	2002 DUSD Rates ²	2004 DUSD Rates ³
Single Family	K-5	.33	.28	.30
	6-8	.16	.125	.13
	9-12	.21	.155	.16
	Totals:	.70	.56	.59
Multi-Family	K-5	.22	.085	.1
	6-8	.11	.035	.04
	9-12	.14	.035	.04
	Totals:	.47	.155	.18

Sources:

1 Eastern Dublin EIR, response to comment 16-17, Table 3.4-2 (revised). These classifications of unit types reflect the decision made in the 1993 EIR to reflect the protocol of the Livermore Valley Joint Unified School District. Student generation rates were based on assumed rates for single family and multi-family units of Livermore Valley Joint Unified School District in place at the time. Single Family is comprised of Rural Residential and Single Family designations, and Multi-Family includes Medium Density, Medium High Density, and High Density designations. Also 2002 SEIR, p. 3.5-2.

2 Based on a study commissioned by the DUSD Board, entitled Dublin Unified School District Study of Demographic Projections and School Construction Revenue Analysis, DRAFT (Shilts Consultants, Inc., June 2001). The rates indicated above for each grade classification are an average of rates for large lot and small lot single-family detached units for single family, and an average of the rates for townhomes and multi-family residential for the multi-family category. Single Family is composed of Rural Residential and Single Family designations and Multi-Family encompasses Medium Density, Medium High Density, and High Density designations. These classifications of unit types reflect the decision to be consistent with the break down of unit types reflected in the 1993 EIR. Also 202 SEIR, p. 3.5-2.

3 Based on a study commissioned by the DUSD Board, entitled Demographic Study and Facilities Plan, Dublin Unified School District (Shilts Consultants, Inc., October 2004 Update, Preliminary Report). SF student generation rates are based on the District's 2004 student yield factors under the medium growth scenario for low density (Single Family Residential, LL & ML) and medium density (Single Family Residential, Small Lot) weighted proportionally (74% and 26% respectively) according to the units proposed under this Project. MF student generation rates are based on the District's 2004 student yield factors under the medium growth scenario for townhomes.

The Eastern Dublin EIR student yield analysis indicates that the Project area would have generated some 1,950 students based upon the unit classifications and generation rates utilized at that time and indicated in Table 4.3.3. The Project evaluated in the 2002 SEIR, using averaged DUSD generation rates then in effect and unit classifications that were consistent with the ED EIR, would have generated some 1,095 students, 56% of the Eastern Dublin EIR projections. The Project, using current DUSD generation rates and weighted unit classifications would generate

1,515 students, 78% of the 1993 projections. Table 4.4.4 also indicates that the Project would generate similar changes in each school category (K-5, 6-8, 9-12).

At full buildout of the entire Eastern Dublin Planning Area (medium-growth scenario), the October 2004 DUSD Preliminary Report estimates that the Eastern Dublin area would contribute 2,848 K-5 students and 1,425 6-8 students; that report does not estimate high-school student generation for Eastern Dublin, but, using District student generation factors, it would generate approximately 868 high school students, for a total of 5,141 students. Of these, the Stage 1 PD area assessed in this SEIR would generate 777 K-5 students, grades 334 6-8 students and 404 high school students. Compared to the existing Stage 1 Development Plan, the Project's addition of units and reallocation of unit types would generate an additional 224 K-5 students, 89 grades 6-8 students, and 107 grades 9-12 students.

Table 4.3.3. Comparison of Student Generation Evaluated in the Eastern Dublin EIR, the SEIR and the Proposed Project

	K-5		6-8		9-12		Total Students
	Rate	Students	Rate	Students	Rate	Students	
Eastern Dublin EIR							
<i>SF units</i> ¹ 1,888	0.33	623	0.16	302	0.21	396	
<i>Mf units</i> ² 1,341	0.22	295	0.11	147	0.14	187	
<i>Total</i> 3,229		918		449		583	1,950
2002 SEIR							
<i>SF units</i> ³ 1,736	0.28	486	0.125	217	0.155	269	
<i>Mf units</i> ⁴ 790	0.085	67	0.035	28	0.035	28	
<i>Total</i> 2,526		553		245		297	1,095
Proposed Project							
<i>SF units</i> ⁵ 2,340	0.30	701	0.13	304	0.16	374	
<i>Mf units</i> ⁶ 768	0.1	76	0.04	30	0.04	30	
<i>Total</i> 3,108		777		334		404	1,515

Notes:

- ¹ Sf = Single Family, and is comprised of Rural Residential and Single Family designations. This classification of unit types reflects the decision made in the 1993 EIR to reflect the protocol of the Livermore Valley Joint Unified School District. Student generation rates were based on assumed rates for single family units of Livermore Valley Joint Unified School District in place at the time.
- ² Mf = Multi- Family, and includes Medium Density, Medium High Density, and High Density designations. This classification of unit types reflects the decision made in the 1993 EIR to reflect the protocol of the Livermore Valley Joint Unified School District. Student generation rates were based on assumed rates for multi-family units of Livermore Valley Joint Unified School District in place at the time.
- ³ Sf = Single Family, and is composed of Rural Residential and Single Family designations. This classification of unit types reflects the decision to be consistent with the break down of unit types reflected in the 1993 EIR. Student generation rates for each grade classification are an average of rates for large lot and small lot single-family detached units.
- ⁴ Mf = Multi- Family, and encompasses Medium Density, Medium High Density, and High Density designations. This classification of unit types reflects the decision to be consistent

with the break down of unit types reflected in the 1993 EIR. Student generation rates for each grade classification are an average of rates for townhomes and multi-family residential for the multi-family category.

⁵ Sf student generation rates are based on the District's 2004 student yield factors under the medium growth scenario for low density (Single Family Residential, LL & ML) and medium density (Single Family Residential, Small Lot) weighted proportionally (74% and 26% respectively) according to the units proposed under this Project.

⁶ Mf student generation rates are based on the District's 2004 student yield factors under the medium growth scenario for Townhome according to the units anticipated under this Project.

At all levels, the number of students expected to be generated by dwelling units from the Project is below the number of students based on student generation rates used in the Eastern Dublin EIR analysis. Therefore there would be *no supplemental impacts* related to student generation or the number of expected students.

Adequacy of school facilities

School sites to meet projected demand were provided in the GPA/SP and through implementation of mitigation measures contained in the Eastern Dublin EIR. The Eastern Dublin EIR recognized, however, that there could be some minor adjustments in the size, number and location of designated school sites over the course of development (Eastern Dublin EIR response to comment 15-30). These adjustments have in fact occurred with development in Eastern Dublin as the type and location of school facilities and sites have been shifted as needed to meet the demand identified by the DUSD.

The proposed Project would increase the demand for elementary school and high school facilities in DUSD. As identified in the DUSD's October 2004 Demographics Study and Facilities Plan Preliminary Report, the Eastern Dublin planning area will require the expansion of high school facilities and require the construction of three new elementary schools, in addition to Dougherty Elementary, Green Elementary, and Fallon Middle School. The existing Stage 1 PD indicates that a 10-net acre elementary school, two partial elementary school sites and a 14.6-acre middle school are to be constructed in the Project area.

Subsequent to the approval of the Stage 1 Development Plan in 2002, the DUSD determined that they would not need the approved middle school site or one partial elementary school site. Accordingly the Project no longer includes a middle school or partial elementary school sites. Likewise the DUSD anticipates that two, 10-acre elementary school sites will be needed within the Project area. The Project now proposes two 10-net acre elementary school sites, no partial elementary school sites and no middle school site.

The Project generates middle school students, however, no middle school site is provided within the Project area. Based on DUSD projected school facility needs, students within the Project area would attend Fallon Middle School. The location and size of Fallon Middle School has taken into consideration anticipated students from the Project area, thus, no further expansion or a new middle school would be required to serve this Project.

DUSD has determined that expanding the capacity of the high school is preferred over constructing a second high school, and the District is currently expanding

Dublin High School facilities at its current location. Expansion of the high school is anticipated to begin 2007 and be completed 2008. Project students would be housed in temporary facilities until build-out of the full school expansion is completed without overcrowding.

As illustrated in Table 4.3.4, the District will have the capacity to house up to 2,500 9-12 grade students, 2,458 6-8 grade students at buildout of District facilities, and 2,700 K-5 grade students at buildout of District facilities within the Eastern Dublin area so long as all the necessary schools are constructed or expanded.

Elementary schools will be constructed based on student demographics and school size needs. The District anticipates that the currently planned elementary schools will be able to house the additional students resulting from the Project. Fallon Middle School is planned by the District to house K-8 students through the 2007-2008 school year, when an additional K-5 school in the eastern Dublin area would become operational. Fallon Middle School is presently being planned to accommodate 1,258 students and would be located to the west of the Project area. Dublin High School is being planned for phased expansion to approximately 2,500 students.

Table 4.3.4.School Capacities and Maximum Enrollment at Buildout

School/Grades	Existing Capacity	Proposed Capacity	Existing Enrollment	Proposed Enrollment
Dougherty Elementary, K-5	731	540	731	540
Green Elementary (Dublin Ranch Phase I), K-5	0	540	0	540
Elementary School E3 (Dublin Ranch Town Center), K-5	0	540	0	540
Elementary School E5(Jordan Trust), K-5	0	540	0	540
Elementary School E4 (Fallon Enterprises), K-5	0	540	0	540
Fallon Middle School, 6-8	0	1,258	0	1,258
Wells Middle School, 6-8	1,000	1,000	1,060	1,000
Dublin High School, 9-12	1,216	2,500	1,268	2,500
Valley Continuation High School, 9-12	240	240	92	240

Source: Shilts Consultants, 2004.

Supplemental Program Impact SCH-1 (adequacy of school facilities). Based on information provided by the Dublin Unified School District staff, adequate facilities have been planned in the Eastern Dublin area to accommodate students anticipated to be generated by the proposed Project (no supplemental impact and no mitigation required).

Through long-term educational planning for development in the Eastern Dublin area, the City and the DUSD have implemented previous EIR mitigations to ensure

that school facilities are available to meet projected demand. There would therefore be *no supplemental impacts* related to schools and educational facilities not analyzed in previous EIRs.

School facility funding

In 1998 Senate Bill 50 became effective as a result of the California voters approving Proposition 1A. SB 50 establishes an amount of allowable developer fees, which is known as a Level 1 fee. The statute allows a school district to exceed the base Level 1 fees and impose higher Level 2 fees if the district 1) is determined to be eligible for State funding; 2) adopts a school facilities needs analysis; and 3) satisfies other criteria of SB 50. Statutory provisions establish a maximum amount of Level 2 fees for all projects within a particular school district. The statute also allows a district to impose Level 3 fees if Level 2 fees have been imposed and state funding is no longer available. Currently, the DUSD collects Level 2 fees from developers.

Under SB 50, payment of the permitted school fees is deemed to be full and complete mitigation of school facilities impacts for CEQA and other purposes. SB 50 limits the amount of fees a school district may legally impose on new development. DUSD imposes these fees on new development; therefore, there would be *no supplemental impacts* related to funding of school facilities.

Supplemental Development-level impacts. All potential impacts related to school facilities have been addressed at the Program level, above. No supplemental impacts related to schools or educational services are anticipated at the Development level of the proposed Project.

4.4 SEWER, WATER & STORM DRAINAGE

Sewer, water and storm drainage were analyzed in Chapter 3.5 of the Eastern Dublin EIR in 1994, an addendum to the Chapter 3.5 analysis of sewer treatment and disposal (dated August 22, 1994) was approved by the City Council. This supplement examines whether changes in the Project description or circumstances since the prior EIRs will result in supplemental impacts.

SEWER

Wastewater (referred to as "Sewer" in the Eastern Dublin EIR) Collection, Treatment and Disposal impacts were analyzed in Chapter 3.5, Sewer, Water, Storm Drainage, of the Eastern Dublin EIR and in an addendum dated August 22, 1994. The topic was also addressed in Chapter 3.7, Utilities, of the 2002 SEIR. This supplement analyzes the Project's impacts when evaluated against new information concerning wastewater collection, treatment capacity and disposal changes subsequent to the earlier analysis. It also evaluates these issues in light of proposed additional development proposed as part of the Project.

ENVIROMENTAL SETTING

The Eastern Dublin EIR examined wastewater collection, treatment, and disposal

issues for the Project area. The 2002 SEIR also addressed the potential impact from growth occurring at a faster rate than had been anticipated in the Eastern Dublin EIR and this growth's potential impact on the planned expansions to the Dublin San Ramon Services District (DSRSD) wastewater treatment facilities. DSRSD, which owns and operates a treatment plant in Pleasanton, was identified as the future provider of collection and treatment services for the Project area with disposal provided by the Livermore Amador Valley Water Management Agency (LAVWMA), a joint powers authority composed of Livermore, Pleasanton and DSRSD.

DSRSD operates a wastewater treatment plant that serves customers from both DSRSD and the City of Pleasanton. Raw wastewater from Dublin is treated at the treatment plant which is located north of Stoneridge Drive in Pleasanton. Anticipating that additional disposal capacity will be available following completion of the second LAVWMA pipeline (described below), DSRSD recently completed the first stage of its planned expansion to serve additional growth in its service area. This expansion added 5.5 million gallon per day (mgd) of average dry weather flow (ADWF) capacity to the treatment plant for a total of 17.0 mgd ADWF.

Agreements between DSRSD and the City of Pleasanton provide that the treatment plant capacity be shared between the two entities on an as-needed basis and provides for expansion of the treatment facilities by DSRSD when required. The plant is master planned to be expanded to an ultimate capacity of 20.7 mgd. In accordance with the provisions of the 1997 LAVWMA Joint Powers Agreement (see below) a maximum of 10.4 mgd may be used to serve DSRSD customers.

The recent plant expansion to 17.0 mgd and the future expansion to 20.8 mgd are consistent with Mitigation Measure 3.5/9.0 of the Eastern Dublin EIR, which anticipated the expansion of DSRSD's treatment plant in stages, as capacity needs increased.

LAVWMA operates a pipeline that carries treated wastewater over the Dublin grade and into East Bay Dischargers Authority (EBDA) facilities for eventual discharge into San Francisco Bay. The Eastern Dublin EIR identified the Tri-Valley Wastewater Authority (TWA), a joint powers authority which, at that time, was planning for disposal capacity beyond that which could be provided by LAVWMA. TWA was at that date proposing to transport untreated wastewater through the Central Contra Costa Sanitary District collection system for treatment and disposal in Martinez. In 1994 TWA transferred authority over acquiring/constructing additional disposal capacity to LAVWMA. LAVWMA, as described below, subsequently chose (per LAVWMA Export Pipeline Facilities Project EIR certified June 25, 1998 and per Revised LAVWMA Export Pipeline Project Description – amended by Res. No. 99-0) to construct improvements to its existing disposal pipeline and the construction of a second disposal pipeline over the Dublin Grade for discharge into San Francisco Bay using EBDA facilities (1994 Addendum to the Eastern Dublin EIR).

Regulatory framework

The EDSP established Goals, Policies and Action Programs to guide cooperation between the City, the DSRSD and the project developers in producing new

wastewater collection, treatment and disposal facilities. These policies included coordinating with DSRSD on the expansion of their recycled water service boundary, ensuring availability of wastewater treatment and disposal capacity by working with DSRSD and requiring developers to get "will-serve" letters from DSRSD prior to City grading permit approval.

In addition to the City's planning, DSRSD has adopted its own Master Plans. On June 21, 2005, DSRSD approved the "Wastewater Collection System Master Plan Update. Like DSRSD's prior updates, the Master Plan addresses wastewater collection, treatment and disposal. Based on a conversation with District engineering staff, the updated wastewater Master Plan assumes the level of development proposed in the Fallon Village Project (personal communication with Rhodora Biagtan, DSRSD, 6/15/05).

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR identified numerous potential impacts related to wastewater. The lack of a collection system was identified as a significant impact and Mitigation Measures 3.5/1.0-5.0, generally preventing development until such facilities are constructed by developers, were adopted to mitigate this impact to a less than significant level. Potential growth-inducing impacts of pipeline construction were mitigated by preventing the construction of facilities greater than those required for the GPA/SP project. Inadequate treatment plant capacity in DSRSD's treatment plan and inadequate disposal capacity were identified as significant impacts: both were mitigated to a less-than-significant level by mitigation measures requiring developers to obtain "will-serve" letters from DSRSD prior to issuance of grading permits; DSRSD will not issue a "will-serve" letter in the absence of treatment plant and disposal capacity. An additional mitigation measure requires Eastern Dublin developers to prepare detailed wastewater capacity investigations. Other mitigation measures supported DSRSD, TWA and, subsequently, LAVWMA in efforts to expand treatment and disposal capacity (along with recycled water projects). Other impacts to the planned TWA disposal systems and the recycled water systems related to noise, odors and potential spills also were identified and mitigated to levels of insignificance. The impact of the use of recycled water on the main groundwater basin was identified as a potential impact and a mitigation measure requiring coordination of recycled water projects with Zone 7's salt mitigation program mitigated this impact to insignificance. Even with these mitigation measures, several impacts related to increased energy use for the sewer systems (Impact 3.5/F,H,V) and growth-inducement (Impact 3.5/T) remained significant and unavoidable. Upon approval of the GPA/SP, the City adopted a Statement of Overriding Considerations for these impacts (Resolution No. 53-93).

The 2002 SEIR also addressed the potential impact from growth occurring at a faster rate than had been anticipated in the Eastern Dublin EIR and this growth's potential impact on the planned expansions to the DSRSD wastewater treatment facilities. This 2002 SEIR found that the mitigation measures in place from the Eastern Dublin EIR were adequate and that no new mitigation measures were necessary.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The 2002 SEIR analyzed wastewater collection and treatment capacities in detail and determined that wastewater collection and treatment facilities would be adequate to serve the proposed development and that there would be no new significant impacts associated with wastewater treatment and collection. The increased residential development for the Project was assumed in the Eastern Dublin EIR. The proposed increase in commercial development is above the amount evaluated in the Eastern Dublin EIR and the 2002 SEIR. The Initial Study concluded that the increase in commercial development may result in potentially significant impacts to wastewater treatment and disposal capacity.

Significance Criteria. Implementation of the Project would be considered to have a significant wastewater impact beyond the impacts previously analyzed in the Eastern Dublin EIR, if it were to:

- Exceed wastewater treatment standards of the Regional Water Quality Control Board
- Result in a determination by DSRSD that it does not have adequate capacity to serve the Project's projected demand in addition to serving provider's existing commitments
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Supplemental Program-level impacts. The following Project level impacts are analyzed in this section of the DSEIR: the adequacy of the wastewater collection, wastewater treatment capacity and treatment and the adequacy of wastewater disposal systems.

Wastewater collection

Wastewater flows from the 2005 Project area are estimated based on land use data and wastewater generation factors contained in the 2000 DSRSD Wastewater Collection Master Plan update (Montgomery Watson, February 2000). The 2000 Wastewater Collection Master Plan established the projected wastewater generation rates for the Project Area and all of Eastern Dublin. These flow rates have been used for DSRSD's on-going sewer trunk-line extensions in Eastern Dublin and for overall system and facilities planning. Table 4.4.1, below compares projected wastewater generation based on the land use data used in the 2000 Master Plan Update with flows expected from the 2005 Project, using the same wastewater generation factors. Even with the addition of approximately 1,000,000 sq. ft. of retail/office land uses over the 2000 Master Plan assumptions, Project flows are consistent with the wastewater flow rates calculated in the 2000 Master Plan Update which has been used in the sizing of the collection system built to date. DSRSD recently adopted (June 21, 2005) the 2005 Wastewater Collection Master Plan update, which updates both collection and treatment planning. (Montgomery Watson, June 2005).

Wastewater generation information in the 2005 Master Plan Update concludes that projected sewer flows are consistent with the 2000 Master Plan.

**Table 4.4.1. Wastewater Generation from Project Area
Comparison with DSRSD 2000 Collection System Master Plan Update**

Land Use	2000 Master Plan ¹	Flows, mgd	Project	Flows, mgd
Residential, Low	2,497 du	0.552	1,739 du	0.385
Residential, Medium	460 du	0.083	601 du	0.109
Residential, Med High	720 du	0.101	768 du	0.108
Commercial	731,808 sf	0.073	2,503,175 sf	0.250
Industrial	1,555,092 sf	0.156	0	0
Totals		0.965		0.852

Notes:

1. DSRSD Wastewater Collection Master Plan Update, Montgomery Watson, Feb 2000, Fig. 2-1, Tables 2-3, 2-5.
2. Project flows calculated per DSRSD unit flow rates: Residential = 70 gal/day/person with 3.16 persons per unit for Residential, Low; 2.58 persons per unit for Residential, Medium; 2.00 persons per unit for Residential, Medium High. Source: MacKay & Soms, 2005

Even though the Project proposes additional commercial uses, this potential development is within DSRSD's Master Plan assumptions. DSRSD has planned collection system and treatment plant expansion capacity to serve the Project. Development such as the Project will be required to construct on-site wastewater infrastructure in accordance with DSRSD's Master Plans. The mitigation measures in the EDEIR and DSRSD's inclusion of Eastern Dublin and development at proposed levels in its long-range wastewater planning ensure that collection system and treatment plant capacity is sufficient to serve buildout of the Eastern Dublin area, including the additional commercial development proposed by the Project. Therefore, there would be *no supplemental impact* due to limitations on collection system or treatment capacity.

On June 21, 2005, DSRSD approved the "Wastewater Collection System Master Plan Update. Based on a conversation with District engineering staff, the updated wastewater Master Plan assumes the level of development proposed in the Fallon Village Project (personal communication with Rhodora Biagtan, DSRSD, 6/15/05).

DSRSD has planned collection system and treatment plant expansion capacity to serve the Project. The mitigation measures in the EIR and DSRSD's inclusion of Eastern Dublin in its long-range wastewater planning ensure that the limited collection system and treatment plant capacity is a not a new significant impact. Therefore, there is *no supplemental impact* due to limitations on collection system or treatment plant capacities.

Wastewater disposal capacity

The Livermore-Amador Valley Water Management Agency (LAVWMA) pipeline that disposes of treated wastewater into San Francisco Bay via East Bay Dischargers

Authority facilities has adequate capacity to accommodate the increased amount of treated wastewater generated by the proposed Fallon Village Project, however, additional wet weather storage of treated wastewater may be required within the buildout of the proposed Project.

LAVWMA, the joint powers agency, was created in 1974 by the cities of Livermore and Pleasanton, and the DSRSD. Effluent from the wastewater treatment plants operated by the City of Livermore and DSRSD is conveyed to LAVWMA regulating reservoirs in Pleasanton and then via a 16-mile export pipeline to the East Bay Dischargers Authority (EBDA) pipeline in San Leandro. The EBDA pipeline conveys the effluent for ultimate discharge to San Francisco Bay.

The LAVWMA system was constructed pursuant to a 1974 Joint Powers Agreement ("1974 JPA") and has been in operation since 1979. By the late 1990's the existing LAVWMA export pipeline was failing due to internal corrosion, and was in need of repair or replacement. In response to the on-going structural integrity problems with the existing pipeline, as well as recognition that the LAVWMA system was then operating near capacity during major wet weather events, and that development planned under approved member agencies' General Plan buildout scenarios required additional wastewater disposal capacity, LAVWMA initiated a project in 2003 to increase its wastewater disposal capacity by expanding its wastewater export facilities. This project completed in Summer 2005 will expand LAVWMA's peak wet-weather flow pipeline capacity from 21.0 mgd to 41.2 mgd through a combination of a 41.2 mgd replacement pipeline in certain locations and a new 21.0 mgd parallel pipeline in other locations, rehabilitation of the existing export pipeline, construction of new pumping stations, and upgrade of the Livermore trunk line.

In 1997 the LAVWMA member agencies executed Principles of Agreement that defined key aspects of the pipeline expansion project. These Principles of Agreement were then incorporated into an Amended and Restated Joint Exercise Powers of Agreement ("1997 Amended JPA") that governs LAVWMA activities. The 1997 Amended JPA defines influent and service area limitations, pipeline configuration and size, cost sharing, status of existing projects, capacity exchanges and peak wet weather flow (PWWF) allocations. According to the terms of the 1997 Amended JPA, and as shown in Table 4.4.3, DSRSD's influent limit is 10.4 mgd average dry weather flow (ADWF) and it's share of the LAVWMA export pipeline's ultimate capacity is 14.40 mgd peak wet weather flow (PWWF). The table also shows the capacity allocated by the 1974 JPA, the governing document at the time the Eastern Dublin EIR was certified.

**Table 4.4.3. LAVWMA Capacity Allocations and Limitations
Assuming Participation by All Agencies¹ (mgd)**

Member Agencies	1974 JPA	1997 Amended JPA	
	1994 Allocated Capacity	ADWF ² Influent Limits ¹	Future PWWF ² Allocated Capacity
Livermore	8.73	11.10	12.40
Pleasanton	7.50	10.30	14.40
DSRSD	<u>4.77</u>	<u>10.40</u>	<u>14.40</u>
Totals	21.0	31.80	41.20

Source: ESA, *LAVWMA Export Pipeline Facility Project Final EIR*, July 1998, Table 2-1, page 2-9.

Notes: 1. Assuming that Livermore, Pleasanton and DSRSD all participate in the Project.

2. ADWF = average dry weather flow; PWWF = peak wet weather flow.

The 1997 Amended JPA requires that the ADWF be measured as the raw wastewater enters the treatment plants, and is limited to a total of 31.80 mgd. This means that implementing these restrictions effectively limits development by limiting the ADWF into the wastewater treatment plants. The 1997 Amended JPA defines PWWF as the peak flow to be passed through the LAVWMA export pipeline. Therefore, on-site storage of treated effluent can be implemented to manage the limitation created by these peak flow maximums.

As required by the terms of the 1997 Amended JPA, the expansion component of the LAVWMA Export Pipeline project was taken to the voters of the cities of Pleasanton and Livermore in November of 1998. The citizens of Pleasanton did vote to participate in the project, but the ballot measure failed in Livermore. Prior to November 2005 Livermore may however decide to reconsider their previous vote and take a subsequent measure to a new vote. Regardless of the outcome of any such local vote both cities and DSRSD are required to participate in the rehabilitation of the existing failing pipeline.

If Livermore does not vote to join the project by the end of 2005 the 1997 Amended JPA provides that DSRSD and Pleasanton will evenly share Livermore's unused export pipeline capacity. All member agencies will retain the defined average dry weather flow influent limits whether or not they participate in the project. Table 4.4.4 shows the capacity allocations at the time of the Eastern Dublin EIR in 1994 and shows the capacity allocations in the event the City of Livermore decides not to participate. This table indicates that under the provisions of the 1997 Amended JPA Livermore will retain their ADWF Influent Limit of 11.10 mgd but will be limited by their current 8.73 mgd PWWF Capacity in the export pipeline. Stated another way Livermore will be free to pursue local disposal options such that they can expand their treatment plant to 11.10 mgd ADWF but they will only be able to export 8.73 mgd PWWF through the pipeline. They will have to find alternative disposal means for any flows above 8.73 mgd.

**Table 4.4.4. LAVWMA Capacity Allocations and Limitations
Without Livermore Participation (mgd)**

Member Agencies	1974 JPA	1997 Amended JPA w/o Livermore			
	1994 Allocated Capacity	ADWF ¹ Influent Limits ¹	Base PWWF ¹ Capacity	Add Unused Livermore PWWF	PWWF Capacity
Livermore	8.73	11.10	8.73	0	8.73
Pleasanton	7.50	10.30	14.40	1.835	16.23 ₅
DSRSD	<u>4.77</u>	<u>10.40</u>	<u>14.40</u>	<u>1.835</u>	<u>16.23</u> ₅
Totals	21.00	31.80	37.53	3.670	41.20

Source: ESA, *LAVWMA Export Pipeline Facility Project Final EIR*, July 1998, Table 2-4, page 2-14.
Notes: 1. ADWF = average dry weather flow; PWWF = peak wet weather flow.

Under the 1997 Amended JPA, DSRSD has an ADWF influent allowance of 10.40 mgd whether or not Livermore participates in the project, a PWWF allocation of 14.40 mgd in the pipeline expansion project if all three agencies participate and 16.235 mgd in the event Livermore citizens do not vote to participate in the pipeline expansion project.

DSRSD and Pleasanton have proceeded with the LAVWMA export pipeline expansion project without Livermore's participation. The old transport line is to be fully lined and the new parallel pipeline were completed in Summer 2005 (operational since December 2004). This will allow LAVWMA to export the quantities agreed to in the 1997 Amended JPA. DSRSD will be limited to 10.40 mgd ADWF capacity, which is consistent with both the plant current and planned capacity and the growth anticipated by this Project (see discussion under Supplemental Impact SI-SEW-1 above). DSRSD is also making plans to address the long term PWWF limit. At this time the District is awaiting Livermore's decision as to whether to participate in the pipeline expansion project. As noted above DSRSD will acquire an additional 1.835 mgd of PWWF capacity in the event Livermore decides not to participate. In any event LAVWMA's current calculations indicate that the DSRSD will not reach the 14.40 mgd PWWF restriction until some time past the year 2020. By that time DSRSD expects to have additional wet weather storage available to ensure that the flows do not exceed this allocation.

With the LAVWMA export pipeline expansion project completed in Summer 2005 and with DSRSD planning for the expansion of improvements to meet the wet weather storage conditions of the LAVWMA 1997 Amended JPA, the Project would cause *no supplemental impacts* with regard to wastewater disposal.

Supplemental Development-level impacts. Since wastewater collection system, treatment and disposal capacity would all be included in Program level demand figures, no supplemental development-level impacts related to wastewater collection, treatment or disposal systems have been identified in the DSEIR. The Stage 2 Development Plan developer will be required to install appropriate infrastructure in compliance with previous mitigations measures and DSRSD's Master Plan.

WATER

Water supply and distribution impacts were analyzed in Chapter 3.5, Sewer, Water, and Storm Drainage, of the Eastern Dublin EIR. The topic was also addressed in Chapter 3.7 of the 2002 SEIR. This supplement analyzes whether changes in the Project description or circumstances since the prior EIRs will result in supplemental water impacts.

ENVIRONMENTAL SETTING

No public water service currently is provided to the Project area. The residences and other land uses in the Project area use locally pumped well water. The Eastern Dublin EIR identifies DSRSD as the provider of water service to Eastern Dublin. DSRSD's long-range water planning for Eastern Dublin includes the Project area. DSRSD obtains its water supplies from Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7), which wholesales treated local surface water, groundwater and imported water from the State Water Project to retail water agencies. The 2002 SEIR relied on the Eastern Dublin Program EIR's analysis and concluded there would be no additional supplemental impacts as a result of the 2002 project. However, the 2002 SEIR updated the Eastern Dublin Program EIR water supply information.

Regulatory framework

The EDSP established Goals, Policies and Action Programs to guide cooperation between the City, the DSRSD and the Project developers in producing new water supplies and water distribution facilities. These policies included coordinating with DSRSD on the expansion of their water service boundary, supporting DSRSD and Zone 7's policies and capital improvement programs and requiring developers to get "will-serve" letters from DSRSD prior to City grading permit approval.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR identified significant impacts related to the supply of water to the Eastern Dublin area. Mitigation measure 3.5/23.0 addresses possible salinity in the groundwater basin. Mitigation measures 3.5/24.0–40.0 were adopted to prevent overdraft of ground water resources by requiring or encouraging annexation and connection to DSRSD; to minimize the effect of additional demand for water by encouraging water recycling and conservation and by encouraging the development of new facilities and supplies; and to ensure the development of a water distribution system by generally preventing development until such facilities are constructed by developers. Other mitigations (3.5/41.0–43.0) were adopted to deal with the potential for reservoir failures, the potential for loss of system

pressure, and noise from water system pump stations. The Eastern Dublin EIR noted that the Eastern Dublin project would increase demand to serve development at build-out under the then-applicable general plans and required an additional 25,000 acre-feet annually (AFA). Mitigation Measure 3.5/28.0 relied on Zone 7's planning to acquire additional supplies. Impact 3.5/S found a lack of a water distribution system and required a "will serve" letter prior to grading permit (mitigation measure 3.5/3.8.0). Impact 3.5/T, Inducement of Substantial Growth, was deemed to be significant even after mitigation. Upon approval of the GPA/SP, the City adopted a Statement of Overriding Consideration for this significant unavoidable impact (Resolution No. 53-93).

The 2002 SEIR updated the Eastern Dublin EIR water supply information with respect to new water supply contracts and water supply litigation. No new significant water supply or distribution impacts were identified.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The Project proposes to develop 582 more residential units than approved for the existing Stage 1 Development Plan. The units were examined in the Eastern Dublin EIR as potential residential development in the Livermore Airport Protection Area, but the development area was designated as a Future Study Area in the Eastern Dublin approvals. No residential development was proposed or analyzed for the Future Study Area in the 2002 SEIR and approvals. The Project proposes to provide the additional residential units outside the Future Study Area in other designated residential areas.

The Project proposes to add up to 1,081,725 square feet of commercial, office and light industrial uses in the Future Study Area. This supplement examines whether the proposed increase in development will have new or substantially intensified significant water impacts beyond those identified in the prior EIRs. This supplement also examines the effects of SB 610 and SB 221, which are water supply planning statutes applicable to the Project since the prior EIRs.

Significance criteria. Implementation of the Project would be considered to have a significant impact on water supply and distribution if it were to result in:

- The need for construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- The need for new or expanded water supply entitlements to serve the Project.

DSRSD Settlement Agreement. The 2002 SEIR provides a detailed discussion of litigation and a subsequent settlement agreement related to the legality of a DSRSD/Zone 7 agreement to expand its service area to serve development in the Dougherty Valley. (2002 SEIR p. 3.7-4 to-6) As required by the settlement agreement DSRSD prepared a Preliminary Water Service Analysis (PWSA). The PWSA showed that:

- The water demand for the 2002 SEIR Project area was included in DSRSD's May 2000 adopted Urban Water Management Plan (UWMP).
- Total firm sustainable water supplies (as defined in the Settlement Agreement) that reasonably may be expected to be available to DSRSD would meet the projected water demand associated with the 2002 SEIR Project, together with all other existing uses and uses under build-out of the applicable general plans for all areas lying within DSRSD's water service area, as and when demand is expected to arise. This conclusion was based on Zone 7's contractual obligation to provide DSRSD with sufficient water to serve DSRSD's customers, along with an analysis of Zone 7's available resources in the future.
- During a "credible worst case drought scenario" (as defined in the Settlement Agreement), providing water to the 2002 SEIR Project area would not significantly and adversely affect the reliability or the quality of water service to DSRSD's existing customers.

DSRSD adopted a Final Revised WSA for Eastern Dublin in December 2001. In its Final Revised WSA, DSRSD's demand figure assumed that the landscaping of public areas (e.g., parks, arterial medians) would use recycled water. DSRSD informs the City that there has been a noticeable reduction in Eastern Dublin potable water demand between the 1993 EIR, and later master water plans and the 2002 SEIR. (DSRSD Water Master Plan dated Sept. 2000). This is due to the District's progressive recycled water program and water conservation program. The increase in recycled water use is due primarily to the increase in park acreage and the addition of a golf course in Eastern Dublin. The decrease in potable water demand is due to a decrease in developed residential densities and a decrease in the gallons of water used by a typical residential unit.

Since certification of the 2002 SEIR, DSRSD has adopted its 2000 Urban Water Management Plan (UWMP). DSRSD circulated a draft of the 2005 UWMP for public review in April 2005 and on May 17, 2005 the DSRSD Board approved the document. The 2005 UWMP does not disaggregate specific East Dublin or Fallon Village water demands. DSRSD reports that the 2005 UWMP water demand, when compared with the 2000 UWMP, shows a slight increase in overall water demand but verifies that there are sufficient supplies to serve the Project demand (personal conversation with Rhodora Biagtan, DSRSD, 6/15/05). These results are consistent with the conclusions of the DSRSD Final Revised WSA.

Zone 7 Water Supply. As discussed in the 2002 SEIR, Zone 7 is contractually obligated to supply water requested by DSRSD, subject to its availability. In 1994, DSRSD renegotiated its water supply contract with Zone 7. The renewed contract is for a term of 30 years and is renewable upon expiration. The agreement also provides DSRSD with the ability to secure alternative sources of water. Alternatives include: water transfers, construction of wells and pumps from the groundwater basin that Zone 7 manages, and recycled water. (see 2002 SEIR p. 3.7-4)

The 2002 SEIR details Zone 7 efforts to obtain additional supplies and entitlements to water necessary to serve its service area. Zone 7's Water Supply Planning Program sets forth its long-term water supply and facility needs through the year 2020. To meet projected demands, Zone 7 identified water supply options based on average,

wet and dry year scenarios. The planning program addresses potential water supply options, groundwater management, and conveyance and treatment facilities. Zone 7 has secured or is in the process of securing the identified water supplies and is planning the necessary facilities, as evaluated in the Zone 7 Water Agency Water Supply Planning Program EIR. Zone 7's long-term and drought-year protection water sources are shown in Table 4.4.6, below taken from the DSRSD 2005 UWMP. In presenting the UWMP to the Board DSRSD reported that *"Through District's (sic) implementation of integrated water management (water supply acquisition, conservation and water recycling), available supplies are 100% reliable to meet the District's buildout demands, under all hydrologic conditions."* DSRSD's Final Water Service Analysis for Eastern Dublin (December 2001) as well as the 2005 UWMP demonstrate that Zone 7 already has secured sufficient supplies to serve the demand of all of Eastern Dublin including the Project.

Table 4.4.6. Zone 7 Supplies and Available Dry Year Storage

Supply Component	Annual Supply Quantity, afa
State Water Project Entitlements	
Original Entitlements	46,000
Additional Entitlements	
Berrenda Mesa Water District (1999)	7,000
Lost Hills Water District (1999)	15,000
Belridge Water Storage District (2000)	10,000
Tulare Lake Basin Water Storage District (2003)	400
Belridge Water Storage District (2004)	2,219
Subtotal SWP Entitlements	80,619
Long-term Yield from SWP (@ 75.6%)	60,948
Groundwater (Safe Yield of Main Basin)	13,400
Local Runoff from Del Valle Watershed	9,300
BBID Water Transfer	2,000
Recycled Water	500
Wet Year Water (a)	3,000
Total of Long-Term Sustainable Supplies(b)	86,148
Dry Year Water Supplies	
Original storage acquired in Semitropic Groundwater Bank	43,000
Additional storage acquired in Semitropic Groundwater Bank	22,000
Subtotal Semitropic Groundwater Storage	65,000
Storage Capacity in the Chain-of-Lakes(c)	50,000
Total Storage Capacity in the Main Basin(d)	>240,000
Minimum Reserved Emergency Storage Available in the Main Basin(e)	127,000

Notes:

- (a) As a SWP Contractor, Zone 7 has in the past and will continue to have the opportunity to acquire excess, available water during wet hydrologic periods. Analysis by Zone 7 staff estimates these quantities to be 3,000 afa during wet years.
- (b) Wet year water has not been included in the calculation of long-term sustainable supplies because it may not be available on an annual basis, although some portion of this supply could be distributed over the hydrologic period.
- (c) Lakes H and I with a combined capacity of 45,000 af are currently available. Additional lakes with an additional capacity of at least 5,000 af are expected by the year 2020..
- (d) Although the total storage capacity of the Main Basin is above 255,000 af, Zone 7 typically operates the Main Basin at around 240,000 af to minimize outflow losses.
- (e) Based on historic minimum storage contained in the Main Basin in the fall of 1966.

Source: Table 4.3, DSRSD Urban Water Master Plan, 2005

Therefore, there would be *no supplemental impact* regarding the provision of an adequate, long-term water supply to serve the Project.

SB610 and SB221 Water planning legislation.

Since certification of the previous EIRs for the Project area, new laws have gone into effect requiring that local agencies document a long term water supply for projects proposing 500 or more dwelling units or non-residential floor space of at least 250,000 square feet. The proposed Project is required to comply with this new legislation.

In 2001 the state legislature passed Senate Bill 610 (Chapter 643, Statutes of 2001) and Senate Bill 221 (Chapter 642, Statutes of 2001) amending state law to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB610 and SB221 are companion measures to promote collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to local decision-makers prior to approval of specified large development projects. Both statutes also require this detailed information be included in the administrative record that serves as the evidentiary basis for an approval of such projects. Under SB610, water assessments must be furnished to local governments for inclusion in environmental documentation for certain projects subject to CEQA. Under SB221, local approval of certain residential subdivisions requires an affirmative written verification of sufficient water supply for the proposed residential subdivision as well as existing and planned future uses in the water provider's service area.

SB610 and SB221 subject certain larger projects to heightened water availability analyses by public water systems serving 3,000 or more drinking water service connections. The Project would be subject to these analyses as the Project would include residential development of more than 500 dwelling units and retail and commercial land uses exceeding 250,000 square feet of floor space. SB221 applies at the tentative map stage to residential projects of more than 500 dwelling units or residential developments that would increase the public water system's connections by ten percent or more.

The required analysis for compliance with both SB610 and SB221 is often the water provider's Urban Water Management Plan (UWMP). Water suppliers use of UWMPs as a foundation to fulfill the specific analytical and planning requirements of these two statutes. Cities, counties, water districts, property owners, and developers can then utilize this document when planning for and proposing new projects.

In April 2005 the City of Dublin formally requested DSRSD, as the water provider, to prepare an SB610 water supply assessment for the Project.

On July 19, 2005, the DSRSD Board approved the SB610 Water Supply Assessment Report for the Project, concluding that a sufficient long-term water supply exists to serve the amount of development proposed in the Stage 1 Development Plan for the Project.

Consistent with SB221, the City will condition all Project area tentative maps to require a written verification that sufficient water supply is available for the Project. Based on the above analysis, including compliance with both SB 610 and SB221, there would be *no supplemental impact* with regard to provision of an adequate long-term water supply to serve the proposed Project.

Supplemental Development-level impacts. No supplemental impacts related to the provision of water have been identified at the Development level of the proposed Project beyond those analyzed at the Program-level since the Program level analysis includes Development level water demands. The Stage 2 Development Plan developer will be required to install appropriate infrastructure in compliance with previous mitigations measures and DSRSD's Master Plan.

STORM DRAINAGE, FLOODING AND WATER QUALITY

Storm drainage, flooding and water quality impacts were analyzed in Chapter 3.5, Sewer, Water, and Storm Drainage, of the Eastern Dublin EIR. Storm Drainage was analyzed in Section 3.7 of the 2002 SEIR; flooding and water quality were addressed in the Initial Study for the 2002 SEIR. This supplement examines the current status of compliance with the Dublin storm drainage master plan facilities and evaluates changes in hydrology or regulatory standards since certification of the prior EIRs. It further evaluates the Project in light of recent changes to regional water quality requirements pursuant to the Clean Water Act subsequent to certification of the prior EIRs. Lastly it evaluates whether the Project would contribute to increases in the salinity of the groundwater basin more than previously estimated.

ENVIRONMENTAL SETTING

Regional and local watersheds

The Project area is located within the Arroyo Las Positas watershed, a sub-basin of the Alameda Creek watershed. The Arroyo Las Positas watershed drains westerly into and through the Arroyo Mocho to the Arroyo De La Laguna, which discharges into Alameda Creek near Sunol, and discharges to San Francisco Bay near Union City.

The local watershed containing the Project area is located north of I-580 at the western edge of the Arroyo Las Positas watershed. The Project area occupies approximately 1,120 acres of a 2,400 acre local watershed that forms the headwaters of the a drainage channel designated by the Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7), as the "G3" channel. The G3 channel flows to triple box-culverts under I-580 and continues south eventually discharging into the Arroyo Mocho.

The local watershed can be further divided into smaller sub-basins. These sub-basins correspond to the drainage areas contributing to each of the well-defined drainage corridors within the Project area. These sub-basins are shown in Figure 3.5.3-1 and are described briefly in the following sections. Combined flows from all these defined sub-basins drain to the Zone 7 G-3 facility described above. The G-3 line is an improved drainage system designed to accommodate the ultimate buildout of the entire Eastern Dublin planning area.

Drainage Sub-Basin "A." This 187-acre sub-basin is a long, linear drainage located along the northwestern and western limits of the larger drainage basin, adjacent to the eastern boundary of the Dublin Ranch development. The sub-basin is contained within a well-defined valley with runoff collected by a small un-named creek at the base of the valley, flowing to the south. This drainage has a creek length of approximately 7,400-feet and an approximate average creek gradient of 4%. Sub-basin "A" terminates at the southern end of the un-named creek just south of the existing Jordan home. At this point the "western drainage" converges with another drainage coming from the northeast portion of the site.

Drainage Sub-Basin "B." This 281-acre sub-basin is a broad drainage located in the northeastern and central portion of the overall basin. This sub-basin drains to a small un-named creek flowing from northeast to southwest (referred to in the proposed Project land use plan as the Eastern Drainage Corridor). This drainage has a creek length of approximately 3,400-feet and an approximate average creek gradient of 3%. Sub-basin "B" terminates at the southwest end of the drainage, at its convergence with Drainage Sub-Basin "A."

Drainage Sub-Basin "C." This 57-acre drainage area is located in the west-central portion of the site. The drainage area contributing to this basin consists of the Jordan home and a small, shallow valley draining northeast to southwest toward the southern end of the Jordan home. Sub-Basin "C" drains to a short stretch of the un-named creek just south of the confluence of the Drainage Sub-Basins "A" and "B". Sub-Basin "C" terminates where the un-named creek flows under Fallon Road approximately 2,400-feet north of the Fallon Road / I-580 interchange.

Following their convergence Sub-Basins "A" "B" and "C" flow into an open ditch along the east side of Fallon Road. This ditch crosses under Fallon Road via a culvert at the downstream end of Sub-Basin "C" and flows along the west side of Fallon Road for approximately 500-feet. At this point the ditch enters another culvert and crosses back to the east side of Fallon Road where an open ditch conveys the runoff south approximately 1,400-feet to a final discharge point at double 6'x5' box culverts under Fallon Road.

Drainage Sub-Basin "D." This 578-acre drainage area occupies the remaining area of the larger Project area drainage basin and is located in the southeasterly and southern portions of the Project area. The sub-basin drains generally to the south via mostly overland flow. The most pronounced drainage corridor in Sub-Basin "D" flows from north to south along existing Croak Road. The runoff from this drainage and other minor drainages emerge from the southern most hills about 1,500-feet north of I-580 and spills out across the flatter southern portions of the site. Runoff eventually collects at the very southwest corner of the Project area just north and east of the Fallon Road/I-580 Interchange where it joins the flow from Drainage Sub-Basins "A", "B" and "C" and flows, via the double box culvert described above, west under Fallon Road.

Local flooding

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Alameda County California (Unincorporated Areas), revised September 17, 1997

indicates that no part of the Project area is subject to flooding in a 100-year storm event.

Existing runoff methodology and calculations

A hydrologic model of existing runoff conditions has been prepared for use in this EIR, using the Army Corps of Engineers HEC-1 Flood Hydrograph numerical method in accordance with the Zone 7's Hydrology and Hydraulics Criteria. A 6-hour storm was used as specified by Zone 7 standards for drainage basin areas of less than 20 square miles in size.

The Project area's watershed was first analyzed based on a hydrograph model of the entire drainage basin. Then each sub-basin was analyzed individually based on its own hydrograph model. The individual sub-basins were identified and modeled as tributary areas collected by well-defined "creeks" or drainages and then the channel flow between the sub-basin confluences was modeled. A summary of the existing conditions HEC-1 Peak Flow results is presented in Table 4.4.7.

Table 4.4.7. Existing Conditions, Peak Flows

Storm Event	Total Basin	Sub-Basin "A"	Sub-Basin "B"	Sub-Basin "C"	Sub-Basin "D"	Confluence A, B, C, D
2-year	65 cfs	18 cfs	19 cfs	6 cfs	35 cfs	77 cfs
10-year	294 cfs	65 cfs	88 cfs	22 cfs	163 cfs	335 cfs
100-year	556 cfs	116 cfs	164 cfs	40 cfs	309 cfs	625 cfs

Source: MacKay & Somps, 2005

Rainfall and quality of existing runoff

Rainfall runoff occurs during wet winter months, during which time approximately 90 percent of the mean annual precipitation of about 16.0 inches occurs. On average, precipitation exceeds evaporation only in December, January and February. High temperatures throughout the rest of the year result in evaporation rates that far exceed precipitation. During rainfall, runoff is rapid on the clayey soils, and stream flow can rise quickly. Storm water runoff is concentrated rapidly by the network of tributaries in the hills which drain the regional watershed.

Prior land use activity within the local watershed has altered natural rainfall-runoff characteristics. Grazing practices have converted native perennial grasslands to Mediterranean annual grasses, altering runoff hydrology of the watershed. These grazing practices have increased runoff from surface soil compaction and grassland conversion and also decreased the quality of stormwater runoff; however the quality of water currently released from the Project area is of moderate quality.

Groundwater salinity

The Livermore-Amador Valley groundwater basin is divided into sub-basins based largely upon faults, which may form local impediments to groundwater flow. Zone 7 has divided the Valley into 13 sub-basins that have been grouped into two categories: the Main Basin and the Fringe Sub-basin. The Project area is located

within the Main Basin. The Main Basin underlies the majority of the Livermore-Amador Valley and includes the Amador, Bernal, Mocho II, and Castle Sub-basins. The Fringe Sub-basins include the Dublin, Bishop, Camp, Cayetano, May, Mocho I, Altamont, Spring and Vasco Sub-basins. The Fringe sub-basins are characterized by comparatively thin sand lenses that hold less water than the Main Basin, and by relatively limited groundwater storage, low well yield, and poorer water quality than the Main Basin.

Salts enter the groundwater from irrigation water, or from recharge with water containing salts. The influx of salts into the Main Basin comes from natural stream recharge, urban irrigation, agricultural irrigation, subsurface groundwater inflow, and artificial recharge. Since there is very little outflow of groundwater from the Main Basin, salts tend to be trapped in the basin, resulting in a steady buildup of salt concentrations over time. Salt accumulation degrades the groundwater quality. The existing total dissolved solids (TDS) level in the Main Basin is 400 to 450 milligrams per liter (mg/l). Drinking water regulations set a secondary standard for TDS of 500 mg/l. This standard is not health-based, but primarily for palatability issues such as taste and color.

Most recently, Zone 7 has commenced work on Mocho Well # 4, anticipated to be sited on the north-west corner of Santa Rita road and Stoneridge road in Pleasanton as one of the first implementing measures for demineralization of the underground basins. The site is suitable for a demineralization plant of up to 7.7 MGD capacity. The plant is proposed to use Reverse Osmosis (RO) membrane technology to treat up to 7.7 MGD of groundwater pumped from existing Zone 7 Mocho wells, produce about 6.2 MGD treated permeate of less than 5 mg/l hardness, blend the permeate with additional groundwater pumpage or a stream of distribution system water and pump it to the Zone 7 water system. The groundwater RO concentrate would be disposed to LAVWMA pipeline via Livermore interceptor. The operation of the Mocho Demineralization plant would remove 3,000 to 4,000 tons of salt annually from the main groundwater basin and lower the hardness of Zone 7's groundwater deliveries. Currently, Zone 7 is working on finalizing the 90% design, preparing the CEQA administrative draft document, and working with Livermore, DSRSD, East Bay Dischargers Authority (EBDA) and RWQCB to obtain necessary permits for concentrate disposal from the demineralization plant. The construction of Mocho plant is scheduled to be completed by September 2007 (source: Jarnail Chabal, Zone 7, 6/24/05).

Existing drainage facilities

From the existing double box-culvert at Fallon Road drainage from the Project area currently runs in a ditch paralleling I-580 approximately 250 feet to the eastern end of the existing G3 concrete culvert. Flows run in this box-culvert west to an existing triple box culvert which carries the flows south under I-580 and continues south eventually discharging into the Arroyo Mocho.

Regulatory framework

The EDSP established Goals, Policies and Action Programs to guide development of an effective storm drainage system in the Eastern Dublin area (Policies 9-7 and 9-8). In order to define and implement such a system the Action Programs required that

a Storm Drainage Master Plan be prepared (Program 9T) that was consistent with EDSP Resource Management Policies (Program 9X). The Dublin Ranch Storm Drainage Master Plan was subsequently prepared and has been updated for each development project in the Eastern Dublin planning area. Through the Storm Drainage Master Plan a drainage solution is to be implemented which protects all downstream properties from new drainage impacts (Program 9U). The EDSP also required cooperation with other regional drainage and/or water quality agencies in the implementation of needed facilities (Programs 9V and 9W).

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR evaluated the potentially significant impact of flooding due to activities of the EDSP. The EIR established mitigation measures incorporating the EDSP policies and action program requiring storm drainage master planning (MM 3.5/46.0), requiring natural channel improvements wherever possible (MM 3.5/45.0) and requiring that drainage facilities minimize any increased potential for erosion or flooding (MM 3.5/44.0). The EIR found that with the implementation of these mitigation measures potential flooding impacts would be reduced to a level of insignificance.

The EIR also evaluated the possibility that, with new residential and commercial development the increase in impervious surfaces might reduce inflows to the main Tri-Valley groundwater basin. The EIR found that with the implementation of a mitigation measure requiring that such flows be protected and enhanced (MM 3.5/49.0 and 50.0) that this potential impact would be reduced to a level of insignificance.

A final potentially significant impact evaluated by the Eastern Dublin EIR concerned the possibility that urban runoff might cause a deterioration of the quality of stormwater discharging from the planning area. This was also considered a potentially significant cumulative impact. With the implementation of mitigation measures requiring each development to prepare project-specific water quality investigations addressing this issue (MM 3.5/51.0); and to comply with the requirements of the City's Best Management Practices, NPDES permit and the County's Urban Runoff Clean Water Program (MM 3.5/53.0-55.0); and the development of a community-based non-point-source control education program (MM 3.5/52.0), this potential impact and potential cumulative impact would be reduced to a level of insignificance.

Storm drainage was discussed in Section 3.7 of the 2002 SEIR, however, no supplemental impacts were identified. (2002 SEIR pp. 3.7-6to-7). The Initial Study for the 2002 SEIR identified no potential for supplemental impacts (2002 SEIR V.2 pp. 40-44.).

This issue was evaluated in the 1993 EIR but was focused out from further evaluation in the Initial Study for the 2002 SEIR.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The Project's proposed additional residential development was considered in the Eastern Dublin EIR and no supplemental impacts were identified. The Project also proposes the addition of up to 1,087,725 square feet of commercial uses beyond that considered in the EDEIR and 2002 SEIR. This supplement examines the potential effects of these Project changes and examines new standards relating to the impact of non-point source water quality that have been put in place since the previous EIR was certified.

Significance criteria. Implementation of the Project would be considered to have a significant impact on storm drainage/ water quality if it were to substantially increase any of the following beyond previous levels:

- Require the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Substantially alter the existing drainage pattern of the area in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the area or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
- Otherwise substantially degrade water quality.

Regulatory Environment

Clean Water Program Requirements As discussed in the Eastern Dublin EIR the 1987 amendment of the federal Clean Water Act required that the Environmental Protection Agency establish new programs to control non-point pollution in both surface and groundwaters.(EDEIR p. 3.5-24.) Locally such programs directed at land development projects were not in place in 1993, when the Eastern Dublin EIR was certified. Revised water quality regulations were not addressed in the 2002 Supplemental EIR.

As of the mid-1990's the regulation of non-point source runoff is administered through the Alameda County Municipal Stormwater National Pollution Discharge Elimination System (NPDES) Permit. Dublin is a permittee city within the Alameda County permit. Regionally the Regional Water Quality Control Board (RWQCB) reviews and approves both the Alameda County NPDES permit and the implementation of measures at a project level. The Alameda County permit requires that dischargers address stormwater quality impacts associated with land development projects. The regulations require that the impacts of the project's stormwater discharge on downstream watercourses be addressed. Potential impacts are described as 1) water quality associated or 2) hydromodification (change in the

timing or velocity of stormwater runoff in the post-development condition) associated impacts.

The water quality requirements of the NPDES permit define quantitative capture rates and treatment criteria for compliance with the permit. Compliance with this portion of the permit is required beginning as of February 15, 2005. The Project proposes local compliance with the NPDES water quality requirements to be met through the City conditioning each property with a requirement to meet the water quality requirements of the Alameda County NPDES permit. The Project includes preliminary methods of treatment compliance in the document entitled "Stage 1 Plan Development Level Stormwater Quality/ Drainage Concepts", ENGEIO, Inc, February 28, 2005, which has been submitted as a part of the Stage 1 PD application. With City acceptance of the recommendations of this report, there would be an appropriate water quality design for the multiple-owner/ multiple-phase Project.

The NPDES permit regulations, Section C.3, also require analysis of and mitigation for adverse impacts, otherwise referred to as hydromodification, to receiving waters downstream of a proposed development. However, to-date, the Alameda County Clean Water Program, which manages the County NPDES permit, has not received approval from the Regional Water Quality Control Board (RWQCB) for their proposed hydromodification management program, as required by the RWQCB. This hydromodification management program establishes criteria for assessing "adverse impacts to beneficial uses" as defined in Section C.3, and guidance for acceptable methods of mitigating any potential impacts. The County continues to work with the RWQCB and is planning to have an acceptable program in place by the end of 2005. To address the hydromodification requirements of the NPDES permit, which are, to-date, undefined as described above, the Project proposes that the City of Dublin condition each property's development application to comply with the hydromodification requirements that will be included in the Alameda County NPDES permit and hydromodification management plan, once approved by the RWQCB.

Supplemental Program-level impacts.

Capacity of local drainage channels

Development of the Project would increase impervious surfaces, resulting in increased storm water runoff. However, the volume of this increased runoff is not expected to exceed the capacity of existing drainage facilities within the Project area to convey drainage off-site.

Stormwater runoff from all existing drainage basin watershed areas would be collected in the post-development storm drainage system. This drainage system would consist of large pipe conveyances in Fallon Road, Dublin Boulevard, Central Parkway, Croak Road and the Loop Road. Drainage would also be accommodated in an unnamed drainage, referred to here as the "Eastern Drainage," in the central open space corridor. These facilities would discharge at the existing double box-culvert under Fallon Road. An approximately 250-foot extension of the existing G3

culvert would be built as part of the proposed Project and would be connected to this double box-culvert at Fallon Road.

Stormwater runoff from the developed Project area has been considered in the approved Dublin Ranch Drainage Master Plan (DRDMP), latest revision April 2004. The DRDMP defines a system to convey anticipated post-development stormwater flows and accounts for the level of development in the approved 2002 Stage 1 Development Plan. As a part of the Project application an updated set of HEC-1 runoff calculations has been prepared (MacKay & Soms, 2005). This analysis includes evaluation of the stand-alone Fallon Village Project and also an evaluation of the Project as a part of the DRDMP. These analyses show that, due to changed watershed stormwater routing and modified timing of peak flows, there would be a slight increase in the total runoff volume from that projected in the DRDMP. However, this slight increase does not significantly effect the planned sizing of storm drainage systems and the HEC-1 runoff and system calculations confirm that adequate capacity is provided by the DRDMP storm drain system.

Table 4.4.8 shows the results of the HEC-1 runoff calculations described in the previous paragraph. Also shown is the total runoff result from previous calculations detailed in the comprehensive DRDMP, of which the Project area is a part. This indicates the recently calculated stormwater flows from the Project area will be in conformance with the DRDMP and within the designed capacity of the DRDMP storm drain system. *No supplemental impact* is anticipated due to increased runoff from the Project since it will not exceed the capacity of local drainage channels.

Table 4.4.8. Existing Conditions, Dublin Ranch Drainage Master Plan and Project

Storm Event	Peak Flow (cfs)		
	Existing Conditions	Dublin Ranch Drainage MP	Project
2-year	65	n/a	113
10-year / 15-year	294 ¹	384 ²	399 ²
100-year	556	684	702

Notes:

¹ denotes 10-year event results; ² denotes 15-year event results

Sources: Existing Conditions and Project, MacKay & Soms, April 2005.
Dublin Ranch Drainage Master Plan, April 2004.

Cumulative stormwater generation

As noted above, development of the Project would increase impervious surfaces, resulting in increased storm water runoff. Although local drainage channels have been planned and sized to accommodate the anticipated amount of increased runoff, increases in runoff could impact regional drainage facilities on a cumulative basis, as runoff from the proposed Project is added to runoff from other development projects in the regional drainage basin. Stormwater from the proposed Project and

surrounding areas flow off of the Project site and ultimately into the Arroyo De La Laguna, south of the I-580 Freeway.

Based on studies and reports commissioned by Zone 7, the estimated 100-year peak flow in the Arroyo De La Laguna is approximately 18,700-cfs. The Project area is estimated to produce an increase in post-versus-pre development 100-year runoff of approximately 146-cfs (refer to Table 4.4.8). Thus the increase in runoff from the Project area would comprise an approximate 0.8% increase in the overall 100-year flows in the Arroyo De La Laguna. This increase of 0.8% would be a small part of the larger cumulative runoff within the Arroyo De La Laguna watershed and would be insignificant in the context of hydromodification, velocity profile changes, and erosive potential of flows in the Arroyo De La Laguna. Zone 7 is currently working with the RWQCB and other Stakeholders on a planned solution to management of cumulative regional runoff and it's possible impacts to the Arroyo De La Laguna – the Storm Management Master Plan (SMMP), more commonly referred to as the Chain of Lakes project. The SMMP currently in design by Zone 7 is the recognized regional solution for cumulative hydromodification and flooding impacts in the lower reaches of the Tri-Valley watershed, such as the Arroyo De La Laguna. Funding for the SMMP project is already being provided for in the form of Zone 7 Water Agency's Special Drainage Area (SDA7-1) Program, which collects developer fees on a pro-rata share based on impervious area. Individual development projects within the Project area would be required pay the SDA7-1 fee as described above, thus contributing to the regional solution to cumulative impacts. There would therefore be *no supplemental impacts* with regard to cumulative drainage conditions.

Changes in non-point source water quality regulations

Provisions of the Alameda County NPDES permit, which in Dublin is administered by the City of Dublin, currently require development projects to implement appropriate source control and site design measures and to design and implement stormwater treatment measures to reduce the discharge of stormwater pollutants to the maximum extent practicable. The permit also requires that developments of one acre or more in size design and implement these treatment facilities. Further, the permit provides standards for the design and implementation of such facilities. Such stringent water quality standards were not in effect in either 1993, when the Eastern Dublin EIR was certified, or when the 2002 Supplemental EIR was certified.

Supplemental Program Impact SD-1 (changed non-point surface water quality standards). Runoff from the Project may not comply with the most recent surface water quality standards and, as a result, could add pollutants to nearby bodies of water (potentially significant supplemental impact).

The Project application includes a detailed draft plan, prepared by ENGEO, Inc. (February 28, 2005, on file in the Dublin Community Development Department), for compliance with current NPDES requirements throughout the Project area. The design of the proposed water quality facilities requires the capture of smaller, more frequent rainfall events, which contain the highest percentage of pollutants, rather than large infrequent runoff events. Runoff from these smaller "water quality" events are proposed to enter proposed infiltration/ water quality facilities. These infiltration facilities will consist of depressed open space areas set aside at the downstream portions of developed areas, wherein the runoff from the water

“quality events” described above will be treated. These open space areas will be overexcavated and backfilled with a specially designed mixture of select soil and sand and planted with specific landscape materials (natural grasses and others). Runoff will disperse across the surface of the treatment area and through infiltration and interaction with plant materials and microbes, will be treated before it enters a piped collection system at the bottom of the filter bed. Low flows are to be routed from the Project storm drains and be treated in the water quality facilities described above prior to release back into the storm drain system or to the preserved Eastern Drainage corridor. The proposed water quality facilities would function as permanent, structural, best management practices (BMPs) for reducing pollutant runoff from flows in the Project, and in the case of runoff conveyed in the Eastern Drainage Corridor, provide a degree of groundwater re-charge. During infiltration, the water would be cleansed of harmful pollutants and sediment introduced by urban runoff.

Both water quality source controls and hydrologic design considerations are means of improving receiving water quality post-development. The ENGEO report recommends source controls to keep these materials from washing into nearby creeks, and hydrologic design considerations to reduce the volume of runoff or trap and break down pollutants. The types of hydrologic design facilities proposed include bio-retention filterbeds, vegetated buffer and parking lot filter strips and street filter strips. Possible locations for water quality bioretention filter beds are shown in the draft ENGEO report and would be located in primarily Residential use areas. (February 28, 2005, on file in the Dublin Community Development Department) This same figure indicates that the non-residential (primarily commercial) properties between the freeway-fronting hills and I-580 will employ a variety of water quality features as selected on a parcel by parcel basis to accomplish these same goals, such as parking lot filter strips and street filter strips. An education program is also recommended to inform home and business owners of the need to keep oils, construction debris, landscape chemicals and paint products out of the storm drain system.

If the recommendations of the ENGEO report are not implemented there could be a *potentially significant supplemental impact* with regard to water quality.

Supplemental Mitigation Measure SM- SD-1 (changed surface water quality standards). The Stage 1 Development Plan shall required that the water quality source control and hydrologic design recommendations of the report prepared by ENGEO, Inc. (February 28, 2005) be implemented for all individual development projects within the Project area.

With implementation of these measures this impact will be reduced to a less than significant level.

Changes in non-point source water quality regulations (hydromodification)

The amount and rate of stormwater runoff from the Project area could exceed that allowed under the most recent water quality standards adopted by the Regional Water Quality Control Board. These standards were not in place when the 1993 Eastern Dublin EIR and 2002 Supplemental EIRs were certified.

Supplemental Program Impact SD-2 (changed non-point surface water quality hydromodification standards). The amount and rate of stormwater runoff from the Project may not comply with the most recent water quality hydromodification standards and, as a result, may not comply with current surface water quality standards (*potentially significant supplemental impact and mitigation required*).

Under the NPDES permit requirements hydrograph modification (hydromodification), or the potential impacts which might result from increased runoff volume after development, must be considered. Alameda County has developed a hydrograph modification protocol for all new developments that is contained in their amended NPDES permit (February, 2003). These guidelines call for management of increases in peak runoff flow and volume where such increased flow and/or volume can cause impacts to beneficial uses in downstream watercourses. Examples of impacts requiring mitigation are scour of creek beds, erosion of creek banks, and silt deposition. If these impacts are attributable to changes in the amount, velocity and timing of runoff, they should be mitigated by site design modifications.

On site the only natural watercourse being used to convey runoff in the post-development condition is the preserved "Eastern Drainage Corridor." Downstream runoff from the Project area would be conveyed by the man-made, concrete-lined G3 box-culverts and the lined Arroyo Mocho. The closest natural, downstream receiving water is the Arroyo De La Laguna, a major conveyance for the much larger Tri-Valley watershed, which is located more than a mile away. See *Cumulative stormwater generation* above for a discussion of regional drainage facilities.

The Project application includes a detailed draft plan, prepared by ENGE0, Inc. (February 28, 2005), making recommendations for addressing hydromodification impacts. The draft plan notes that, as the G3 channel and the Arroyo Mocho immediately downstream of the Project are manmade/ concrete lined conveyances, only the onsite Eastern Drainage Corridor need be addressed regarding possible hydromodification impacts. The report describes enhancements that are proposed to the Eastern Drainage Corridor to mitigate for potential hydromodification impacts such as erosion, scour and sedimentation. The report also notes that the open channel form of the Eastern Drainage Corridor would slow runoff velocities and serve to reduce any possible impacts to downstream facilities and distant natural receiving waters. Use of water quality features (see discussion under SM-SD-2 below), which would capture the most frequent critical channel-forming flows, would also slow runoff to the Eastern Drainage, to the piped underground drain system and to the downstream receiving waters, further reducing potential downstream impacts.

Use of the Eastern Drainage as a stormwater conveyance and implementation of the water quality features identified in the ENGE0 plan, and required per Supplemental Mitigation SM-SD-1, would ensure that there are no impacts due to Project imposed hydromodification. However, as noted above under Regulatory Environment, the RWQCB has not accepted Alameda County's draft program for dealing with hydromodification. With no final Alameda County program in place this could result in a *potentially significant supplemental impact*.

Adherence to the following measure would reduce this supplemental impact to a less-than-significant level.

Supplemental Mitigation Measure SM- SD-2 (changed surface water quality hydromodification standards). Development within the Project area shall comply with the hydromodification provisions of the Alameda County Clean Water Program as approved by the RWQCB and administered by the City of Dublin. If no Alameda County Clean Water Program permit has been adopted at the time individual development proposals are approved by the City the applicant may be required to submit hydrology and hydrologic analyses to identify specific increases in storm water runoff into downstream receiving waters. Such reports will be reviewed by both the City of Dublin and Zone 7 Water Agency. Development projects will also be required to pay the then-current Zone 7 Special Drainage Area fee (SDA7-1) in effect at the time of development.

Salt loading

The Project could contribute to salt loading of underground aquifers managed by Zone 7 due to use of recycled water for irrigation of Project landscaped areas.

Salt loading from development within the Project area to the main ground water basin would be caused mainly by the use of reclaimed water irrigation systems. Zone 7 has adopted, and is implementing, a Salt Management Plan designed to completely offset salt loading that would otherwise take place. The plan includes demineralizing shallow groundwater with high salt content and reinjecting it into the groundwater basin; the resulting salty brine is to be piped out of the basin through the LA VWMA disposal facility. (Zone 7, Salt Balance Annual Report, June 20, 2001.) Zone 7 has addressed the salt loading impacts to the main groundwater basin and the mitigations needed in a joint ACWD-DERWA study. Based on this study Zone 7 has included the construction of brine processing facilities as part of their Capital Improvement Program that is currently being funded by Zone 7 fees. The City will continue to work with Zone 7 and with the other agencies to resolve the problem. The funding for mitigations of salt loading will be paid for with increased water and sewer rates of Zones 7 and DSRSD. All development within the Project area will pay for mitigation of increased salt loading impacts through the payment of their water and sewer hook up fees and water rates. This complies with Eastern Dublin EIR MM 3.5 / 23.0, which required recycled water projects to be coordinated with any salt mitigation requirements of Zone 7.

Salt loading to the Main Basin from this Project development is considered by Zone 7 to be "minimal." This impact is more of a regional salt-water management problem, because it results from the accumulation of all existing and proposed irrigation system improvements of the entire region. As noted in the Environmental Setting section above, Zone 7 is implementing a regional demineralization program of which individual developments within the Project area would participate through payment of fees to Zone 7. Therefore, there would be *no supplemental impacts* with regard to Project contribution to the regional salt loading.

Supplemental Development-level impacts. Since storm drainage, flooding and water quality impacts analyzed at a Program level included all the proposed Project changes at a Development level, no supplemental Development level impacts related to storm drainage, flooding or water quality have been identified in the DSEIR. The Stage 2 Development Plan developer will be required to install appropriate infrastructure in compliance with previous mitigations measures, the DRDMP and the City's NPDES and BMP requirements.

4.6 SOILS, GEOLOGY AND SEISMICITY

INTRODUCTION

This supplement to the Eastern Dublin EIR examines whether the proposed Stage 1 or Stage 2 Development Plans and amendments to the Specific Plan policies with respect to grading have substantially changed any potential soils or geologic impacts since certification of the Eastern Dublin EIR. Soils, geologic and seismic conditions were analyzed in Chapter 3.6 of the Eastern Dublin EIR and reviewed in the Initial Study for the 2002 SEIR. As a result of the 2002 review, it was determined that soils, geologic and seismic conditions did not present any new potentially significant impacts when compared with the Eastern Dublin EIR and therefore not reassessed in detail in the 2002 SEIR. As a result of the revised development plan, a preliminary geotechnical report prepared in February, 2003 was updated to analyze site conditions, any additional environmental impacts and mitigation measures to the Eastern Dublin EIR.

ENVIRONMENTAL SETTING

Regional geologic, and seismic conditions

Regional geologic and seismic conditions are described on pages 3.6-1 and 3.6-2 of the Eastern Dublin EIR. As described in that document, the Pleasanton fault zone is located approximately 450 feet west of the Project area's southwestern corner and the area is subject to strong seismic shaking from earthquakes occurring along portions of the Concord, Calaveras, Greenville, Hayward, and San Andreas faults. There are no known active faults that traverse the Project area and the site is not located within a current state-designated (Alquist-Priolo Act) Earthquake Fault Zone as identified on page 3.6-2 of the Eastern Dublin EIR.

Surface ruptures are confined to a narrow zone bordering an active fault and the potential for primary ground rupture is considered low and not likely to occur on the site. Ground motion characteristics on the Project area are dependent on the characteristics of the generating fault, distance from the source, the magnitude of the seismic event and specific geologic conditions at the site. Peak bedrock accelerations of 0.6 g (force of gravity) could occur on the site from the maximum credible earthquake on the Calaveras fault, which is located 2.5 miles from the area. The total probability that one or more large earthquakes will occur in the San Francisco Bay region between 1990 and 2020 was estimated to be 67 percent.

It is anticipated in the event of an earthquake (based on review of probabilistic analyses by the WGEP, 1999) that the Project area will be subjected to strong seismic

ground shaking. The majority of the site consists of stiff soil and bedrock designated as soil Profile type Sc in the California Building Code (CBC). The southwestern portion of the site consists of stiff alluvial soils which the CBC designates as soil profile type SD. Chapter 16 of the CBC establishes seismic design parameters for Soil Profile Type Sc and Type SD. The site has a Seismic Zone design value of 4 and a Seismic Zone Factor design value of .40 pursuant to UBC seismic design parameters. These factors have not changed since the certification of the East Dublin EIR and SEIR. These factors have not changed in any substantial way since certification of the Eastern Dublin EIR.

Project site conditions

Project area topography, drainage, geologic structure, geologic units, and slope stability are described on pp. 3.6-3 through 3.6-6 of the Eastern Dublin EIR. Geologic conditions and soil types on the Project area are mapped on Eastern Dublin EIR Figures 3.6-C and 3.6-D. With the exception of some newly identified landslide locations, these factors have not substantially changed since certification of the Eastern Dublin EIR. A primary concern of assessing the potential changes in Project impacts is the issue of slope stability. The Eastern Dublin EIR noted that many of the Project area ridge crests are generally underlain by stable, competent material. However, extensive land sliding and gulying (erosion), as well as some soil creep, occur on the site.

The surface of the area is typically mantled with 3 to 4 feet of silty clay derived from the underlying materials of weak bedrock or alluvium containing a high proportion of fine-grained expansive clay. The gradational contact at the base of the desiccated surficial soil layer typically exhibits a zone of discontinuous slickensided shear planes interpreted by geotechnical engineers as the result of shrinking and swelling of the silty clay soils which is typical of highly expansive clay soils.

Figure 3.6-C of the Eastern Dublin EIR identifies the geologic units mapped on the Project area and includes undocumented areas of fill derived from previous roadway construction from quarry and ranching operations, landslides, colluvium, alluvium, and bedrock. These units are described in detail on page 3.6-5 of the Eastern Dublin EIR. Landslides documented in the Eastern Dublin EIR range from active to dormant and include debris slides and flows, mud flows and slump rotational slides. Land slides, predominantly occur in the northern half of the Project area, within the General Plan Amendment Extension area. Shallow earthflow/debrisflow (5'-15" thick) also exist on the south eastern portion of the site (refer to Geological Map, February 2003, Figure 3.6-1). A majority of the large debris slides are dormant and exhibit rounded, subdued topography. The majority of the shallow mud flows, debris slides and debris flows are active or have been active within the last few decades. An update to the geotechnical study (ENGEO Inc.) was prepared for the northerly portion of the Project area (the Stage 2 portion) in December, 2004. This update investigated subsurface conditions in selected deep-seated landslide areas through continuous sample borings. The landslides are defined by three categories and include: Shallow (5-15 feet deep); moderately deep earthflows and rotational slumps (15-30 feet deep); and deep-seated rotation slumps (30 to 60 feet deep).

Existing landslides have the potential to affect proposed development and require additional mitigation due to revised grading outside the area previously evaluated in the Eastern Dublin EIR. Mitigation Measures identified in the Eastern Dublin EIR remain applicable and are appropriate with some additional mitigation measures identified for the area impacted by the revised grading plans. These mitigation measures are consistent with the findings and analysis in the Eastern Dublin EIR and have not significantly changed other than applying mitigation measures to the revised area proposed for grading which was not contemplated in the Eastern Dublin EIR.

Regulatory framework

The EDSP did not depict development in the landslide-prone hilly northeastern portion of the Specific Plan area. The EDSP also contains policies restricting development in steep or geologically unstable slopes and requiring site-specific geotechnical evaluations as part of development review. It also includes policies designed to minimize the impact of grading on scenic vistas and to minimize the affects of soil erosion arising from development activities.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR identified potentially significant and unavoidable impacts associated with primary effects of seismic groundshaking (Impact 3.6/B; MM 3.6/1.0); potentially significant but mitigatable secondary effects of seismic groundshaking, including seismically induced settlement, landsliding, and compaction (Impact 3.6/C; MM 3.6/2.0-8.0), alterations of site landforms (Impact 3.6/D; MM 3.6/9-10), groundwater (Impacts 3.6/F and 3.6/G; MM 3.6/11-13), expansive soils (Impact 3.6/H; MM 3.6/14-16), natural slope stability (Impact 3.6/I; MM 3.6/17-19), cut-and-fill slope stability (Impact 3.6/J; MM 3.6/20-26), erosion and sedimentation (Impacts 3.6/K and L; MM 3.6/27-28).

The Initial Study for the 2002 Supplemental EIR focused out the topic of geology, soils and seismicity.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The currently proposed Project contains generally the same development areas as were assumed in the Eastern Dublin EIR and the 2002 EIR. The Project does however include proposed changes in grading policies which would allow increased grading outside the previously evaluated developed area, similar impacts due to an increase in the proposed urbanized area and changes associated with the use of Geological Hazard Abatement Districts. Given geotechnical characterization of the site, a review of the revised grading plans and to achieve compliance with grading policies to construct graded slopes without drainage terraces to maintain a natural appearance of graded slopes, additional application of appropriate geotechnical construction practices is required. Application of these practices is typical within the City of Dublin and necessary to reduce geotechnical hazards including landslides, compressible soils and expansive soils existing outside the previously evaluated development area.

Significance criteria. Implementation of the Project would be considered to have a significant geologic impact if, in addition to the impacts previously analyzed in the Eastern Dublin EIR, it were to:

- Expose people or structures to potential substantial adverse effects including risk of loss, injury, or death involving;
 - *rupture of a known earthquake fault
 - *strong seismic ground shaking
 - *seismic-related ground failure, including liquefaction
 - *landslides
- Result in substantial soil erosion or loss of topsoil.
- Be located in an unstable geologic formation, or cause the geology to become unstable, potentially resulting in landslides, lateral spreading, subsidence, liquefaction, or collapse.
- Be located on expansive soils.

Supplemental Program-level impacts. Potential supplemental soils and geotechnical impacts analyzed in this 2005 SEIR are based on the extent of grading activities in the Project area.

Soil hazards

The Project would alter the limits of the urbanized portion of the site identified in the existing Stage 1 PD approvals. Areas that are currently designed in the EDSP or General Plan for limited or no residential development would be developed for Low Density Residential. Remedial grading to correct geotechnical conditions such as landslides, compressible soils and expansive soils would extend beyond the limits of improvements and into open space areas. Soil and geotechnical conditions of these areas are generally similar to that of the currently designated urbanized area however, since the geotechnical conditions of these portions of the Project site have not been analyzed in previous EIRs, there could be a *potentially significant supplemental impact* with regard to soil hazards.

In addition, as noted in the Existing Conditions section, recent geotechnical reports for portions of the Project area have identified the presence of landslides, especially in the northern portion of the Project area.

Supplemental Program Impact GEO-1 (potential soil hazards due to alteration in the extent of Project grading). The proposed Stage 1 Development Plan show that Project grading would extend beyond that analyzed in the Eastern Dublin EIR. A number of new landslides have also been identified within the Project area. This could result in potentially significant supplemental impacts since geotechnical conditions of these areas have not been analyzed in the Eastern Dublin EIR (*potential supplemental impacts and mitigation required*).

Adherence to the following measure would reduce this supplemental impact to a level of less-than-significance.

Supplemental Mitigation Measure SM-GEO-1 (potential soil hazards due to alteration in the extent of Project grading). Prior to construction, design level geotechnical report(s) and corrective grading plan(s) depicting the locations and

depths of landslide repairs, keyways and subsurface drains is required. The corrective grading plans shall identify appropriate mitigation for graded slopes. In order to stabilize slopes where unstable geologic materials extend at beyond proposed development area, geotechnical corrective grading may extend beyond the limits of improvements and into open space areas. Grading in open space areas shall be limited to excavations that remove unstable soils and landslide debris and backfilling excavations with compacted, drained engineer fills. To provide stable construction slopes, the back slopes of excavated areas may extend up slope and beyond the limits of mapped slides. The corrective measures used will be typical and configured to conform at natural slope contours with materials and compaction at the approval of a geotechnical engineer. This may vary from original grade within repair envelope due to geotechnical and slope drainage considerations.

Supplemental Development-level impacts. For the proposed Stage 2 Development Plan, the Program-level analysis above found that grading required to construct the development would extend beyond that analyzed in the Eastern Dublin EIR. This could result in potentially significant supplemental impacts since geotechnical conditions of these areas were not analyzed in the Eastern Dublin EIR. Supplemental Mitigation Measure SM-GEO-1, above, requires a design level geotechnical report and corrective grading plan depicting the locations and depths of necessary landslide repairs, keyways and subsurface drains. This information for the Stage 2 Development Plan has been provided in a site-specific geotechnical report (ENGEO, December, 2004). All proposed grading would be below the City's elevation 770' development cap. As such, the imposition of the Program-level Supplemental Mitigation Measure on the Stage 2 Development Plan proposal would mitigate soils, geologic and seismic impacts to a less than significant level.

4.7 BIOLOGICAL RESOURCES

INTRODUCTION

This section provides information on the biological resources within the boundaries and in the vicinity of the Fallon Village Project (hereinafter "Project") area. Biological resources were analyzed in Chapter 3.7 of the 1993 Eastern Dublin EIR, a program EIR for the Eastern Dublin General Plan Amendment and Specific Plan area, and Chapter 3.3 of the 2002 East Dublin Properties Stage 1 Development Plan and Annexation Supplemental EIR (SEIR). The Project applicant has proposed land uses for the Project area different from those proposed in the Specific Plan, and the proposed land plan differs slightly from the Stage 1 Development Plan that was the subject of the 2002 SEIR, and thus the City of Dublin has determined that a SEIR is necessary. The purpose of this section is to supplement the 2002 SEIR, with respect to the proposed Project, and to update information regarding special-status plant and wildlife species, sensitive habitats, and any regulatory changes that may have occurred since certification of the 2002 SEIR.

The biological resources found on the Project site have been studied in depth by WRA, Inc., Zander Associates, Sycamore Associates LLC, H.T. Harvey & Associates,

and others (Condor Country Consulting 2002, 2003, ECS 2001, Helm Biological Consulting 2004, H.T. Harvey & Associates 1990b, Rana Resources 2001a-b, Sycamore Associates 2001a-d, 2002a-k, 2003a-b, Townsend and Sycamore Associates 2002a-c, WRA 2003a-b, 2004a-c, Zander Associates 1999, 2000). The results of these studies are summarized in, and many such studies were undertaken during the preparation of, the *Resource Management Plan for the East Dublin Properties* (hereinafter "RMP") (WRA and Zander Associates 2004). Although the studies conducted in preparation of the RMP did not identify any new special-status species or sensitive habitats that were not considered in the 2002 SEIR, these studies clarified considerably the distribution of special-status plant and wildlife species and sensitive habitats on the Fallon Village site. This section updates species information and regulatory circumstances (e.g., listing of the California tiger salamander [*Ambystoma californiense*], hereafter CTS, and proposal of Critical Habitat for the CTS, and vacated but re-proposed Critical Habitat for the California red-legged frog [*Rana aurora draytonii*], hereafter CRLF) since the certification of the 2002 SEIR and provides an analysis of impacts and mitigation measures specific to the Project.

The following section has been authored by WRA, Inc.

ENVIRONMENTAL SETTING

General project area characteristics

The project setting and a description of habitats in the Fallon Village Project area were provided in the 2002 SEIR. For the convenience of the reader, much of this information is repeated below, along with a brief description of the wildlife communities present within each habitat type. However, as habitat types and land uses in portions of the Project area have changed since 2002, the description of the Project area has been updated to reflect current conditions.

The Project area occurs within a regional transitional area with respect to topography, habitat, and land-use practices. Topographic relief generally decreases from north to south and, to a lesser extent, from east to west. Habitats adjacent to the Project area are, for the most part, contiguous with relatively undeveloped private property to the north and east on which cattle grazing occurs. To the east of the Project area, habitat is predominantly annual grasslands interspersed with small inclusions of riparian woodland. To the north and northeast, oak savannah, mixed woodlands, and chaparral increase with increases in elevation. Lands to the west are being developed for residential housing and a golf course (Dublin Ranch). Development (urban, industrial, and cultivation) is greatest in the south. Thus, the habitat of the Project area is influenced by adjacent agricultural and urban development.

The Project area is part of a larger region characterized by grassland habitat with patches of other habitat types intermixed. These other habitat types include riparian woodland, oak savanna, seasonal freshwater wetland, and alkali wetland. Stock ponds are also common in this landscape. The boundaries of this overall grassland landscape are defined by the foothills of Mount Diablo to the north and northeast, Highland Ridge and the Altamont Hills to the northeast and east, Interstate 580 to the south, and the existing developed portions of Dublin and San Ramon to the west. Development within this overall area has been occurring around its perimeter

with the greatest concentration along the southern and western sides in east Dublin, the Dougherty Valley area in Contra Costa County, and north Livermore.

The Project area itself is relatively flat in its southern portions, where fertile floodplain clay and clay loam soils of the Clear Lake-Sunnyvale association underlie level pastureland with occasional low-lying seasonal wetland areas. To the north, topography steepens to rolling hills, and soils transition to the Altamont/Diablo association of deep, well-drained clays of sedimentary origin. Runoff from these hills is carried by several small, unnamed creeks, which generally flow in a southerly direction to pass under Fallon Road. The flatter, southern portions of the site are drained by overland flow to the south. Soils are neutral to moderately alkaline throughout the site, with areas of concentrated salts occurring where water pools and evaporates. The elevation of the site varies from 910 feet at the northern end of the Project area to approximately 340 feet at the southern limits. Grazing of non-native grasslands is the predominant land use in the Project area.

Project area habitat types and locations

The Eastern Dublin EIR identified nine different habitats and showed intermittent streams as occurring in the subject area (see Figure 3.7-A of the 1993 EIR). The 2002 SEIR determined that eight of these habitats, plus one additional habitat type (seasonal wetlands), were known or assumed to occur within the Fallon Village Project area and provide habitat of varying quality for special-status species. One additional habitat type, seasonal wetlands, was not identified in the Eastern Dublin EIR but was identified in the 2002 SEIR. Intermittent streams are also present within the Project area. The seasonal wetland habitat and these intermittent streams also provide habitat for special-status species. Land use has changed in portions of the Project area since 2002, most notably due to the replacement of dryland farming in the northern part of the site with grazing. Current habitat types in the Project area were mapped in detail in the RMP and are shown in **Exhibit 4.7.1**.

A majority of the Project area consists of non-native grassland used for grazing; much of this land, primarily in the northern and eastern part of the site, was used for dry rotational cropland until recently. Several drainages within the Project area support intermittent streams, with a limited amount of central coast riparian scrub. The southern portion of the Project area supports ruderal fields and developed lands. Seasonal wetlands also are known to occur in some low-lying portions of the Project area. All of these specific habitat types are described below in descending order of dominance by acreage. The locations of these habitat types are shown in **Exhibit 4.7.1**.

Non-native Grassland, Grazed. The Project area includes approximately 910 acres of intensively grazed annual grassland, the dominant biotic habitat on the property and in the Dublin region (**Exhibit 4.7.1**). Characteristic plant species are introduced winter-annual pasture grasses including wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), foxtail barley (*Hordeum murinum* var. *leporinum*), and rattail fescue (*Vulpia myuros*). The diversity of grassland-associated forbs typically decreases with the intensity of grazing pressure, with light to moderately-grazed areas supporting greater relative cover of native annuals and perennials. In such areas, natives such as purple sanicle (*Sanicula bipinnatifida*),

Ithuriel's spear (*Triteleia laxa*), blue dicks (*Dichelostemma capitatum* ssp. *capitatum*), and California poppy (*Eschscholzia californica*) can form dense colonies in the early spring, while tarweeds (*Hemizonia* spp., *Holocarpha virgata*) and other late-blooming Composites dominate in the late summer through fall. In addition to these native forbs, small stands of native purple needlegrass (*Nasella pulchra*) occur on north-facing slopes in the northern portion of the Project area. Discrete patches of this habitat are difficult to differentiate from the surrounding matrix of non-native grasses, and there is currently no accepted "threshold level" of native species indicative of native grassland. Purple needlegrass was therefore not differentiated as a distinct habitat type.

Grasslands throughout the Project area are drained by broad, swale-like drainages that carry surface water only during heavy rain events, if at all. These areas lack a defined bed and bank and are vegetated entirely with upland species typical of non-native grassland. Because they are not floristically distinct and do not provide aquatic habitat, these features are included in grassland habitat on **Exhibit 4.7.1** and in acreage calculations. These areas were not claimed by the U. S. Army Corps of Engineers as jurisdictional waters due to the lack of a regular incised channel, which indicates "ordinary" flows. Other drainages on-site have well-defined channels and/or support wetland vegetation; these jurisdictional areas are described below as intermittent streams and freshwater marsh/seep habitats.

On low-lying areas in the southern portion of the site, facultative halophytes (salt-loving species) become a minor component of the non-native grassland community. These species, including salt grass (*Distichlis spicata*), alkali mallow (*Malva leprosa*), Mediterranean barley (*Hordeum marinum* var. *gussoneanum*), and salt-marsh sand-spurrey (*Spergularia maritima*) are concentrated in areas where mild to moderately alkaline, moisture-retentive clay soils pool water during the late winter and early spring. The special-status species Congdon's tarplant (*Hemizonia parryi* ssp. *congdonii*), as well as two occurrences of San Joaquin spearscale (*Atriplex joaquiniana*), are associated with these moist, alkaline soils within non-native grassland in the southwestern corner of the Project area. These areas are distinct from alkali grassland/meadow habitat, described below.

Many wildlife species use these annual grasslands for foraging and nesting. Reptiles expected to occur in this grassland habitat include the western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*). Amphibians such as the Pacific treefrog (*Pseudacris regilla*), western toad (*Bufo boreas*), and CRLF make little use of the dry upland grassland except during winter, when these species may forage in the swales or disperse across upland areas; the CTS aestivates in small mammal burrows within these grasslands. Birds known to breed in this habitat type include the western meadowlark (*Sturnella neglecta*) and burrowing owl (*Athene cunicularia*), and possibly the California horned lark (*Eremophila alpestris actia*), although the latter species has not been confirmed breeding on the site. Raptors including the red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), barn owl (*Tyto alba*), and golden eagle (*Aquila chrysaetos*), as well as the loggerhead shrike (*Lanius ludovicianus*), nest in adjacent areas and forage for mammals, birds and insects that reside in this grassland habitat. California ground squirrels (*Spermophilus beecheyi*) and Botta's pocket gophers (*Thomomys bottae*) are present

throughout this habitat. Other small mammals expected to occur here include the black-tailed hare (*Lepus californicus*), western harvest mouse (*Reithrodontomys megalotis*), and California vole (*Microtus californicus*). These small mammals provide an important prey base for raptors and mammalian predators such as the American badger (*Taxidea taxus*), red fox (*Vulpes vulpes*), coyote (*Canis latrans*), and gray fox (*Urocyon cinereoargenteus*).

Non-native Grassland, Ungrazed. This habitat type comprises approximately 195 acres, primarily in the east-central part of the Project area (the Croak parcel) but also on the Fallon Enterprises addition on the western side of the site (see **Exhibit 4.7.1**). Ungrazed grassland is typically less diverse than grasslands with light to moderate levels of grazing, which suppresses the dominance of robust non-native annual grasses and weeds. Ungrazed grassland in the Project area is characterized by dense thickets of black mustard (*Brassica nigra*) and yellow star thistle (*Centaurea solstitialis*) and tall stands of winter annual grasses. Most native annuals are outcompeted by this dense growth and plant diversity is limited to these introduced, fast-growing species.

Stands of landscape trees including red gum eucalyptus (*Eucalyptus camaldulensis*), blue gum eucalyptus (*E. globulus*), beefwood (*Casuarina cunninghamiana*), wattle (*Acacia* sp.), ornamental pine (*Pinus* sp.), tree-of-heaven (*Ailanthus altissima*), Fremont cottonwood (*Populus fremontii*), Peruvian peppertree (*Schinus molle*), and scattered red willow (*Salix laevigata*) occur within ungrazed grassland in the Project area.

Compared to ungrazed non-native grassland, the higher level of residual dry herbaceous vegetation in the ungrazed grassland provides additional cover for small mammals, reptiles, and birds and additional seed supply for foraging birds and mammals. However, this tall vegetation may limit the use of ungrazed grassland by ground squirrels, burrowing owls, and CTS. The planted trees on the Croak property provide roosting sites and hunting perches for raptors and American crows (*Corvus brachyrhynchos*) that forage in grazed and non-grazed grasslands. While the planted trees provide limited habitat value due to their largely non-native nature and limited extent, these trees provide cover and foraging habitat for some avian species. Raptors such as the red-tailed hawk, white-tailed kite (*Elanus leucurus*), American kestrel, and great horned owl (*Bubo virginianus*), as well as the loggerhead shrike, may nest in these trees. Seeds produced by the grasses and forbs provide food for migrating and wintering songbirds, such as American goldfinches (*Carduelis tristis*), golden-crowned sparrows, (*Zonotrichia atricapilla*), and white-crowned sparrows (*Z. leucophrys*).

As noted above for grazed non-native grasslands, the ungrazed grasslands on the Croak parcel are drained by broad, swale-like drainages that lack a defined bed and bank and are vegetated entirely with upland species typical of non-native grassland. Because they are not floristically distinct and do not provide aquatic habitat, these features are included in the ungrazed grassland habitat on **Exhibit 4.7.1** and in acreage calculations. These areas were not claimed by the U. S. Army Corps of Engineers as jurisdictional waters due the lack of a regular incised channel, which indicates "ordinary" flows.

Developed. This habitat type comprises approximately 36 acres in the Project area (**Exhibit 4.7.1**). Developed land occurs around residences, barns, and existing facilities. These areas are typically characterized by ruderal or horticultural plant cover with little or no native vegetation. Isolated stands of blue gum are typically found associated with developed sites throughout the Project area.

The wildlife most often associated with developed and landscaped areas are those that are most tolerant of periodic human disturbances, including several introduced species such as European starlings (*Sturnus vulgaris*), house sparrows (*Passer domesticus*), rock doves (*Columba livia*), house mice (*Mus musculus*), and Norway rats (*Rattus norvegicus*). Native species that are able to utilize these habitats include western fence lizards, American crows, American Robins (*Turdus migratorius*), Brewer's Blackbirds (*Euphagus cyanocephalus*), northern mockingbirds (*Mimus polyglottos*), mourning doves (*Zenaidura macroura*), house finches (*Carpodacus mexicanus*), and striped skunks (*Mephitis mephitis*). Barn Owls may roost and breed in farm buildings, foraging over adjacent habitats. Larger mammals that may occasionally forage and find refuge within the buildings on site include the Virginia opossum (*Didelphis virginianus*) and raccoon (*Procyon lotor*). Bats of several species could potentially roost within the structures.

Ruderal. Ruderal habitats represent approximately 11 acres in the southern part of the Project area (**Exhibit 4.7.1**). These highly-disturbed fields are continually subject to grading, scraping, or other human activities, and support dense stands of herbaceous, non-native forb species. Yellow star thistle, sweet fennel (*Foeniculum vulgare*), bristly ox-tongue (*Picris echioides*), wild radish, and stinkweed (*Dittrichia graveolens*) are the dominant species here, while annual grasses are less important. Native plant species are uncommon in these areas.

Most wildlife use of this habitat is expected to be by species most typical of developed areas. Reptile species expected here include the gopher snake and western fence lizard. The mammals found here are also limited by the proximity of the site to disturbance and include Botta's pocket gopher and California ground squirrel. Bird species likely to forage in this habitat include savannah sparrows (*Passerculus sandwichensis*), house finches, Brewer's blackbirds, and loggerhead shrike.

Seasonal Freshwater Marsh/Seep. This habitat type comprises approximately 5.2 acres in the Project area (**Exhibit 4.7.1**). Several distinct areas within drainages where groundwater is close to the surface and saturates the soil for part of the year support a hydrophytic association of Mexican rush (*Juncus mexicanus*), iris-leaved rush (*Juncus xiphioides*), water-plantain (*Alisma plantago-aquatica*), water cress (*Rorippa nasturtium-aquaticum*), and yerba mansa (*Anemopsis californica*). These wetlands typically occur within the streambed, but occasionally may extend to adjacent banks or, in several areas in the northern portion of the Project area, extend well outside the stream channel where seeps occur. This habitat type includes both areas that were considered USACE-jurisdictional wetlands and vegetated wetlands/drainage swales that may be regulated by the Regional Water Quality Control Board (RWQCB) as Waters of the State.

Vegetation composition and structure within most of these areas have been heavily impacted by grazing. In contrast, a level basin near the southern terminus of a broad seasonal creek within ungrazed grassland on the Croak property has a distinct plant community of creeping wildrye (*Leymus triticoides*) and sedge (*Carex* sp.), as well as several red willow and cottonwood trees. This area is in the vicinity of an old homestead and may never have been grazed.

Seasonal freshwater marsh is important to aquatic species in intermittent streams. CRLF, Pacific tree frogs, western toads, and garter snakes (*Thamnophis* sp.) use seasonal marsh/seep habitats for foraging and for dispersal. Areas with standing water within seasonal wetlands are sources of invertebrate prey for birds and bats and can support a number of aquatic invertebrate species such as dragonflies and damselflies.

Alkali Grassland/Meadow. This habitat type comprises approximately 5.0 acres in the Project area (**Exhibit 4.7.1**). These discrete habitat areas are termed “alkali grassland” in the 2002 SEIR, but because at least some of these areas have a distinctly different plant community from non-native grassland and receive more water from groundwater, some of these occurrences may be better termed alkali meadow (the RMP refers to these habitats as “alkali meadow and grassland”). In the vicinity of several small seeps and along the lower-gradient reaches of Project area drainages, concentrated salts form a powdery crust on the soil surface. This high alkalinity, combined with the hard, compacted nature of associated heavy clay soils, excludes most plant species, creating distinctly barren areas known as alkali scalds. In the Project area, scalds typically occur within a larger saline/alkaline community dominated by saltgrass, Italian ryegrass (*Lolium multiflorum*), and Mediterranean barley, with occasional colonies of rush (*Juncus mexicanus*, *J. xiphioides*). Two occurrences of San Joaquin spearscale are associated with this habitat in the northwestern portion of the Project area.

Wildlife use of these small areas of alkali grassland/meadow is expected to be similar to that of the surrounding grazed non-native grasslands. Because occurrences of alkali grassland/meadow in the Project area are primarily along streams or wetlands, amphibians may use these habitats for foraging and/or dispersal to some extent.

Seasonal Wetlands. Seasonal wetlands represent approximately 2.5 acres of the Project area (**Exhibit 4.7.1**). Small depressions within grazed grassland in the southern portions of the site pool water during the late winter and spring. The moisture-holding capacity of Clear Lake clay soils, coupled with soil compaction due to livestock grazing, creates patches of relatively impermeable soils which collect overland flow when the groundwater table is high. Soils within these seasonal pools are likely inundated or saturated for several weeks and support a preponderance of hydric plant species, including stipitate popcorn-flower (*Plagiobothrys stipitatus* var. *micranthus*), valley downingia (*Downingia pulchella*), semaphore grass (*Pleuropogon californicus*), common knotweed (*Polygonum arenastrum*), and Mediterranean barley. An artificial wetland on flooded fill along the northern boundary of the Branaugh

property is dominated by weedy hydrophytes including rabbitsfoot grass (*Polypogon monspeliensis*), swampgrass (*Crypsis schoenoides*), and bristly ox-tongue.

Due to their limited size, seasonal wetlands within the Project area are not expected to be heavily used by waterfowl or shorebirds, although species such as the Killdeer (*Charadrius vociferus*) and Common Snipe (*Gallinago gallinago*) may forage in these areas. Pacific treefrogs may breed in these seasonal wetlands, although due to the limited ponding duration the CTS and CRLF are not expected to use these habitats for breeding.

Ponds. Ponds comprise approximately 2.5 acres of the Project area (see **Exhibit 4.7.1**). In this document, the term “pond” refers to all areas of open-water, lentic or slow-moving lotic habitat, including stock ponds and in-stream pools; the application of the term “pond” herein is consistent with habitat mapping for the RMP. One stock pond occurs on the Fallon Enterprises parcel, a pond is located in a former quarry within the Anderson parcel, three artificial / ornamental ponds occur near the ranch house on the Jordan parcel, and numerous small, in-channel pools occur within intermittent streams on the Jordan parcel. Emergent aquatic vegetation, including narrow leaf cattail (*Typha angustifolia*) and tule (*Scirpus acutus* var. *occidentalis*), has colonized the periphery of some of these features; the proportion of open aquatic habitat to emergent vegetation varies widely with both seasonal and annual fluctuations in water level.

Amphibians and reptiles associated with intermittent streams occur in ponds in the Project area. However, because of longer periods of inundation, this habitat also supports species that depend on longer durations of ponding, such as the CTS or more perennial water sources such as the CRLF (and possibly the western pond turtle, *Emys marmorata*). In addition, black phoebe (*Sayornis nigricans*), northern rough-winged swallow (*Stelgidopteryx serripennis*), tree swallow (*Tachycineta bicolor*), and other bird species, as well as bats that forage for insects over water, likely forage over these ponds. Great blue heron (*Ardea herodias*), great egret (*Ardea alba*) and other waterbirds may also forage here. In addition, emergent vegetation may support breeding red-winged blackbird (*Agelaius phoeniceus*) and, in more extensive emergents around the quarry pond on the Anderson property, tricolored blackbird (*Agelaius tricolor*).

Intermittent Streams. This habitat type comprises approximately 0.8 acres in the Project area (**Exhibit 4.7.1**). Runoff from the Fallon Village site is carried by two major unnamed streams which originate on the Fallon Enterprises and Braddock & Logan properties and converge in the southwest corner of the Jordan property. Surface-water flows in these drainages are supplemented by groundwater, and a spring has been mapped by the USGS at the headwaters of the eastern drainage. In addition to these intermittent streams, other drainages on the site were delineated by Sycamore and Associates (2002a, 2002b). The morphology and plant community composition of these drainages vary greatly with slope, size of drainage basin, and the relative contribution of groundwater to flows. Those drainages that have pronounced incisions and support sporadic in-stream pools or wetland vegetation were considered to support “ordinary” flows and were verified as Waters of the U.S. by the USACE. As discussed above, shallow, swale-like drainages lacking

ordinary flows and vegetated entirely with upland species were not considered Waters of the U.S. and are included in the grassland habitat.

The 2002 SEIR estimated approximately 31,000 linear feet of intermittent streams in the Project area. However, much of the area considered to be intermittent stream in the 2002 SEIR was determined to be seasonal freshwater marsh/seep areas during the wetland delineations performed in the Project area (2002 SEIR, p. 3-3.3). The larger in-stream pools are described herein as "ponds" to distinguish these habitats from the intermittent streams, as was done for the habitat mapping in the RMP.

Although intermittent streams make water widely available to wildlife, their non-permanent nature limits use by most aquatic species during the dry season. Pooling water within the intermittent streams can support a number of aquatic invertebrate species such as dragonflies and damselflies. These invertebrates provide food for a number of amphibians including the Pacific treefrog, western toad, and CRLF, which in turn provide prey for a variety of reptilian, avian, and mammalian predators. CRLF use these intermittent streams as foraging habitat and dispersal corridors. The pools likely also provide a source of water for species using all the habitats on the site.

Central Coast Riparian Scrub. This habitat type comprises approximately 1.2 acres of the Project area (**Exhibit 4.7.1**). This habitat was referred to as arroyo willow riparian woodland in the 2002 SEIR, but herein we use the term central coast riparian scrub (which was also the term used in the RMP). This habitat type is characterized by a dense thicket of arroyo willow (*Salix lasiolepis*) along a narrow intermittent drainage that crosses lower Fallon Road (with a smaller patch on the north side of the quarry pond on the Anderson parcel). Associated with the 5 to 10 meter tall stand of arroyo willows is an open understory of ruderal herbs, predominantly poison hemlock. The understory of the arroyo willows northeast of Fallon Road has been heavily grazed.

Wildlife associated with adjacent grassland and seasonal wetland habitats will utilize the riparian scrub habitat. For example, reptiles and amphibian such as gopher snakes, rattlesnakes, western fence lizards, and kingsnakes (*Lampropeltis getula*) found in grasslands will use the riparian scrub. The riparian scrub provides habitat for some avian species for foraging, roosting and nesting. These include the chestnut-backed chickadee (*Poecile rufescens*), bushtit (*Psaltriparus minimus*), Nuttall's woodpecker (*Picoides nuttallii*), Bewick's wren (*Thryomanes bewickii*), California towhee (*Pipilo crissalis*), and song sparrow (*Melospiza melodia*). Although this habitat is degraded, some species of Neotropical migrants may use this habitat during migration, for example the ash-throated flycatcher (*Myiarchus cinerascens*), Pacific-slope flycatcher (*Empidonax difficilis*), warbling vireo (*Vireo gilvus*), Swainson's thrush (*Catharus ustulatus*), black-headed grosbeak (*Pheucticus melanocephalus*), house wren (*Troglodytes aedon*), orange-crowned warbler (*Vermivora celata*), and Wilson's warbler (*Wilsonia pusilla*). This habitat also provides shade or resting habitat for species like the black-tailed deer (*Odocoileus hemionus*) and daytime refugia for nocturnal mammals such as raccoons and opossums.

Special-status species and sensitive habitats

Numerous special-status species surveys, many conducted according to protocols specified by the U.S. Fish and Wildlife Service and California Department of Fish and Game, have been conducted in the Fallon Village Project area. The majority of these surveys were conducted during the preparation of, and were summarized in, the RMP.

In addition to reviewing the RMP, the specific technical studies on which the RMP's findings were based were reviewed, as well as reports of surveys conducted in adjacent areas (e.g., Dublin Ranch). These studies include:

- Branchiopod surveys (Condor Country Consulting 2002, 2003; Sycamore Associates 2002g, H.T. Harvey & Associates 1996b, 1997e, 1998b, 1999c, 2000c, Helm Biological Consulting 2004)
- Site assessments and focused surveys for the CRLF and CTS (Sycamore Associates 2001a-d, 2002h-i, 2003a-b); for the Jordan property (Rana Resources 2001a-b, WRA 2003a, 2004b) and for Dublin Ranch (H.T. Harvey & Associates 1993, 1996a, 1998a, 1999a, 2001a-b, 2003b, 2004a-b)
- General biotic assessments and constraints analyses (Zander Associates 1999, Sycamore Associates 2002a, WRA 2004c, H.T. Harvey & Associates 1999a,d)
- Botanical assessments (Sycamore Associates 2002b-c) and rare plant surveys (WRA 2004a, H.T. Harvey & Associates 1990b, 1998c, 1999a,e, 2000b)
- Wetland delineation and preliminary jurisdictional determination technical reports (Zander Associates 2000, Sycamore Associates 2002d-f, H.T. Harvey & Associates 1992a, 1999b, 2000g, 2003a)
- Habitat assessments for the Burrowing Owl (Sycamore Associates 2002j-k)
- Early evaluations (Townsend and Sycamore Associates 2002a-c, WRA 2003b) summary reports (H.T. Harvey & Associates 1991a, 1992b, 1997a,d), and surveys (H.T. Harvey & Associates 1991b, 1997b-c) for the San Joaquin kit fox
- Golden Eagle surveys and monitoring reports (H.T. Harvey & Associates 1990a, 2000d-e, 2002a, 2003c-d, 2004c)

A further literature review was conducted, including database searches for known occurrences of special-status species and habitats in the greater Dublin area. The following sources were reviewed to determine which special-status plant and wildlife species have been documented in the vicinity of the Project area:

- California Natural Diversity Database (CNDDDB) records (CDFG 2005) for the Livermore 7.5 minute USGS quadrangle and the eight surrounding USGS quadrangles
- U. S. Fish and Wildlife Service (USFWS) Quadrangle Species Lists (USFWS 2005) for the Livermore quadrangle
- CNPS Electronic Inventory records (CNPS 2005) for the Livermore 7.5 minute USGS quadrangle and the eight surrounding USGS quadrangles, as well as for CNPS List 4 species in Alameda County
- California Department of Fish and Game (CDFG) publication "California's Wildlife, Volumes I-III" (CDFG 1988, 1990a-b)
- CDFG publication "Amphibians and Reptile Species of Special Concern in California" (Jennings and Hayes 1994).

In addition, H.T. Harvey & Associates biologists conducted site visits on the Fallon Enterprises, Braddock & Logan, Branaugh, Righetti, and Croak parcels, and viewed other portions of the Project area from these five parcels and from public roads, to evaluate the habitat conditions present within the Project area and verify the findings of the RMP and its component technical studies with respect to existing site conditions and the potential for special-status species and /or sensitive habitats to occur on-site.

Based on an analysis of the above information, special-status plants and wildlife known to occur, or with the potential to occur, in the Fallon Village Project area are described below and summarized in Table 4.7.1. Approximate areas of special-status species occurrences are mapped on **Exhibit 4.7.2**.

Special-status Species: Botanical. The Eastern Dublin EIR (1993) evaluated the potential for occurrence of 12 special-status plant species in its study area: large-flowered fiddleneck (*Amsinckia grandiflora*), hispid bird's beak (*Cordylanthus mollis* ssp. *hispidus*), palmate-bracted bird's-beak, Hoover's cryptantha (*Cryptantha hooveri*), Mt. Diablo buckwheat (*Eriogonum truncatum*), diamond-petaled California poppy (*Eschscholzia rhombipetala*), stinkbells (*Fritillaria agrestis*), fragrant fritillary (*Fritillaria liliacea*), Great Valley gumplant (*Grindelia camporum* var. *parviflora*), Contra Costa goldfields (*Lasthenia conjugens*), Lobb's aquatic buttercup (*Ranunculus lobbii*), and caper-fruited tropidocarpum. Of those 12 species, the Great Valley gumplant is no longer listed as a California Native Plant Society (CNPS) rare plant species and is therefore not considered in this DSEIR.

The 2002 SEIR determined that 13 special-status plant species not addressed in the Eastern Dublin EIR may have some potential to occur within the Project area based on the presence of suitable habitat on-site and/or proximity to known occurrences in the area. These species included the San Joaquin spearscale, Congdon's tarplant, Livermore tarplant, big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), big tarweed (*Blepharizonia plumose* ssp. *plumosa*), showy madia (*Madia radiata*), rayless ragwort (*Senecio aphanactis*), hairless popcorn-flower (*Palgiobothrys glaber*), heartscale (*Atriplex cordulata*), crownscale (*Atriplex coronata* var. *coronata*), brittlescale (*Atriplex depressa*), and alkali milk-vetch (*Astragalus tener* var. *tener*). Another species, the saline clover (*Trifolium depauperatum* var. *hydrophilum*), was also evaluated for the purposes of this DSEIR for potential occurrence on the site because a population was recently observed in the vicinity of the Project area (CNDDDB 2005). Table 4.7.1 lists the special-status plant species that have at least some potential to occur within the Project area.

Focused surveys for special-status plants were conducted throughout the Project area by Sycamore and Associates from 1999-2001 (Sycamore and Associates 2002a, 2002b). These surveys were timed to coincide with the flowering periods of potential special-status plants, and otherwise conformed to the CDFG's *Guidelines of Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities* (CDFG 1997). Two special-status plants, San Joaquin spearscale and Congdon's tarplant, were located in the Project area. These species are described below.

San Joaquin sparscale (*Atriplex joaquiniana*). Federal Status: None; State Status: None; CNPS Status: List 1B. San Joaquin sparscale is an annual, gray-scaly, ascending plant in the goosefoot family (Chenopodiaceae). Like all *Atriplex* species, San Joaquin sparscale lacks petals, and flowers instead appear as dense clusters of fleshy, grey-green perianth parts in terminal inflorescences. San Joaquin sparscale occurs on moist alkaline soils within a range of habitats, including non-native annual grassland, alkali meadow and scald, alkali sink, and the cut banks of eroded vernal pools. This species flowers over a long period from April to October, depending on hydrological characteristics of the associated mesic habitat.

Large populations of San Joaquin sparscale occur in the vicinity of the Springtown Wetlands Preserve, near Livermore, where plants are most commonly associated with alkali heath (*Frankenia salina*), alkali weed (*Cressa truxillensis*), salt grass, and tarweeds. CDFG documents 69 populations/ occurrences of this species, nearly all of which were observed relatively recently and are presumed to be extant (CNDDDB 2005).

Five occurrences, totaling approximately 900 individuals, of San Joaquin sparscale were observed in the Project area in 2001. Three occurrences are located on the Fallon Enterprises parcel (two of which are associated with alkali meadow/ scald habitat), and two occurrences are located within non-native grassland underlain by alkaline clay soils on the Chen parcel.

Like all annual plants, San Joaquin sparscale weathers years of unfavorable conditions by remaining dormant in the seedbank, and population size typically fluctuates widely from year to year. At least one extant population of this species was not apparent until soil disturbance triggered germination (WRA 1999). Where plants occur in non-native grassland, regular disturbance that reduces cover of competing exotic species, such as grazing, mowing, and scraping, likely benefits San Joaquin sparscale.

Congdon's tarplant (*Hemizonia parryi* ssp. *congdonii*). Federal Status: None; State Status: None; CNPS Status: List 1B. Congdon's tarplant is a spiny, resinous annual herb in the sunflower family associated with moist, alkaline grasslands. Populations are frequently located within sumps or disturbed areas where water collects, and may be favored by moderate levels of disturbance that reduce the cover of non-native grasses and forbs. Unlike many of its community associates, this species matures in late summer and can flower into mid fall; tarweeds in general are among the latest-blooming wildflowers of this area. Congdon's tarplant can be differentiated from co-occurring species of tarweed by the lack of tack-shaped glands on the leaves and flower bracts and the structure of its chaff scales (dry bracts among individual flowers).

Known populations of Congdon's tarplant occur in Monterey, San Luis Obispo, and Santa Clara counties, where CNNDDB documents 62 occurrences. Large populations are known from the Project region; a population totaling nearly one million individuals occurs over a wide area of Alameda and Contra Costa counties, and two populations of over 250,000 individuals each occur in the Livermore area (CNDDDB 2005).

Within the Project area, five occurrences totaling over 8,000 individuals of Congdon's tarplant have been observed within low-lying grassland on the Chen, Anderson, and Jordan parcels.

Sensitive Plant Communities and Habitats. The CDFG ranks certain rare or threatened plant communities, such as wetlands, meadows, and riparian forest and scrub, as 'threatened' or 'very threatened'. These communities are tracked in the CNDDDB. Impacts to CDFG sensitive plant communities, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under the California Environmental Quality Act (California Code of Regulations: Title 14, Div. 6, Chap. 3, Appendix G). Furthermore, wetland and riparian habitats are also afforded protection under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFG, and/or the USFWS.

The 1993 Eastern Dublin EIR identified northern riparian forest, arroyo willow riparian woodland, and freshwater marsh as botanically sensitive habitats. The 2002 SEIR considered these habitats (with slight changes in nomenclature) and further identified intermittent streams, seasonal wetlands, and alkali grassland as botanically sensitive habitats. Subsequent studies have confirmed that several of the ponds (including stock ponds and in-stream pools) in the Fallon Village Project area support breeding by special-status amphibians, indicating their importance on the site; thus, for the purposes of this DSEIR, ponds are also considered a sensitive habitat type.

The terms used to refer to habitats in the Fallon Village Project area have varied between the 1993 EIR, 2002 SEIR, and RMP; thus, it is necessary to clarify the nomenclature and regulatory status of the sensitive habitats in the Fallon Village Project area for the purpose of this DSEIR to avoid confusion. Because accepted habitat classification systems have changed over time, and due to increasingly detailed site surveys (including a delineation of waters of the U.S., verified by the Corps in 2002) since the certification of the 2002 SEIR, some change in the terminology regarding botanically sensitive habitats (as compared to the 1993 EIR and 2002 SEIR) is appropriate. Hereinafter, the following terminology is used:

- *Central Coast Riparian Scrub* (1.2 acres) refers to all woody riparian vegetation in the Project area. This habitat is regulated by the CDFG under Sections 1600-1607 of the Fish and Game Code (Streambed Alteration Agreement), and by local and regional policies that may require significant development buffers;
- *Seasonal Wetland* (2.5 acres) refers to isolated ephemeral wetlands within low-lying grassland; these areas were not identified in the 1993 EIR, and are referred to as seasonal wetlands in the 2002 SEIR. Approximately 1.5 acres of this habitat are considered to be USACE jurisdictional. Remaining areas may be subject to RWQCB jurisdiction.

- *Intermittent Streams* (0.8 acres) refer to generally USACE jurisdictional Waters of the U.S., that occur in linear drainages. In the 2002 SEIR, the term “intermittent stream” was used to refer to all drainages in the Project area, regardless of the presence or absence of wetland vegetation and USACE jurisdictional status.
- *Seasonal Freshwater Marsh/Seep* (5.2 acres) includes areas within or adjacent to intermittent stream drainages that support a hydrophytic plant community. Such areas include both USACE-jurisdictional wetlands and vegetated areas in swales considered potential waters of the state. Contrary to the 2002 SEIR, lentic habitats that are predominantly unvegetated are not considered freshwater marshes in this DSEIR.
- *Alkali Grassland/Meadow* (5.0 acres) refers to discrete areas dominated by saltgrass and/or show evidence of salt accumulation (i.e., alkali scalding). These areas were referred to previously as alkali grassland (in the 2002 SEIR) and alkali meadow and grassland (in the RMP).
- *Ponds* (2.5 acres) include all areas of open-water, lentic or slow-moving lotic habitat, including stock ponds and in-stream pools. In the 2002 SEIR, ponds were included under the diverse heading “springs, seeps, and impoundments”.

No other botanically sensitive habitats occur in the Project area.

Special-status Species: Wildlife. The Eastern Dublin EIR (1993) evaluated 27 special-status wildlife species (see Table 4.7.1). Ten of these species no longer have state or federal special status, require habitats that are not present within the Project area, or have distributions that do not include the Project area. These species include American badger, Ricksecker’s water scavenger beetle (*Hydrochara rickseckeri*), curved-foot hygrotus diving beetle (*Hygrotus curviceps*), bay checkerspot butterfly (*Euphydryas editha bayensis*), Callippe silverspot butterfly (*Speyeria callippe*), Bridges’ coast range shoulderband (*Helminthoglypta nickliniana bridgesi*), San Francisco forktail damselfly (*Ischnura gemina*), Lum’s micro-blind harvestman (*Microcina lumi*), and California linderiella (*Linderiella occidentalis*). These species will not be addressed further in this Supplement.

The 2002 SEIR addressed eight additional special-status wildlife species with the potential to occur in the Project area as either resident, breeding, occasional visitors, migrant, or transient species.

In addition to the 27 special-status wildlife species addressed in the Eastern Dublin EIR and the eight additional species considered in the 2002 SEIR, another six special-status species were considered based on the recent literature review and site assessment conducted by H.T. Harvey & Associates. These species include the ferruginous hawk (*Buteo regalis*), white-tailed kite (*Elanus leucuru*), long-billed curlew (*Numenius americanus*), willow flycatcher (*Empidonax traillii*), California yellow warbler (*Dendroica petechia brewsteri*), and California mastiff bat (*Eumops perotis californicus*). Table 4.7.1 provides the current listing status, species description, and

potential for occurrence for 30 special-status wildlife species, including the 24 species addressed in the 1993 Eastern Dublin EIR and the 2002 SEIR that still retain special status. Of these species, 13 are known to occur on site, and another seven have some potential for occurrence on-site (though they would occur rarely and/or as occasional visitors). These species are discussed in greater detail below.

The Project area has been surveyed for special-status wildlife species (and for potential habitat for these species) by a number of consulting firms. Sycamore Associates conducted branchiopod surveys on the Fallon Enterprises and Braddock & Logan parcels, burrowing owl surveys on the Fallon Enterprises, Braddock & Logan, Anderson, Campbell, Branaugh, Croak, Chen and Righetti parcels (2002j-k), CRLF surveys on the Fallon Enterprises Braddock & Logan, Chen, Anderson, Righetti, Branaugh, Campbell, RBJ, Pleasanton Ranch and Croak parcels (2001a-c, 2002h, 2003a), CTS surveys on the Fallon Enterprises, Braddock & Logan, Chen, Anderson, Righetti, Branaugh, Campbell, RBJ, and Pleasanton Ranch parcels (2001a,d), botanical surveys on the Fallon Enterprises, Braddock & Logan, Croak, Chen, Anderson, Righetti, Branaugh, Campbell, RBJ and Pleasanton Ranch parcels (2002b-c), and wetland delineations on the Fallon Enterprises, Braddock & Logan, Chen, Anderson, Righetti, Branaugh, Campbell, RBJ, Pleasanton Ranch and Croak parcels (2002d-f). H.T. Harvey & Associates conducted CRLF habitat surveys on the Jordan parcel (1999b). WRA conducted rare plant surveys (2004a) and CTS surveys on the Jordan parcel (2003a) and performed an early evaluation for San Joaquin kit fox (2003b). Rana Resources conducted CRLF and CTS surveys on the Jordan Property (2001a-b), and Condor Country Consulting conducted brachiopod surveys on the Fallon Enterprises and Braddock & Logan parcels (Condor Country Consulting 2002, 2003). Zander Associates conducted a wetland delineation on the Jordan parcel (2000). Entomological Consulting Services conducted branchiopod surveys on the Fallon Enterprises and Braddock & Logan parcels (2001). Helm Biological Consulting conducted dry season brachiopod analysis on the Fallon Enterprises, Chen, Anderson, Righetti, and Branaugh parcels (HBC 2004). S.E. Townsend with Sycamore Associates performed early evaluations for San Joaquin kit fox for the Anderson, Campbell, Branaugh, Croak, Chen, Righetti, Braddock & Logan, and Fallon Enterprises parcels (2002a-c). The results of these surveys are discussed in more depth for specific species below.

Threatened and endangered wildlife species

Invertebrates. Special-status vernal pool branchiopods occur in ephemeral fresh water pools, primarily in the Central Valley and along the foothill ranges. In 1994, the USFWS listed three vernal pool invertebrate species as endangered – the vernal pool tadpole shrimp (*Lepidurus packardi*), conservancy fairy shrimp (*Branchinecta conservatio*), and longhorn fairy shrimp (*Branchinecta longiantenna*) -- and listed the vernal pool fairy shrimp (*Branchinecta lynchi*) as threatened (*Federal Register* 59[180]: 48136-48153). Of these four species, the longhorn fairy shrimp (*Branchinecta longiantenna*) and the vernal pool fairy shrimp (*Branchinecta lynchi*) have the most potential to occur in the vicinity of the Project area based on known range. Critical Habitat was designated on 6 August 2003 (68 *Federal Register* 46684), but the Fallon Village Project area is not within the Critical Habitat designation.

The longhorn fairy shrimp is a member of the aquatic crustacean order Anostraca and is endemic to the Central valley, eastern coastal foothills from Tehama to Riverside counties, and a limited number of sites in the Transverse Range and Santa Rosa Plateau of California (*Federal Register* 59[180]: 48136-48153). Its present distribution is restricted to vernal pools in four locales; the eastern central coast range from Contra Costa County south into San Luis Obispo County, Kellogg Creek Watershed in the Altamont Pass area, western and northern boundaries of Soda Lake on the Carrizo Plain, and Kesterson National Wildlife Refuge in the Central Valley (*Federal Register* 59[180]: 48136-48153).

The vernal pool fairy shrimp occurs in vernal pools within a geographic range extending from Shasta County south through the Central Valley into Tulare County, and along the central coast range from northern Solano County south into San Benito County (*Federal Register* 59[180]: 48136-48153). This species, however, occurs sporadically within local vernal pool complexes. The total vernal pool fairy shrimp is known from only 32 locations.

The conservancy fairy shrimp and the vernal pool tadpole shrimp are not known to occur within 10 miles of the Project area. Disjunct populations of the conservancy fairy shrimp have been observed at Vina Plains and south of Chico in Tehama County, Jepson Prairie in Solano County, Sacramento National Wildlife Refuge in Glenn County, on the San Luis NWR Complex, near Haystack Mountain, and just east of Merced in Merced County, and Lockwood Valley in Ventura County (*Federal Register* 59[180]: 48136-48153). The vernal pool tadpole shrimp is endemic to ephemeral fresh water vernal pools, primarily in the Central Valley, but its current distribution is restricted to vernal pool habitats in 18 populations within the valley. These populations occur from Shasta County south to the San Luis National Wildlife Refuge in Merced County, with a single vernal pool complex located on the San Francisco Bay National Wildlife Refuge in Alameda County (*Federal Register* 59[180]: 48136-48153).

Both the Eastern Dublin EIR and 2002 SEIR determined that the longhorn fairy shrimp and the vernal pool fairy shrimp could potentially occur in the Project area. Vernal pool fairy shrimp have been reported approximately 4, 5, and 11 miles east of the Project area. Longhorn fairy shrimp have been reported approximately seven and eight miles east of the Project area.

Extensive protocol-level surveys were conducted adjacent to the project site at Dublin Ranch between 1995 and 2000 (H. T. Harvey & Associates 1996b, 1997e, 1998b, 1999d, 2000c). In 2001, a habitat assessment survey for special-status invertebrates was conducted on the Fallon Enterprises and Braddock & Logan properties. This assessment concluded that these species are not likely to occur on the properties (Entomological Consulting Services 2001).

Since the 2002 SEIR, USFWS protocol-level, wet-season and dry-season surveys were conducted on all parcels where suitable habitat was considered to occur (Fallon Enterprises, Chen, Anderson, Righetti, and Branaugh properties) with the exception of the Jordan parcel (Condor Country Consulting 2002, 2003). Dry season samples were collected and analyzed following the USFWS protocol on these same parcels

and were negative for listed species (Helm Biological Consulting 2004). No suitable habitat was identified on the Braddock & Logan, Croak, EBJ, Pleasanton Ranch, and Campbell parcels (Condor Country Consulting 2002, 2003). The Jordan property assessment indicated no suitable vernal pool habitat-only drainages and perennial pools with predatory mosquito fish- and therefore no suitable habitat for special status invertebrates (WRA 2003).

California tiger salamander (*Ambystoma californiense*). The CTS's preferred breeding habitat includes temporary, ponded environments that contain water for a minimum of three to four months (e.g., vernal pools, ephemeral pools, or human-made ponds) surrounded by uplands that support small mammal burrows. The species will utilize permanent ponds provided that aquatic vertebrate predators are not present. Pools and ponds provide breeding and larval habitat, while small mammal burrows, such as ground squirrel and Botta's pocket gopher burrows, in the upland habitats support juvenile and adult CTS during the dry season. The CTS was only recently (August 2004) listed as threatened under the ESA; Critical Habitat has been proposed for this species, and all but the southern portion of the Project area is included in proposed Critical Habitat.

The Eastern Dublin EIR stated that no CTS had been observed within the Eastern Dublin Specific Plan area, but determined that impacts to the species from development within the Specific Plan area were potentially significant (IM 3.7/G). The 2002 SEIR indicated that the species had been observed on the East Dublin Properties and in adjacent areas, and reiterated that impacts to the species were potentially significant (Impact BIO-7).

CTS were first detected on the Dublin Ranch site in 1998 (H.T. Harvey & Associates 1998a) approximately 1,000 feet from the Project area's western boundary. In addition, an adult CTS was detected in the Project area during 2001 winter/spring surveys in the quarry pond on the Anderson property, and one adult was observed in a burrow on the Branaugh property (Sycamore Assoc. 2001d). During 2001 site visits to the Jordan, Fallon Enterprises, and Braddock & Logan parcels, no CTS larvae or adults were observed, but potentially suitable breeding ponds, suitable dispersal (intermittent drainages), and upland aestivation habitat (ground squirrel burrows) were observed (Rana Resources 2001b, Sycamore Associates 2001d.). Based on the known occurrence on the Anderson and Branaugh properties, and the available habitat, the 2002 SEIR considered CTS to occur in suitable habitat in the Project area, i.e., in ponds and adjacent drainages and uplands.

Since the 2002 SEIR, additional focused surveys have detected adult and larva CTS in several additional locations. CTS were detected on the Fallon Enterprises, Braddock & Logan, Branaugh, Anderson, and Righetti during nocturnal surveys conducted by Sycamore Associates (2002i, 2003b). Two adult CTS were also detected on Croak Road between the Anderson and Chen parcels. The Chen, Campbell, EBJ, and Pleasanton Ranch parcels were included in the survey area, but no CTS or suitable aquatic habitat for this species was identified on these parcels. WRA conducted focused surveys on the Jordan parcel in 2004 and detected CTS larvae in one pond and two adults between drainages containing ponds (WRA 2004b).

To date, CTS larvae have been observed in the quarry pond on the Anderson parcel, in two of several ponds on the Jordan parcel, and in the stock pond on the Fallon Enterprises parcel (Condor Country Consulting 2002, Sycamore Associates 2002i, 2003b, WRA 2004b). The Jordan parcel ponds have been surveyed with negative results, though CTS may breed in them in some years (Rana Resources 2001b, WRA 2004b). Site reconnaissance by H.T. Harvey & Associates during the winter of 2004-2005 indicated the presence of two additional potential breeding pools on the Fallon Enterprises parcel; spring larval surveys for CTS were conducted with negative results (H.T. Harvey & Associates, 2005). H.T. Harvey & Associates' observations in February 2005 also indicated that pond 10 (a pool located along drainage C3 at the Fallon Enterprises/Jordan parcel boundary), and a small pool along drainage C2 at the southern border of the Fallon Enterprises parcel, are not expected to pond water long enough, or deep enough, to support successful breeding by CTS. These pools had been determined to provide potential CTS breeding habitat by Sycamore Associates (2001a), although surveys of these pools by Sycamore Associates in 2001 did not indicate the presence of breeding CTS.

CTS breeding in the Project area aestivate in upland areas surrounding the ponds, and adult or juvenile CTS have been observed in terrestrial areas on the Braddock & Logan, Fallon Enterprises, Jordan, Branaugh, Anderson and Righetti parcels, and on Croak Road between the Anderson and Chen parcels. Ample small mammal burrows are likely present in all upland habitat except for the developed habitat in the Project area, and no insurmountable barriers to dispersal among the parcels in the Fallon Village Project area are present around any of the known or potential breeding ponds on the site. Therefore, suitable aestivation habitat for CTS can be presumed to be present in any undeveloped area close enough to a breeding pond to have a reasonable likelihood of supporting aestivating CTS. The Campbell parcel was previously determined to lack suitable aestivation habitat (Sycamore Associates 2003b); however, there are ground squirrel burrows in the ruderal habitat areas that would suffice for CTS aestivation. Likewise, the Croak parcel was also determined to lack suitable aestivation habitat for the CTS (Sycamore 2002i, 2003b) due to the tall vegetation and limited habitat quality for ground squirrels. However, while tall vegetation can inhibit movement by CTS, the existing vegetation on the Croak parcel is not so dense as to prevent access by CTS, and is variable or patchy so CTS can maneuver around less accessible areas. Also, small mammal burrows are expected to be present, even if patchy, on the Croak parcel. Thus, this parcel is considered to provide suitable CTS aestivation habitat in this DSEIR.

Studying the species elsewhere, Trenham et al. (2001) observed a high probability of adults dispersing between pools up to 670 m apart but did not observe dispersal longer than 700 meters (m). In a yet to be published paper (Trenham and Shaffer in review) that Trenham presented at The Western Section of the Wildlife Society (TWS) Meetings, January 2005, they estimated that 50, 90, and 95% of adults were within 150, 490, 620 m of the study pond, respectively, and that 95% of juveniles were within 630 m of the pond, with none found at 800 m. Though these two studies did not present a maximum dispersal distance, and were based on a limited sample, they represent the best available data concerning CTS dispersal distances. Given that Trenham et al. (2001) found that adults dispersed between pools up to 670 m apart, this DSEIR assumes that any undeveloped habitat within 670 m (i.e., 2200 feet) of a

breeding pond represents CTS aestivation habitat in the absence of a barrier. **Exhibit 4.7.3** depicts the locations of known or potential CTS breeding ponds and CTS aestivation habitat in the Project area.

California red-legged frog (*Rana aurora draytonii*). The CRLF is strongly associated with riparian habitats in California and northern Baja California. CRLF prefer deep, quiet pools (more than one meter deep) in creeks, rivers, or lakes below 1,370 meters in elevation. Habitat associations include fresh emergent or dense riparian vegetation, especially willows adjacent to shorelines. CRLF can survive in seasonal bodies of water that are dry for short periods if a permanent water body or dense vegetation stands are nearby. These frogs also forage in riparian or grassland habitats adjacent to suitable aquatic habitat. During wet periods (especially in the winter and early spring months), CRLF can move long distances between aquatic habitats, often over upland habitats such as roads, open fields, and croplands. Such movement over upland areas is best documented in mesic coastal areas but occurs to some extent at drier sites, such as the Dublin area, as well.

The Eastern Dublin EIR identified known locations of CRLF within the Specific Plan area and determined that impacts to the CRLF from development were potentially significant (IM 3.7/F). Likewise, the 2002 SEIR listed known occurrences of the species within the East Dublin Properties and determined that impacts to the species were potentially significant (Impact BIO-5). Since certification of the Eastern Dublin EIR, the CRLF has been federally listed as Threatened under the ESA. Critical habitat was designated for the CRLF on March 13, 2001 (*Federal Register* 66, 14626-14674), but was rescinded in November 2002; critical habitat was then re-proposed on 13 April 2004 (*Federal Register* 69, 19619-19642) but has not yet been re-designated. The Project area is included within the proposed critical habitat area.

The 2002 SEIR documented additional surveys conducted between 1993 and 2000 that detected CRLF in several locations in the Eastern Dublin planning area and adjacent to the Project area. Within the Project area, CRLF had been reported in the unnamed drainage adjacent to Fallon Road along the Chen parcel. They had also been reported breeding upstream in the same drainage approximately 600 feet east of Fallon Road. In 2001, Sycamore Associates conducted a site assessment for CRLF on the Fallon Enterprises and Braddock & Logan parcels (2001a). Four adult CRLF were observed on the Fallon Enterprises parcel and one adult was observed on the Braddock & Logan parcel. The 2002 SEIR considered these properties to contain suitable CRLF breeding habitat in certain aquatic features, and suitable dispersal habitat and upland refugia (Sycamore Associates 2001a). In 2001, a site assessment and a focused survey for CRLF breeding were performed on the Chen, Anderson, Righetti, Branaugh and Campbell properties. No CRLF were detected, nor was any evidence of CRLF breeding (i.e., egg masses or larvae) observed. Nevertheless, the quarry pond on the Anderson property was considered to provide suitable breeding habitat, and suitable dispersal and upland aestivation habitats were considered present in isolated wetland areas and uplands adjacent to aquatic features (Sycamore Associates 2001b-c).

Since the 2002 SEIR, additional surveys for CRLF were conducted and CRLF were observed during reconnaissance-level site assessments. Rana Resources (2001a) and

WRA (2004c) conducted surveys on the Jordan property, detected breeding in an in-channel pond, and identified potential breeding habitat in an additional seven areas. Sycamore Associates (2002a,h, 2003a) conducted site assessments on the remaining parcels and observed CRLF on the Fallon Enterprises and Braddock & Logan parcels and CRLF habitat on the remaining parcels.

Specific locations of CRLF, especially along linear aquatic habitats, may vary from year to year, and season to season, as habitat quality and availability fluctuate. In the Project area, known or potential breeding habitat for CRLF occurs in the stock pond on the Fallon Enterprises parcel, in a number of ponds and in-stream pools on the Jordan parcel, and in the quarry pond on the Anderson parcel. Pond 10, a pool located along drainage C3 at the Fallon Enterprises/Jordan parcel boundary, was considered potential breeding habitat by WRA (2003a), but H.T. Harvey & Associates' observations of this area in February 2005, made from the Fallon Enterprises parcel, indicate that this shallow pool is no longer expected to pond water long enough, or deep enough, to support successful breeding by CRLF.

Essential aquatic habitat for CRLF consists of breeding habitat and perennial aquatic habitat used by frogs during the dry season. Most activities, including foraging, occur within these aquatic habitats and "upland associated habitat" within 100m of essential aquatic habitat (Bulger et al 2003). Most foraging away from the ponds is expected to occur along persistent stream drainages connected to breeding ponds or other essential aquatic habitat, and within perennial pools within drainages. Dispersal between essential aquatic habitats will occur in drainages or over upland habitats.

During surveys on the parcels comprising the Project area, CRLF were observed in drainages (away from potential breeding ponds) at the top of drainage C1 on the Braddock & Logan parcel, at the top of drainage C2 and at two points along drainage C3 on the Fallon Enterprises parcel, and at a number of locations along drainages C1 and C3 on the Jordan parcel. These records confirm that CRLF use these intermittent drainages for foraging and/or dispersal.

Overland dispersal among drainages also occurs. The occurrence of CRLF in upland areas farther from drainages on the Jordan parcel and in the central part of the Anderson parcel indicates overland movement. Given their ability to disperse long distances, the dispersion of known or potential breeding ponds, and the potential habitat for CRLF in Doolan Canyon to the east of the site, dispersing CRLF could occur virtually anywhere on the site. Primary dispersal habitat in the Project area is located between on-site ponds, and between on-site and off-site aquatic habitat areas to the north and east. **Exhibit 4.7.3** depicts the location of known or potential aquatic breeding habitat, associated upland habitat within 100 meters of essential aquatic habitat, and upland foraging/dispersal habitat between essential aquatic habitat areas (both on- and off-site).

Alameda Whipsnake (*Masticophis lateralis euryxanthus*). The Alameda whipsnake is a slender, fast moving, diurnal snake, restricted to parts of the inner Coast Range in western and central Contra Costa and Alameda counties. The primary habitat of this species consists of scrub and/or chaparral interspersed with grassland, oak savanna,

oak-bay woodland, and riparian zones. Included within are rock outcrops for retreat and potential prey items. Alameda whipsnakes commonly occur on east, south, southeast, and southwest facing slopes with open or a partially open canopy. This snake is highly mobile with a home range of up to 8.7 ha. (*Federal Register* 65, 12155-12181). Within their home range, whipsnakes will repeatedly utilize one or more core areas of scrub and/or rock outcrops to actively hunt prey, breed, lay eggs, and hibernate. The primary prey of the Alameda whipsnake is the western fence lizard, but the diet may also include alligator lizards, skinks, frogs, other snakes, small rodents, and small birds.

The Eastern Dublin EIR identified impacts to Alameda whipsnake as less than significant due to the lack of suitable habitat (IM 3.7/E). Since certification of the Eastern Dublin EIR, the Alameda whipsnake has been Federally listed as Threatened under the ESA. The species has been listed as Threatened under the California Endangered Species Act since 1971. In October 2000, the USFWS designated critical habitat for this species; however, it was then vacated 9 May 2003. Several observations north of the Eastern Dublin area were reported between 1972 and 1999. The 2002 SEIR determined that appropriate habitat does not occur in Eastern Dublin, including the Project area. Based on the lack of suitable habitat, this species is not expected to occur within the Project area, and impacts to this species were considered less than significant in both the Eastern Dublin EIR (IM3.7/E) and the 2002 SEIR.

Peregrine Falcon (*Falco peregrinus anatum*). The Peregrine Falcon nests on ledges on steep cliffs and, to a lesser extent, on large bridge spans and tall buildings. In California, this species nests along the entire coastline, the northern Coast and Cascade Ranges and the Sierra Nevada. During winter and periods of migrations, Peregrine Falcons can be found throughout the state.

The American Peregrine Falcon was listed as Endangered by the USFWS in 1970 and by the State of California in 1971. Intensive efforts to recover Peregrine Falcon populations were initiated and the USFWS removed the American Peregrine Falcon from the Endangered species list in 1999, though the State of California still lists the species as Endangered. Peregrine Falcons may forage on the Project area during winter or migration, but is not expected to nest on the site or occur frequently. Impacts to this species were considered less than significant in both the Eastern Dublin EIR (IM3.7/E) and the 2002 SEIR.

Bald Eagle (*Haliaeetus leucocephalus*). Most of the annual food requirements of Bald Eagles are derived from or are obtained around aquatic habitats. The type of food consumed is typically proportional to its availability and most often consists of fish, water birds, and small to medium sized mammals. Because of this species' diet, nesting territories are usually found near water.

The bald eagle was reclassified from federally Endangered to Threatened in 1995. It remains state-listed as Endangered. The Bald Eagle also is protected under the federal Bald Eagle Protection Act. Bald eagles nest approximately 12 miles southeast of the Project area at Lake Del Valle. This species is not expected to breed in the Project area due to the lack of proximity to a large body of water, and it is expected

to occur rarely, if at all, as a non-breeding forager. While considered in the Eastern Dublin EIR and the 2002 SEIR, the Project area does not provide suitable habitat for and the Project will not impact the Bald Eagle. Impacts to this species were considered less than significant in both the Eastern Dublin EIR (IM3.7/E) and the 2002 SEIR.

San Joaquin Kit Fox (*Vulpus macrotis mutica*). San Joaquin kit foxes inhabit grasslands and scrublands in portions of California. The species' range currently includes much of the San Joaquin Valley and adjacent foothills, and interior valleys in San Luis Obispo, Monterey, and San Benito Counties, as well as the hills east of Livermore, where rare. Loss of habitat from urban, agricultural, and industrial development are the principal factors in the decline of the San Joaquin kit fox. The species was listed as endangered by the USFWS in 1967 and by the State of California in 1971. Critical habitat has not been designated for the species. The Eastern Dublin EIR identified impacts to the kit fox as potentially significant (IM 3.7/D).

The 2002 SEIR cited a number of surveys for kit fox conducted in the Eastern Dublin area (H.T. Harvey & Associates 1997a-c) and the adjacent North Livermore Valley (H.T. Harvey & Associates 1997c-d). None of these surveys detected kit fox with the exception of a single kit fox detected on two separate nights during spotlight surveys in Contra Costa County on Morgan Territory Road approximately 5.5 miles northeast of the Project area. Despite more intense efforts to detect kit fox in the Eastern Dublin and North Livermore Valley areas since 1997, none have been detected. Based on negative results within the Eastern Dublin area and the surrounding areas, kit fox appear to be absent from the Eastern Dublin area (H.T. Harvey & Associates 1997d). The 2002 SEIR determined that although the potential for occurrence is low, the Project area does support habitat that could be considered suitable for kit fox and considered impacts to individuals of the species potentially significant as identified in the Eastern Dublin EIR and the 2002 SEIR (p. 3.3-17) (Impact BIO-4).

Since the 2002 SEIR, Early Evaluations for San Joaquin kit fox following the USFWS protocol (USFWS 1999) were conducted for the Braddock & Logan, Fallon Enterprises, Anderson, Campbell, Croak, Branaugh, Chen and Righetti parcels (Townsend & Sycamore Associates 2002 a-c); these evaluations are sufficient to cover the Pleasanton Ranch and EBJ parcels as well. The conclusion of these Early Evaluations is that while there is marginally or potentially suitable habitat for the kit fox, the Project area is outside the geographic range of the species. Sites (Righetti, Fallon Enterprises, Braddock & Logan, Anderson and Chen) considered to have potential dens, based only on suitable size, were monitored to the extent that tracking media and remote cameras were used to detect any kit fox use, with negative results (Townsend & Sycamore Associates 2002 a-c). The consistent conclusion is that the Project area is outside of the current geographical range of the species.

California species of special concern and other special-status wildlife species

Western Pond Turtle (*Emys marmorata*). The western pond turtle is a medium-sized, brown or olive-colored aquatic turtle found west of the Sacramento-San Joaquin

Delta and south to northern Baja, except in desert areas. The pond turtle is normally found in and along riparian areas, although gravid females have been reported up to a mile away from water in search of appropriate nest sites. The preferred habitat for these turtles includes ponds or slow-moving water with numerous basking sites (logs, rocks, etc.), food sources (plants, aquatic invertebrates, and carrion), and few predators (raccoons, introduced fishes, and bullfrogs). In addition to being a California Species of Special Concern, as identified in the Eastern Dublin EIR, this species is also protected under California Fish and Game Code Section 5050.

The Eastern Dublin EIR cited known occurrences of the western pond turtle from Cottonwood Creek east of the Fallon Village Project area, and identified impacts to the western pond turtle as potentially significant (IM 3.7/H). Three occurrences of western pond turtle were reported within five miles of the Project area, at distances of two, four and five miles away. Neither the 2002 SEIR nor the technical studies prepared for the Project area cited records from Fallon Village. Suitable habitat is present within and around the permanent ponds on the site (i.e., on the Jordan parcel), and the western pond turtle has the potential to occur within the Project area. However, the probability of occurrence is low given the lack of sightings from the site.

California Horned Lizard (*Phrynosoma coronatum frontale*). This lizard, a state species of Special Concern, occupies loose sandy loam and alkaline soils in a variety of habitats including chaparral, grasslands, saltbush scrub, coastal scrub, and clearings in riparian woodlands. California horned lizards eat primarily insects such as ants and beetles. The species once inhabited much of the Central Valley but has disappeared from much of its former range. This population decline is attributed primarily to conversion of land for agricultural purposes. The human introduction of non-native Argentine ants, which are inedible to horned lizards and tend to displace native carpenter ants, is another factor in the horned lizards' decline.

The Eastern Dublin EIR identified impacts to the California horned lizard as insignificant due to this species' extensive distribution (IM 3.7/R). The 2002 SEIR documented California horned lizards approximately 11 and 12 miles south and approximately 13 miles east of the Project area. The 2002 SEIR also noted that the horned lizard had been listed as a fully protected species under the California Fish and Game Code, however, this section of Title 14 has since been repealed and the species is no longer considered a protected reptile species. The 2002 SEIR concluded that while marginal habitat for the lizard probably occurs on portions of the Project area, the California horned lizard is unlikely to occur within the Project area based on the marginal quality of on-site habitat and the lack of contiguity with occupied habitat off-site. This species is considered absent from the Project area.

Northern Harrier (*Circus cyaneus*). The Northern Harrier is commonly found in open grasslands, agricultural areas, and marshes. Nests are built on the ground in areas where long grasses or marsh plants provide cover and protection. Harriers hunt for a variety of prey, including rodents, birds, frogs, reptiles, and insects by flying low and slow in a traversing manner utilizing both sight and sound to detect prey items.

The Eastern Dublin EIR noted that the Northern Harrier was a common forager in the Specific Plan area during the nonbreeding season but that nesting habitat quality was limited by the short nature of the vegetation in most fields; however, the EIR considered impacts to foraging habitat potentially significant (IM 3.7/O). The 2002 SEIR identified marginally suitable nesting habitat in the grassland portions of the Project area. The only potential breeding habitat is in the non-grazed non-native grassland on the Croak parcel; this habitat is marginal for breeding, and it is likely that this species occurs in the Fallon Village Project area only as a nonbreeding forager.

Burrowing Owl (*Athene cunicularia hypugea*). The Burrowing Owl is a small, terrestrial owl of open country. Burrowing Owls favor flat, open grassland or gentle slopes and sparse shrubland ecosystems. These owls prefer annual and perennial grasslands, typically with sparse, or nonexistent, tree or shrub canopies. In California, Burrowing Owls are found in close association with California ground squirrels. Ground squirrels provide nesting and refuge burrows, and maintain areas of short vegetation height, which provide foraging habitat and allow for visual detection of avian predators by Burrowing Owls. In the absence of ground squirrel populations, habitats soon become unsuitable for occupancy by owls. Burrowing Owls are semi-colonial nesters, and group size is one of the most significant factors contributing to site constancy by breeding Burrowing Owls. The nesting season, as recognized by the California Department of Fish and Game, runs from February 1 through August 31. In addition to being a California Species of Special Concern, as indicated in the Eastern Dublin EIR, this species is protected by Fish and Game Code Section 3503.5.

The Eastern Dublin EIR noted that Burrowing Owls were present in the Specific Plan area and identified impacts to the burrowing owl as potentially significant (IM 3.7/M). The 2002 SEIR documented the observation of burrowing owl individuals and sign within the East Dublin Properties and considered impacts to Burrowing Owls potentially significant (Impact BIO-10).

Technical studies conducted within the Fallon Village Project area, and observations by H.T. Harvey & Associates, have documented Burrowing Owls on the Croak, Chen, Fallon Enterprises, and Braddock & Logan parcels (Sycamore Associates 2002j-k) (see Exhibit 3.3, Property Ownership). Potential foraging habitat is present in grassland, wetlands, and ruderal habitats throughout the Project area, and all but the Campbell parcel provide at least potential nesting habitat.

Short-eared Owl (*Asio flammeus*). Short-eared Owls occur in open habitats such as grasslands, wet meadows, and marshes. Although they may forage in a variety of open habitats providing small mammalian prey, they require tall herbaceous vegetation for nesting. Short-eared owls are very rare breeders anywhere in central California.

The Eastern Dublin EIR identified impacts to the short-eared owl as insignificant due to the lack of appropriate habitat (IM 3.7/Q). The 2002 SEIR identified marginally suitable foraging and nesting habitat in the grassland portion of the Project area. However, this species has not been observed on the site, and though it may occur as

an uncommon to rare forager during migration and winter, there is a very low probability of breeding in the Project area.

Cooper's Hawk (*Accipiter cooperii*). The Cooper's Hawk is a medium-sized accipiter. This species can prey upon medium-sized birds (e.g., jays, doves, and quail) and occasionally takes small mammals and reptiles. The Cooper's Hawk prefers landscapes where wooded areas occur in patches and groves which facilitates the ambush hunting tactics employed by this species. Breeding pairs in California prefer nest sites within dense stands of live oak woodland or riparian areas and prey heavily on young birds during the nesting season.

The Eastern Dublin EIR identified impacts to the Cooper's hawk as potentially significant (IM 3.7/P). The 2002 SEIR documented Cooper's hawk observations within Eastern Dublin but determined that no suitable nesting habitat occurs within the Project area. It is likely that the Project area is used only as a foraging area during the non-breeding season (SEIR, p. 3.3-8).

Sharp-shinned Hawk (*Accipiter striatus*). The Sharp-shinned Hawk is commonly found in dense woodland or riparian habitats bordering open areas. Sharp-shinned Hawks typically pursue small birds in semi-open country, at the edges of open woodlands, in clearings, along hedgerows, shorelines, or along passerine migration corridors. Raptors are federally protected under the Migratory Bird Treaty Act and under California Department of Fish and Game Code Section 3503.5. The Eastern Dublin EIR identified impacts to the Sharp-shinned Hawk as potentially significant (IM 3.7/P). The 2002 SEIR determined that suitable winter foraging habitat may occur in the Project area but that suitable breeding habitat is not present. Although this species is expected to forage on the site regularly during the non-breeding season, it is not expected to nest there (EIR, p 3.3-9).

Ferruginous Hawk (*Buteo regalis*). Ferruginous Hawks winter in open habitats throughout central and southern California and occur widely in non-native grasslands and other open habitats within this region. The Ferruginous Hawk is a California Species of Special Concern, and is protected under the federal Migratory Bird Treaty Act and Fish and Game Code Section 3503.5. The Ferruginous Hawk is a rare migrant and winter visitor in the Project area, but the Project area is outside the breeding range of this species.

Golden Eagle (*Aquila chrysaetos*). The Golden Eagle is a relatively common permanent resident in the Dublin area, using tall, sturdy trees for nesting and foraging widely over grassland habitats, primarily on small mammals. These birds are federally protected under the Migratory Bird Treaty Act and under California Department of Fish and Game Code Section 3503.5, and under the federal Bald Eagle Protection Act.

A pair of Golden Eagles has successfully nested northwest of the Project area at least since 1990 (H.T. Harvey & Associates (2000d, 2002a, 2004c). Documented primary foraging areas for this pair are north and east of the Project area (H.T. Harvey & Associates 2002d), and the adjacent Dublin Ranch project has established a conservation area adjacent to the Project area that includes this nesting pair of eagles

and considerable foraging habitat. In addition, these eagles forage over the Fallon Village Project area (especially the northern portion) as well. The Eastern Dublin EIR identified a significant impact to the nesting site of this pair (IM 3.7/J), potentially significant Project and cumulative impacts to foraging habitat (IM 3.7/K), and a potentially significant impact due to electrocutions (IM 3.7/L). The 2002 SEIR determined that elimination of foraging habitat on the East Dublin Properties was a potentially significant impact (Impact BIO-9).

The larger eucalyptus trees in the Fallon Village Project area are potentially suitable for use as nesting sites by Golden Eagle. However, it is unlikely that a pair would nest on the site if the nesting territory on Dublin Ranch is occupied (given the close proximity of these areas), and Golden Eagles currently use the Project area only for foraging.

Merlin (*Falco columbarius*). The Merlin is a small falcon that breeds in wooded areas of the Pacific Northwest, Canada and Alaska. Although it does not nest in California, the species winters in a variety of habitats throughout the state from October through March. It preys almost exclusively on small birds. Raptors are federally protected under the Migratory Bird Treaty Act and under California Department of Fish and Game Code Section 3503.5. The 2002 SEIR considered Merlins to be occasional visitors, migrants, or transients, and they are expected to occur infrequently (and only as non-breeding foragers) in the Project area (SEIR p. 3.3-9).

Prairie Falcon (*Falco mexicanus*). This large falcon is found in grasslands, deserts, and other open habitats in western North America. Sheltered cliffs are required for nesting. Raptors are federally protected under the Migratory Bird Treaty Act (MBTA) and under California Department of Fish and Game Code Section 3503.5. The Eastern Dublin EIR identified impacts to the Prairie Falcon as potentially significant (IM 3.7/O). The 2002 SEIR documented that Prairie Falcons had been found to nest several miles north of Eastern Dublin, on Mt. Diablo and near Brushy Peak. The SEIR concluded that no suitable nesting habitat occurs in the Eastern Dublin area, but that most of the area is high quality potential foraging habitat. H.T. Harvey & Associates biologists have observed Prairie Falcons foraging on the Project area during winter (SEIR p. 3.3-9).

Long-billed Curlew (*Numenius americanus*). The Long-billed Curlew, a state Species of Special Concern, forages in aquatic habitats (such as mudflats, salt marshes, and wet fields) in central California but does not nest in the region. This species may forage occasionally on grazed grasslands in the Fallon Village Project area, but is expected to occur infrequently.

California Yellow Warbler (*Dendroica petechia brewsteri*). The California Yellow Warbler, a state Species of Special Concern, nests in riparian habitats throughout much of California. Although this species nests in high-quality, extensive willow and cottonwood-dominated riparian habitat in the Dublin area, such habitat is absent from the Fallon Village Project area due to the low quality of the central coast riparian scrub on the site. Yellow Warblers (consisting primarily of other subspecies) are expected to occur in the Project area commonly during migration, but are not expected to nest there.

Loggerhead Shrike (*Lanius ludovicianus*). The Loggerhead Shrike is a USFWS and CDFG Species of Special Concern that nests in trees and shrubs surrounded by open habitats, and forages in grasslands, ruderal habitats, and other areas with short vegetation. Shrikes feed on a variety of small prey including arthropods, mammals, amphibians, reptiles and birds. In California, the species does not migrate and is resident year-round. Declines in numbers have been noted across a broad geographical range in the United States. The 2002 SEIR considered impacts to this species potentially significant (SEIR p. 3.3-4).

Loggerhead shrikes have been observed on numerous occasions on and adjacent to the Project area. Suitable breeding habitat for this species occurs within the Project area in the central coast riparian scrub habitat and in trees and shrubs elsewhere in the area, and suitable foraging habitat is present throughout.

California Horned Lark (*Eremophila alpestris actia*). This CDFG Species of Special Concern breeds in open grasslands throughout the San Joaquin Valley and adjacent foothills and along the central and southern California coast. It is a ground-nesting species that prefers short, sparsely vegetated areas with some bare ground. The 2002 SEIR considered impacts to this species potentially significant. This species has been observed in short grasslands in the Project area (WRA 2004); this habitat type provides suitable breeding habitat, although breeding has not been confirmed in the Project area.

Tricolored Blackbird (*Agelaius tricolor*). Tricolored Blackbirds are a USFWS and CDFG Species of Special Concern and are found almost exclusively in the Central Valley, and central and southern coastal areas of California. The Tricolored Blackbird is highly colonial in its nesting habits and forms dense breeding colonies of up to tens of thousands of pairs. This species typically nests primarily in tall, dense, stands of cattails or tules, but also nests in blackberry, wild rose bushes and tall herbs. Nesting colonies are typically located near standing or flowing freshwater. Tricolored Blackbirds occur in large, often multi-species, flocks during the non-breeding period and range more widely than during the reproductive season.

The Eastern Dublin EIR identified impacts to the tricolored blackbird as potentially significant (IM 3.7/I). The 2002 SEIR reported a tricolored blackbird breeding colony on the Anderson parcel. Although nesting colonies of this species are not consistent in their use of nesting sites and may not return to the same location, the quarry pond still represents potentially suitable breeding habitat for this species. WRA observed potential breeding habitat at stock pond five on the Jordan Property in 2003.

Pallid Bat (*Antrozous pallidus*). The pallid bat is a California Species of Special Concern that prefers arid, low elevation regions. Pallid bats generally roost in crevices in trees, rock outcrops, or buildings, and forage on crickets, grasshoppers, June beetles, ground beetles, and sometimes scorpions. This species obtains and feeds on its prey primarily on the ground.

The 2002 SEIR indicated that this species could potentially occur on the East Dublin Properties and identified impacts to bat roosts as potentially significant. (SEIR p. 3.3-24 and 25). Within the Project area, barns and other structures with appropriate roosting sites, and possibly crevices within loose tree bark, may supply roosting habitat. There have been no surveys for this species in the Project area, and this species has not been observed within the Project area; however, based on the availability of suitable roosting habitat, pallid bats could potentially roost and/or forage within the Project area.

California Mastiff Bat (*Eumops perotis californicus*). California mastiff bats are a USFWS and CDFG Species of Special Concern and are the largest of all of North America species of bats. This species can forage at 600 to 700 meters above ground level and may forage for up to 7 hours and 15 miles from its roost. Mastiff bats roost primarily in cliffs or high buildings where there is a minimum of 3 meters of vertical drop at the entrance to roosts. They are found in central and southern coastal California, the San Joaquin Valley, the southern half of the Sierra foothills, and throughout desert regions. This species may utilize very tall cliffs, bridges, or buildings as night roosts, day roosts or maternity roosts. While the California mastiff bat may forage in the Project area from roosts many miles from the site, no roosting habitat (e.g., cliffs, very tall buildings) is available in the Project area, and there is a low probability of occurrence by this species on the site.

Townsend's Big-eared Bat (*Corynorhinus townsendii townsendii*). Townsend's big-eared bat, a California Species of Special Concern, occurs throughout much of California. Inhabiting mesic habitats, it will roost in colonies in caves, mines, tunnels, and buildings. This species forages along habitat edges, gleaning insects from bushes and trees. Once abundant throughout California, the Townsend's big-eared bat has decreased in numbers due to sensitivity to human disturbance of roosting sites. Maternity colonies of the species have been extirpated from the Dublin area, and there are no recent records within approximately 10 miles of the Project site, with the nearest known occurrence being in Sunol Regional Park. This species has a low potential to occur in the Project area.

Yuma Myotis (*Myotis yumanensis*). Yuma myotis, a USFWS Species of Special Concern, is found everywhere in California except the Mojave and Colorado Desert Regions. This species typically feeds on small insects over water sources. Diverse roosting structures are used, including buildings, mines, caves or crevices. Within the 1,120 acre Project area, habitat for this species includes all trees and old buildings. There have been no surveys for this species in the Project area; however, based on the available suitable roosting habitat, Yuma myotis have a high potential to occur within the Project area.

White-tailed Kite (*Elanus caeruleus*) (referred to as black-shouldered kite in the Eastern Dublin EIR). This species prefers habitats with low ground cover and variable tree growth. Kites nest in trees or shrubs surrounded by extensive open areas used for foraging. Kites prey primarily on small rodents (especially the California vole), but also feed on birds, insects, reptiles, and amphibians. While not specifically described, impacts to the white-tailed kite were evaluated as a protected raptor in the Eastern Dublin EIR (IM 3.7/O) and the 2002 SEIR (SEIR p. 3.3-10).

Raptors are federally protected under the Migratory Bird Treaty Act and under California Department of Fish and Game Code Section 3503.5. White-tailed kite are also fully protected under Fish and Game Code Section 3511. White-tailed kites forage in grasslands throughout the Fallon Village Project area, and are expected to nest in scattered trees within the Project area.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR included a comprehensive assessment of habitat and wildlife resources in the EIR planning area. The EIR identified potential impacts related to the general effects of potential development in Eastern Dublin, including direct habitat loss, indirect habitat loss due to vegetation removal for construction and development activities, and loss or degradation of sensitive habitat (IM 3.7/ A, B, and C). The Eastern Dublin EIR also identified potential impacts related to wildlife species such as the San Joaquin kit fox, CRLF, CTS, and others (IM 3.7/D – S). Raptor electrocutions associated with proposed high-voltage power lines were addressed in depth in the 1993 Eastern Dublin EIR (IM 3.7/L), and included a number of mitigation measures (MM 3.7/26.0a-d). Mitigation measures were adopted to, among other things, prepare resource management plans, avoid development in sensitive areas, and revegetate disturbed areas (generally MM 3.7/1.0 – 28.0). All mitigation measures adopted upon approval of the Eastern Dublin EIR continue to apply to the proposed Fallon Village Project.

Even with mitigation, the City concluded that the cumulative loss or degradation of botanically sensitive habitat was significant and unavoidable (IM 3.7/C). Upon approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Considerations for this significant unavoidable impact (Resolution No. 53-93).

The Eastern Dublin EIR analyzed cumulative impacts on biological resources within the portions of Alameda and Contra Costa Counties in the general vicinity of the Specific Plan area. At that time, Contra Costa County had an Urban Limit Line that functioned as a growth boundary. That Urban Limit Line placed all of the Dougherty and Tassajara valleys inside the growth boundary (i.e., allowing development of those areas), and placed lands to the east of Tassajara Valley and north of the County line outside the growth boundary. Alameda County had no comparable growth boundaries; instead, planning for the Alameda County portions of this region was performed by the cities of Dublin and Livermore.

The Eastern Dublin EIR identified three significant cumulative biological impacts. These are listed below:

1. Habitat loss on the Project site will contribute to the ongoing loss of wildlife habitat in the Tri-Valley region (IM 3.7/ A).
2. The Project will contribute to the continued loss and deterioration of botanically sensitive habitat, particularly riparian habitat (IM 3.7/C).
3. The Project will contribute to the cumulative loss of foraging habitat for golden eagle and other raptors (IM 3.7/ K).

2002 Supplemental EIR

The 2002 SEIR determined that species and habitats not previously considered or analyzed in the Eastern Dublin EIR could occur in the Project area. Furthermore, designation of critical habitat for the CRLF and changes in regulatory standards for this and other species since the certification of the Eastern Dublin EIR were thought to create new potentially significant impacts. To address these issues, the 2002 SEIR described a number of impacts and mitigation measures to supplement those in the 1993 Eastern Dublin EIR.

Additional supplemental impacts and mitigation measures for the current Project, due to changes in the Project area, layout, and impacts and changes in regulatory standards since 2002, as well as clarifications regarding several previously identified mitigation measures, are described below.

The 2002 SEIR was a program-level EIR, and relatively few technical studies to identify the type, abundance, and distribution of biological resources in the Project area in detail had been conducted prior to the certification of that SEIR. Since the certification of the 2002 SEIR, subsequent information (e.g., the results of studies conducted for the Resource Management Plan) has refined understanding of the distribution and abundance of the biological resources in the Project area. However, for most of these resources (and their corresponding impacts and mitigation measures described in the 2002 SEIR), no new circumstances (e.g., substantial increases in effects previously identified as significant or changes in regulatory standards) have arisen since 2002 that would require supplemental analysis in this DSEIR. All mitigation measures adopted upon approval of the 2002 SEIR continue to apply to the proposed Fallon Village Project. The section below details the mitigation measures for which no new circumstances have arisen since 2002, although additional detail regarding the distribution of biological resources (and thus additional detail regarding the extent of impacts) is provided.

Between the 1993 EIR and the 2002 SEIR, land use and development policies for the overall cumulative impact area changed. Contra Costa County revised its Urban Limit Line, moving it to the west and thereby placing all of the Tassajara Valley outside of the Urban Limit Line. Consequently, the Tassajara Valley is no longer considered to be available for urban development. Also, Alameda County adopted an Urban Growth Boundary in 2000 through passage of Measure D. As discussed in the Initial Study for the 2002 SEIR, Measure D does not limit development within cities (2002 SEIR Appendix A, pp. 45-46). The Project area has since been annexed to the City of Dublin, as anticipated in the 2002 SEIR. The Urban Growth Boundary also placed large portions of North Livermore outside of the growth boundary. Those areas are within the City of Livermore's planning area and for the purposes of cumulative impact analysis in the 2002 SEIR were still considered to be available for urban development.

As a result of these changes in land use policies and rules, the amount of land within the overall area described above which is available for development decreased from 1993 to 2002, primarily as a result of the change in the Contra Costa Urban Limit Line in the Tassajara Valley region. As a result, cumulative impacts on biological resources, while still considered cumulatively significant by the 2002 SEIR, were less

than when analyzed in the 1993 EIR. No changes have occurred since 2002 that would change the nature of the assessment of cumulative impacts from the Fallon Village Project that was done in the 2002 SEIR

Resource Management Plan (RMP)

Mitigation measure SM-BIO-1 in the 2002 SEIR required preparation of a Resource Management Plan (RMP). The purpose of the RMP was to address biological resource impacts of future development in a coordinated manner across the entire 1,120 acre Project area, rather than on a parcel-by-parcel basis as development plans for individual parcels are prepared over time. The RMP was completed in 2004.

Substantial additional biological studies were performed in the Project area after the 2002 SEIR was completed. As a result, the RMP was able to analyze the distribution of biological resources, and thus the potential for impacts, in greater detail and more comprehensively than was possible in the 2002 SEIR. The RMP considered the rare and sensitive species and biological communities in the Project area, discussed and mapped the distribution of these resources on each parcel, and analyzed potential direct, indirect, and cumulative impacts to these resources consistent with the standards identified by the Eastern Dublin EIR and the 2002 SEIR.

The primary product of the RMP was a comprehensive and detailed set of recommended guidelines for avoiding and minimizing impacts, and for mitigating unavoidable impacts, consistent with the following requirements and principles:

1. The biological resource mitigation measures in the Eastern Dublin EIR and the 2002 SEIR.
2. All applicable local, state and federal regulatory requirements.
3. Local resource protection policies (e.g., Stream Restoration Program, Grazing Management Plan).
4. To the greatest extent feasible, and consistent with applicable mitigation measures and regulatory requirements, avoidance of impacts to sensitive biological resources, and preservation and management of such resources on-site (i.e., within the Project area).
5. To the extent impacts to sensitive biological resources cannot be avoided, off-site mitigation of those impacts consistent with the applicable mitigation measures.
6. Permanent protection and management of sensitive biological resources which are preserved either through avoidance or mitigation, and the means to accomplish this protection and management.
7. Principles of regular monitoring and adaptive management.
8. Assured funding for such preservation, management, and monitoring.

The RMP does not establish mandatory requirements; rather, it provides recommended approaches which can be changed over time as new information is developed.

The RMP identified, described, and mapped a set of recommendations concerning those areas within the Project area which should either be developed, or conserved.

The recommended Conservation Area consists of three proposed management zones:

1. An aquatic and buffer zone, consisting of potential or known breeding ponds for CRLF and CTS, as well as areas within 300 feet of these ponds. Aquatic and buffer zone management areas were identified on much of the Jordan parcel (extending slightly onto the Chen property), and around a pond in the north-central part of the Fallon Enterprises parcel.
2. A corridor zone, which extends along drainage C1 in the north-central part of the site from the aquatic and buffer zone on the Jordan parcel northeast then north through corners of the Fallon Enterprises and Croak parcels and through most of the western edge of the Braddock & Logan parcel. The RMP proposes that this zone vary in width from 150 feet to 600 feet, with an average width of 400 feet. The corridor design is intended to be flexible enough to allow for larger buffers in more sensitive areas (e.g., around large seeps) while allowing for narrower buffers in more ephemeral portions of the drainage.
3. A grassland management zone, consisting of the upland area in the northernmost part of the Project area (primarily above the 770-foot elevation contour) on the Fallon Enterprises and Braddock & Logan parcels, and the Scenic Viewshed area along the northern portions of the Chen and Anderson parcels, and a sliver of the Croak parcel.

The RMP also presented recommended management guidelines for each of these three management areas, and for the proposed development area.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The Project proposes a similar type and density of proposed development that was analyzed in the Eastern Dublin EIR and 2002 SEIR. However, changes have been made to the Project area (i.e., the addition of a ±13-acre parcel formerly considered part of Dublin Ranch to the west) and the Project design (e.g., preservation of one broad conservation corridor rather than two narrower corridors in the northern part of the site) as compared to the Project analyzed in the 2002 SEIR. Furthermore, the identification of a sensitive habitat (ponds) that was not identified as such in the 2002 SEIR, and changes in regulatory standards since 2002 (e.g., listing of and proposal of critical habitat for the CTS and vacation and re-proposal of critical habitat for the CRLF), necessitate additional analysis of supplemental Project impacts.

The mitigation measures established in the Eastern Dublin EIR, the 2002 SEIR and this document fulfill the City's obligations under CEQA with respect to biological resources. However, the City recognizes that development activity within the Project area may require one or more permits from a variety of state and federal resources agencies. Development project proponents within the Project area will be responsible for obtaining all such necessary permits. Those permits may impose mitigation requirements which are different from and/or greater than the mitigation measures established in the Eastern Dublin EIR, the 2002 SEIR, and this document.

Significance Criteria. The Project's impacts to biological resources would be considered significant if the Project results in the actions or outcomes listed below. These significance criteria are based on the *CEQA Guidelines'* (CCR Title 14, Div. 6, Ch. 3) recommended tools for determining the potential for significant environmental effects, including the model Initial Study checklist (Appendix G of the Guidelines) and CEQA's mandatory findings of significance (Guidelines sec. 15065), consistent with CEQA Guidelines Section 15162. The proposed Project would have a significant supplemental impact on biological resources if the following impacts have the potential to occur but were not analyzed in the 2002 SEIR, or are substantially more severe than analyzed in the 2002 SEIR:

- Substantially degrade the quality of the environment;
- Substantially reduce the habitat of a fish or wildlife species;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Substantially reduce the number or restrict the range of an endangered, rare or threatened species;
- Eliminate important examples of the major periods of California history or prehistory;
- Have a substantial adverse effect, either directly or indirectly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Regulatory Setting. Biological resources are regulated by the following:

Federal Endangered Species Act. The federal Endangered Species Act (FESA) protects listed wildlife species from harm or "take" which is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that directly results in death or injury to a listed wildlife species. An activity can be defined as "take" even if it is unintentional or accidental. Listed plant

species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under FESA if they occur on federal lands or if the project requires a federal action, such as a Section 404 fill permit.

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over federally listed threatened and endangered species under the FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under the FESA, but may become listed in the near future and are often included in their review of a project.

Critical Habitat. Critical habitat is a term within the Federal Endangered Species Act. It is defined as an area occupied by a species listed as threatened or endangered within which are found physical or geographical features essential to the conservation of the species, or an area not currently occupied by the species which is itself essential to the conservation of the species. As defined in the ESA, "conservation" means any and all methods and procedures, and the use of those, needed to bring a species to recovery—the point at which the protections of the ESA are no longer needed. (USFWS 2003)

California Endangered Species Act. The California Endangered Species Act (CESA) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with the CESA, CDFG has jurisdiction over state-listed species (California Fish and Game Code 2070). Additionally, the CDFG maintains lists of "species of special concern" that are defined as species that appear to be vulnerable to extinction because of declining populations, limited ranges, and/or continuing threats.

California Environmental Quality Act. Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in FESA and CESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFG.

Clean Water Act. Under Section 404 of the Clean Water Act, the Corps is responsible for regulating the discharge of fill material into waters of the United States. Waters of the U.S. and their lateral limits are defined in 33 CFR Part 328.3 (a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may also be subject to Corps jurisdiction. The Project area contains seasonal wetlands that may be under the jurisdiction of the Clean Water Act.

California Water Quality and Waterbody Regulatory Programs. Pursuant to Section 401 of the federal Clean Water Act, projects that are regulated by the Corps must obtain water quality certification from the RWQCB. This certification ensures that

the Project will uphold state water quality standards. The RWQCB may impose mitigation requirements even if the Corps does not.

The CDFG exerts jurisdiction over the bed and banks of rivers, lakes, and streams according to provisions of Section 1601 to 1603 of the Fish and Game Code. The Fish and Game Code requires a Streambed Alteration Agreement for the fill or removal of material within the bed and banks of a watercourse or waterbody and for the removal of riparian vegetation.

The Federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Most native bird species in the Fallon Village Project area are covered by this Act.

The California Native Plant Society (CNPS), a non-governmental conservation organization, has developed lists of plant species of concern in California. Vascular plants included on these lists are defined as follows:

- List 1A Plants considered extinct.
- List 1B Plants rare, threatened, or endangered in California and elsewhere.
- List 2 Plants rare, threatened, or endangered in California but more common elsewhere.
- List 3 Plants about which more information is needed - review list.
- List 4 Plants of limited distribution-watch list.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing on List 1B or List 2 are, in general, considered to meet CEQA's Section 15380 criteria and adverse effects to these species are considered significant.

The Dublin Heritage Tree Ordinance (City of Dublin Zoning Ordinance Chapter 8.72:4 [revised 11/02]) states that existing mature bay, cypress, maple, oak, redwood, and sycamore trees shall be preserved in zoning districts if they are over 24 inches in diameter measured 4 feet 6 inches above natural grade. However, trees meeting the above criteria may be removed on a limited basis with the permission of the Director upon submittal of an arborist's report which determines that the tree is in poor health and not likely to survive; if the trees constitute a high fire hazard or a threat to persons, structures, or property; or, if they impede public works projects. Trees to be removed shall be shown on the Final Landscaping and Irrigation Plan for individual development applications and detailed on a tree inventory chart on that plan.

Supplemental Program-Level Impacts and Mitigation Measures. Supplemental mitigation measures SSM-1 (for special-status plants) and SSM-2 to SSM-5 (for Burrowing Owls) are identified below to update and clarify mitigation measures that had previously been identified for impacts that are not expected to differ substantially between the proposed Program-level Development Plan analyzed for the 2002 SEIR and the currently proposed Development Plan (the Project).

The following supplemental biological resources impacts and mitigation measures concern impacts that are new or substantially more severe from those identified in the 2002 SEIR and/ or require supplemental analysis due to changes in regulatory conditions since 2002:

Following are impacts and/ or mitigation measures that were identified in the 2002 SEIR, and for which impacts resulting from the currently proposed Project are not expected to differ significantly from those identified in the 2002 SEIR.

Direct and indirect habitat loss

Impacts IM 3.7A and 3.7B of the Eastern Dublin EIR identified direct habitat loss and indirect impacts of vegetation removal as potentially significant impacts, and also identified direct habitat loss as a potentially significant cumulative impact.

Impact BIO-1 of the 2002 SEIR identified impacts to biological resources from direct and indirect habitat loss as a potentially significant individual and cumulative impact. The Project, and subsequent development which will be subject to detailed property-by-property development proposals and additional project-level environmental review, would result in direct and indirect habitat loss, degradation, and disturbance across the overall Project area as described in Impacts 3.7A and 3.7B of the Eastern Dublin EIR. Not all of these impacts were analyzed in the Eastern Dublin EIR, due to the subsequent development of new information and new regulatory activities as described above. Also, many impacts may not be adequately addressed solely through subsequent property-by-property development proposals and project-level environmental review.

First, between 1993 and preparation of the 2002 SEIR, one new habitat type not previously identified in the EIR, i.e., seasonal wetland, was identified as occurring within the Project area, and impacts to this habitat type would occur within the Project area (see **Exhibits 4.7.1 and 4.7.4**). Second, intermittent streams, shown but not identified as habitat in the Eastern Dublin EIR, were identified as a habitat type and are known to occur within the Project area as shown on **Exhibits 4.7.1 and 4.7.4**. Some portions of the intermittent streams would be located within open space corridors or open space areas designated in the GPA/SP and the Project, while other portions would not. Third, thirteen additional special-status plant species and eight additional special-status wildlife species were identified by the 2002 SEIR, and one additional plant species and two additional wildlife species are identified in this DSEIR, as occurring or potentially occurring on the site, as compared to the Eastern Dublin EIR (note: none of the "new" species identified in this DSEIR will be significantly impacted). Two of these plants, the San Joaquin sparscale and Congdon's tarplant, have been observed within the Project area. Finally, the potential impacts to any particular biological resource will likely occur on two or more of the individual properties within the Project area. Analyzing and mitigating for such impacts solely on a property-by-property basis will not adequately address the collective impact across the Project area. Consequently, while each property owner in his/ her subsequent development proposals and project-level environmental review must follow the impact-specific mitigation standards set forth

in this chapter, a more comprehensive and integrated approach to these impacts is also warranted.

The potential loss of sensitive species habitat not previously analyzed in the EIR, result in supplemental potentially significant impacts discussed below.

Supplemental Program Impact BIO-1 (direct and indirect habitat loss). The Proposed Project could impact various habitats not identified in previous EIRs, including seasonal wetlands, intermittent streams and one plant species and two wildlife species (*less-than-significant supplemental impact with adherence to previous mitigation measures*).

Implementation of mitigation measures MM 3.7/1.0-5.0 from the 1993 EIR and SM-BIO-1 from the 2002 SEIR will reduce these impacts, including cumulative impacts, to a less-than-significant level.

Loss of Special-Status plant species

No special-status plant species were identified by the Eastern Dublin EIR as occurring in the Specific Plan area. The 2002 SEIR stated that two species, the San Joaquin spearscale and Congdon's tarplant, had been documented within the Project area since preparation of the Eastern Dublin EIR, indicated that suitable habitat for other special-status plants was present in the Project area, and determined that impacts to these species were potentially significant (Impact BIO-2).

In compliance with the Mitigation Measure SM-BIO-2 in the 2002 SEIR, surveys for rare plants were conducted throughout the Project area in early spring, late spring, and late summer, according to USFWS and CDFG survey protocols (CDFG 1996), to confirm presence or absence of special-status plant species. Results of these surveys were summarized in individual technical reports and in the RMP.

The San Joaquin spearscale and Congdon's tarplant were the only special-status plant species detected in the Project area during these surveys (Sycamore and Associates 2002b-c, WRA 2004a). Because impacts to both species were described in the 2002 SEIR, and no other special-status plants were identified in the Project area during focused surveys, no new impacts to special-status plants are described in this DSEIR.

Supplemental Mitigation measures SM-BIO-2 and SM-BIO-3 in the 2002 SEIR continue to apply to the Fallon Village Project (SM-BIO-2 required rare plant surveys, which have already been performed, and consideration of the results of the surveys in subsequent environmental review of development applications).

Supplemental Mitigation Measure SM-BIO-4 in the 2002 SEIR has been modified to reflect currently acceptable means of mitigating direct impacts to special-status plants, and reads as follows:

SSM-BIO-1 (revised). If special-status plants cannot be avoided, then the area containing the plant that is to be impacted, and the approximate number of plants to be impacted, must be determined, and the following steps must be taken:

- a) Harvest seeds from the plants to be lost, or use seeds from another source within the in Livermore and Amador valleys, and their surrounding watersheds, and seed an area suitable for supporting the plant, either within the Project area or off-site, at a level sufficient to replace the impacted individuals at a 1:1 ratio on an individual plant and basis, and at a ratio no less than 0.5:1 on an occupied habitat basis. The mitigation site shall be preserved and protected in perpetuity. If the mitigation site fails to support at least as many plants as were impacted within a five year period, then step "b" below must be implemented.
- b) Permanently preserve, through use of a conservation easement or other similar method, an equal amount of acreage either within the Project area or off-site that contains the plant.

Prior to submission of a Stage 2 development plan or tentative map, the developer shall submit a written report to the City for its review and approval demonstrating how the developer will comply with this mitigation measure, including the steps it will take to ensure that transplanting or seeding will be successful.

Implementation of these mitigation measures, as revised above, will reduce both Project and cumulative impacts to special-status plants to less-than-significant levels.

Burrowing Owls

Eastern Dublin EIR Impact 3.7/M determined that development in Eastern Dublin could result in the loss of potential breeding habitat and/or the disturbance of nests for this special-status species. The 2002 SEIR reiterated this impact as potentially significant and incorporated recently developed guidelines from the CDFG for mitigating impacts to this species.

Technical studies conducted within the Fallon Village Project area, and observations by H.T. Harvey & Associates, have documented Burrowing Owls on the Croak, Chen, Fallon Enterprises, and Braddock & Logan parcels. Potential foraging habitat is present in grassland, wetlands, and ruderal habitats throughout the Project area, and all but the Campbell parcel provide at least potential nesting habitat. Development on these parcels could result in the loss of suitable Burrowing Owl nesting, roosting, and foraging habitat, and potentially the loss of owls and their nests in occupied burrows.

The 2002 SEIR specified mitigation measures SM-BIO-28 through SM-BIO-37 to mitigate impacts to Burrowing Owls, but did not require breeding-season surveys to determine the number of pairs for which habitat mitigation would be required, and were not entirely consistent with currently acceptable measures typically employed or allowed by CDFG (e.g., flexibility in passive relocation of owls during the very early part (e.g., February-March) of the breeding season, if nesting has not begun). Thus, these mitigation measures have been revised below. Implementation of the following measures, as revised, would continue to reduce project impacts to Burrowing Owls to less-than-significant levels:

SSM-BIO-2 (revised) (burrowing owl). During the breeding season (February 1-August 31) prior to submittal of Stage 2 development proposals for a particular parcel, or during a subsequent breeding season but prior to the initiation of construction, a survey shall be conducted according to CDFG protocols to determine whether Burrowing Owls are present, and if present, the number of nesting pairs of Burrowing Owls present on the parcel.

SSM-BIO-3 (revised) (burrowing owl). Pre-construction surveys for burrowing owls shall be conducted by a qualified biologist prior to any ground disturbance between September 1 and January 31. If ground disturbance is delayed or suspended for more than 30 days after the survey, the site should be re-surveyed. If no over-wintering birds are present, burrows should be removed prior to the nesting season. If over-wintering birds are present, no disturbance should occur within 150 feet of occupied burrows. If owls must be moved away from the disturbance area during this period, passive relocation measures must be prepared according to current CDFG burrowing owl guidelines, approved by CDFG, and completed prior to construction.

SSM-BIO-4 (revised) (burrowing owl). If construction is scheduled during the nesting season (February 1 – August 31), pre-construction surveys should be conducted on the entire site-specific Project area and within 500 feet of such Project area prior to any ground disturbance. A minimum buffer (at least 250 feet) shall be maintained during the breeding season around active burrowing owl nesting sites identified in pre-construction surveys to avoid direct loss of individuals. Owls present on site after February 1 will be assumed to be nesting on or adjacent to the site unless evidence indicates otherwise. All active burrows shall be identified. If construction around active nests is scheduled to occur when nests are active (i.e., if they contain, or are assumed to contain, eggs or un-fledged young), a 250-foot exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged, typically by August 31. If owls are present during the early part of the breeding season, and evidence indicates that they have not yet begun nesting, they may be passively relocated from the site if authorized by CDFG.

SSM-BIO-5 (revised) (burrowing owl). If destruction of occupied (breeding or non-breeding season) burrows, or any burrows that were found to be occupied during pre-construction surveys, is unavoidable, a strategy will be developed to replace such burrows by enhancing existing burrows or creating artificial burrows at a 2:1 ratio on permanently protected lands adjacent to occupied burrowing owl habitat, and will include permanent protection of a minimum of 6.5 acres of burrowing owl habitat per pair or unpaired resident owl. A plan shall be developed and approved by CDFG describing creation or enhancement of burrows, maintenance of burrows and management of foraging habitat, monitoring procedures and significance criteria, funding assurance, annual reporting requirements to CDFG, and contingency and remediation measures.

RMP consistency

The Project applicant used the RMP in developing the proposed Project analyzed in this DSEIR (**Exhibit 4.7.3**). The proposed Development Plan is consistent with the recommended plan for development and conservation zones described in the RMP. The total acreage of the Conservation Area under the proposed plan is 304.1 acres, exceeding the 288.2 acres recommended by the RMP. The boundaries of the Conservation Area in the proposed Development Plan follow the proposed boundaries in the RMP closely, with slight adjustments in various locations made to accommodate adjustments in overall plan design as planning for Fallon Village has progressed.

The Conservation Area on the Jordan parcel preserves the majority of the aquatic and buffer zone management area proposed by the RMP. The Project also preserves most of the buffer around the stock pond on the Fallon Enterprises parcel. Only a single road crossing, Central Parkway, is proposed and this crossing avoids direct impacts to ponds, consistent with the management guidelines for this area within the RMP. The Central Parkway alignment is very close to several ponds, one in particular, and grading impacts could be greater than shown in the bubble diagram of the development plan. The RMP guidelines call for the single road crossing to be "as far as is feasible from ponds." The Project is consistent with the RMP if this crossing cannot be feasibly moved to be farther from the ponds. The RMP guidelines also provide for a bridge structure spanning as much of the aquatic and buffer zone as possible. If the Central Parkway crossing spans the stream on the Jordan parcel (thus avoiding/minimizing direct impacts to the stream), impacts would be lower than those tabulated herein (e.g., in Table 4.7.3). Overall the aquatic and buffer zone would include approximately 52.1 acres under the proposed Project (as opposed to 58.1 acres recommended by the RMP). The proposed land use for the aquatic and buffer zone under the proposed Project is Open Space.

The guidelines for the corridor zone contained in the RMP allow up to three road crossings of the corridor. The Project proposes contains only one crossing of the corridor zone, resulting in considerably less impact to the corridor zone than was envisioned in the RMP. The average 400-foot width of the corridor under the proposed Project is consistent with the RMP guidelines, with slight adjustments in the location of the corridor zone boundary at the northern end to follow the natural contours where it connects to the grassland management zone. The corridor zone will include approximately 40.9 acres under the proposed plan (as opposed to 40.7 acres recommended by the RMP). The proposed land use for the corridor zone under the proposed Project is Open Space.

The preserved portion of the grassland zone under the proposed Project differs from that in the RMP by small adjustments of the boundaries that occurred during the preparation of the Development Plan to accommodate grading in these steeply sloped areas. In the northwestern part of the Project area, development is proposed further upslope in some areas than was recommended by the RMP (though with no development higher than the 770-foot elevation contour and proposed development remaining outside all 300-foot buffer zones around potential CRLF aquatic breeding habitat). The conservation corridor described in the RMP, which passes through the center of the site, maintains the width recommended in the RMP.

Additional grassland areas are preserved in the grassland management zone in the southeastern part of the Braddock & Logan parcel and northeastern part of the Croak parcel for an overall increase in preserved grassland of about 21 acres. The acreage proposed in the grassland management zone totals 211.1 acres under the proposed Project, compared to 189.4 acres recommended by the RMP. The proposed land use for the grassland management zone would consist of Open Space and Rural Residential/Agriculture.

In summary, the proposed Stage 1 Development Plan is generally consistent with the RMP and would result in comparable impacts as those described in the RMP and would provide greater preservation of the grassland management zone than was recommended by the RMP. There would therefore be *no supplemental impacts* with regard to consistency with the RMP.

Impacts to addition to Fallon Enterprises property

A ±13-acre strip of land on the west side of the Fallon Village Project area was not analyzed in the 2002 SEIR because it was not considered part of the East Dublin Properties at the time. This land, referred to herein as the "Fallon Enterprises addition," is a portion of Dublin Ranch, which adjoins Fallon Village to the west. This parcel has been added to the Fallon Village assemblage, and thus the current DSEIR is required to analyze whether the addition of this parcel to the Fallon Village Project area would result in an impact to biological resources.

The affected portion of the Project area is shown as a combination of "Low Density Residential" and "Open Space" in the proposed Stage 2 Development Plan (see Exhibit 3.9)

The site development and tentative tract mapping for the portion of Dublin Ranch in which the Fallon Enterprises addition was previously included, called Area A, was evaluated by an initial study in June 2000. Pursuant to the EDSP, this 13-acre area is planned for open space and a partial Elementary School which the Dublin Unified School District has deemed is no longer needed due to the presence of other nearby school facilities. The initial study determined that impacts related to development of this parcel could be mitigated to a less-than-significant level with measures in the 1993 Eastern Dublin EIR.

There are no new habitat types on the Fallon Enterprises addition that have not been previously described for the Fallon Village Project area. The majority of this parcel borders the Dublin Ranch golf course to the west, and consists of previously disturbed land that was reseeded and has returned to ungrazed non-native grassland. No special-status plant species or botanically sensitive habitats were recorded on the Fallon Enterprises addition during surveys and environmental review for Area A of Dublin Ranch, and no special-status plants are expected to occur there. A shallow basin, apparently created by diversion of a drainage and the placement of fill during grading for the Dublin Ranch golf course, is present along the western edge of the Fallon Enterprises parcel, right along the boundary between Fallon Enterprises and the Fallon Enterprises addition to the west. Approximately 0.01 acres of a pond (considered a sensitive habitat) within this basin extends onto the Fallon Enterprises addition.

Several of the special-status wildlife species previously identified as occurring on the East Dublin Properties in the 2002 SEIR may occur on the Fallon Enterprises addition, although none have been observed on this site. Suitable breeding and foraging habitat for Burrowing Owls and Loggerhead Shrikes, and foraging habitat for raptors, is present on the Fallon Enterprises addition. The lower end of a drainage near the northern part of the Fallon Enterprises addition was surveyed in spring 2005 to determine whether or not CTS breed there, with none being found (H.T. Harvey & Associates, 2005). Due to the proximity of this long, narrow strip of land to developed portions of Dublin Ranch, it is unlikely that this area is heavily used (if at all) by foraging Golden Eagles, and the Fallon Enterprises addition does not contain suitable nest sites for nesting raptors, or roost sites for special-status bats.

Species-specific impacts to Burrowing Owls, special-status passerines (i.e., Loggerhead Shrikes), and CTS may occur on this parcel, pending the outcome of further studies or preconstruction surveys on or adjacent to this parcel required as mitigation measures elsewhere in this section. Thus, the mitigation measures pertaining to Impacts BIO-7 (Burrowing Owls), BIO-9 (special-status passerines), and SM-BIO-6 (CTS), namely mitigation measures SM-BIO 5, SM-BIO-13 to SM-BIO-18, and SM-BIO-9 to SM-BIO-16, would apply to the Fallon Enterprises addition. In addition, Impact BIO-3 (and mitigation measure BIO-5) for impacts to the San Joaquin kit fox would apply to this parcel.

However, because no new habitat types, new rare or sensitive species, or new botanically sensitive habitats have been identified on this parcel, no new impacts not previously analyzed by the 2002 SEIR would occur due to the development of the Fallon Enterprises addition as part of the Fallon Village Project. Furthermore, development of this area would not result in any substantially increased impacts (as compared to those analyzed by the 2002 SEIR). Thus, the addition of the Fallon Enterprises addition to the area being evaluated for Fallon Village, and the ultimate development of this parcel, would result in *no supplemental impacts* on biological resources.

Supplemental Program Impact BIO-1 (loss or degradation of botanically sensitive habitat). The proposed Project could result in loss or degradation of existing arroyo willow ponds and freshwater marsh due to Project improvements (potentially significant supplemental impact and mitigation required).

Impact 3.7/C of the Eastern Dublin EIR identified potentially significant direct and indirect impacts to arroyo willow riparian woodland and freshwater marsh due to development, grading, road construction, and culvert crossings. The 2002 SEIR additionally considered seasonal wetlands, intermittent streams, and alkali grasslands to be botanically sensitive habitats and identified impacts to botanically sensitive habitats as potentially significant (Impact BIO-3).

Ponds were not specifically identified as a sensitive habitat in either the 1993 EIR or the 2002 SEIR, and neither document specifically identified impacts to ponds. However, because of the importance of ponds to special-status species (especially CTS and CRLF species), impacts to ponds in the Fallon Village Project area, which

includes filling of an estimated 1.35 acres of ponds as shown on Table 4.7.1, would be a significant supplemental impact.

As noted above, the terminology used to refer to the sensitive habitats in the Project area has been revised. Botanically sensitive habitats in the Project area are depicted in Exhibits 4.7.1 and 4.7.3. As indicated by Exhibit 4.7.3, many of the botanically sensitive habitat areas are located in areas designated as proposed open space, while other occurrences would be impacted by proposed development. Table 4.7.3 lists the approximate extent of each botanically sensitive habitat type expected to be impacted by the Project based on habitat mapping performed for the RMP and the proposed Stage 1 Development Plan in Exhibit 4.7.3. The data shown in Table 4.7.2 provides more detailed information on the location and extent of biological impacts that were shown in either the Eastern Dublin EIR or the 2002 SEIR.

Table 4.7.2. Expected Project Impacts to Botanically Sensitive Habitats.

Parcel	Central Coast Riparian Scrub	Parcel	Central Coast Riparian Scrub	Parcel	Central Coast Riparian Scrub	Parcel
Fallon Enterprises	-	Fallon Enterprises	-	Fallon Enterprises	-	Fallon Enterprises
Braddock & Logan	-	Braddock & Logan	-	Braddock & Logan	-	Braddock & Logan
Jordan	0	Jordan	0	Jordan	0	Jordan
Croak	-	Croak	-	Croak	-	Croak
Chen	0	Chen	0	Chen	0	Chen
Anderson	0.14	Anderson	0.14	Anderson	0.14	Anderson
Righetti	-	Righetti	-	Righetti	-	Righetti
Campbell	-	Campbell	-	Campbell	-	Campbell
Branough	-	Branough	-	Branough	-	Branough
EBJ & Pleasanton Ranch	-	EBJ & Pleasanton Ranch	-	EBJ & Pleasanton Ranch	-	EBJ & Pleasanton Ranch
Fallon Enterprises addition	-	Fallon Enterprises addition	-	Fallon Enterprises addition	-	Fallon Enterprises addition
Total	0.14	Total	0.14	Total	0.14	Total

Source: WRA, 2005

Whether or not impacts to these botanically sensitive habitats are considered significant depends on the magnitude of the impact and the importance of the impact (in terms of the regional rarity of the habitat type in question and the quality of the impacted habitat). Based on these criteria, the impacts to alkali grassland/meadow are not considered significant due to the limited extent of the impacts and the extremely degraded quality of the alkali grassland to be impacted. A total of 2.62 acres of the existing five acres of alkali grassland/meadow will be protected in the proposed open space (Exhibit 4.7.3). This DSEIR considers impacts to central coast riparian scrub, seasonal wetland, intermittent streams, seasonal freshwater marsh/seep, and ponds, which include removal of these features, to be a potentially significant impact and cumulative significant impact.

Mitigation Measures 3.7/6.0 and 3.7/7.0 of the Eastern Dublin EIR apply to this impact but do not mitigate it to less than significant levels. Mitigation measures SM-BIO-5 through SM-BIO-8 of the 2002 SEIR also apply to the riparian, wetlands, and waters impacts. In addition, supplemental mitigation measures SSM-BIO-7 and SSM-

BIO-9 below, which require compensation for impacts to aquatic CTS breeding habitat and essential aquatic habitat for the CRLF, would adequately mitigate impacts to ponds. Implementation of the aforementioned measures, as well as the following supplemental mitigation measure, will reduce Project level supplemental impacts to botanically sensitive habitats to less than significant levels. Cumulative impacts, as identified in the 2002 SEIR, would remain significant and unavoidable due to the loss of additional botanically sensitive habitat.

Supplemental Mitigation Measure SM-BIO-1 (loss or degradation of botanically sensitive habitats). Impacts to central coast riparian scrub habitat shall be mitigated through the restoration or enhancement of riparian habitat at a 3:1 ratio (on an acreage basis), preferably within the proposed aquatic and buffer zone or corridor zone management areas on-site. If mitigation within the Project area is not feasible, then the developer shall mitigate impacts to central coast riparian scrub through the restoration or enhancement of riparian habitat at a 3:1 ratio (measured by acreage) at an off-site location acceptable to the City. Any riparian mitigation areas shall be preserved and protected in perpetuity. Restored habitat shall be monitored for a period of five years including preparation of an annual report each year.

Impacts to California red-legged frog

Supplemental Program Impact BIO-2 (impacts to California red-legged frogs). The Project area has been proposed for designation as critical habitat by the U.S. Fish and Wildlife Service and development of the Project could result in impacts to this species (*supplemental significant impact and mitigation required*).

Impact IM 3.7/F of the Eastern Dublin EIR identified potentially significant impacts to CRLF habitat due to the destruction and alteration of small ponds and streams. Increased sedimentation from run-off into ponds and riparian habitats could reduce water quality and threaten breeding and larval habitat. Removal or modification of the vegetation in stream courses could reduce the suitability of habitat for CRLF. Increased vehicular traffic and construction of new roads could increase direct mortality. Harassment and predation by pets and urban wildlife such as raccoons could also increase with residential development. Mitigation measures were adopted for these impacts in the 1993 EIR.

Between 1993 and 2002, the U.S. Fish and Wildlife Service designated Critical Habitat for the CRLF under the Endangered Species Act. This Critical Habitat included all of the Fallon Village Project area. During this period, additional information came to light regarding the use of upland habitats for dispersal by CRLF, and regarding the occurrence of this species in the East Dublin area. Based on this new information, the 2002 SEIR determined that development of the East Dublin Properties could have a broader impact on CRLF habitat and on individual CRLF than had been previously analyzed in the 1993 EIR, and this additional impact was potentially significant. Furthermore, the 2002 SEIR determined that the loss of upland components of CRLF habitat represented a potentially significant cumulative impact (BIO-5).

Regulatory changes have occurred, and substantial additional information has been provided by technical studies in the Project area since the certification of the 2002

SEIR, necessitating supplemental analysis in this DSEIR. Since the certification of the 2002 SEIR, the Critical Habitat designation for this species was vacated. The USFWS has proposed a new designation of Critical Habitat, and the Project area remains within the proposed Critical Habitat area, but this designation has not been finalized.

The designation of Critical Habitat does not affect the CRLF habitat constituent elements evaluated to determine potential significant impacts. Federal agencies are required to consult with the Fish and Wildlife Service to ensure that agency actions do not “adversely modify” this designated habitat. However, Federal agencies are already required under the ESA to consult with the Service to ensure that these same types of actions do not jeopardize the existence of the species. In most cases the species protection benefits from a critical habitat designation largely duplicate those already in place as a result of the species being listed, even without critical habitat.

As described previously in “Threatened and Endangered Wildlife Species”, the Project area contains known or potential breeding habitat for CRLF in ponds on the Fallon Enterprises, Anderson, and Jordan parcels. Most foraging is expected to occur along stream drainages near breeding ponds or other essential aquatic habitat, and overland dispersal through upland areas is expected to occur as well.

As indicated by the proposed land plan (Figure 3.3-C), the stock pond on the Fallon Enterprises parcel, considered potential CRLF breeding habitat, will be preserved. Likewise, the CRLF breeding ponds on the Jordan parcel will not be directly impacted by proposed development at Fallon Village.

The only potential CRLF essential aquatic habitat (i.e., breeding pond or perennial water body that is used by CRLF during summer) that would be directly impacted by the proposed land plan is the quarry pond on the Anderson parcel. Although protocol-level surveys in spring and fall of 2001 failed to detect this species (or egg masses or larvae) in the pond (Sycamore Associates 2001c), an adult was observed 750 feet south of Pond 1 (Sycamore Associates 2003b), and the RMP considered this pond potential CRLF breeding habitat.

Potentially significant supplemental impacts to CRLF that could occur due to the development of Fallon Village are as follows:

- Loss of essential aquatic habitat due to filling of the 1.24-acre quarry pond on the Anderson parcel.
- Loss of up to 16.55 ac of associated upland habitat (i.e., upland habitat within approximately 300 feet of essential aquatic habitat- as defined in the CRLF Recovery Plan, USFWS 2002).
- Reduction in dispersal capability due to the development of upland areas and drainages. Up to 501.8 acres of dispersal habitat connecting essential aquatic and upland associated habitat in the Project area to on- or off-site essential aquatic habitat areas will be impacted. Dispersal habitat is calculated in the CRLF Recovery Plan as the barrier-free area in between two or more aquatic

- habitats within two kilometers (approximately 1.3 miles) of each other and the associated uplands within 300 feet from the water's edge (USFWS 2002).
- Reduction in water quality and aquatic habitat due to increased sedimentation and input of other substances into streams from runoff.
 - Removal or modification of approximately 0.14 ac of woody riparian vegetation on the Anderson parcel.
 - Increased mortality due to increased vehicular traffic, and construction of new roads.
 - Loss of individuals during project construction.
 - Loss of individuals during management of conservation areas and during maintenance of structures (e.g., bridges) crossing the conservation areas.
 - Harassment and predation by feral animals and urban wildlife, and harassment by humans.
 - Alteration of hydrology of preserved streams, in-stream pools, and ponds by diversion of runoff from developed areas.

Table 4.7.3 lists the approximate extent of impacts to CRLF habitat expected based on the proposed Development Plan in **Exhibit 2.7** and the locations of different CRLF habitat areas shown in **Exhibit 4.7.3**.

Table 4.7.3. Expected Project Impacts to California Red-Legged Frog Habitat

Parcel	Impacts (acres)		
	Aquatic Breeding Habitat	Associated Upland Habitat	Other Dispersal Habitat
Fallon Enterprises	-	0.69	116.60
Braddock & Logan	-	-	70.38
Jordan	0	4.53	122.22
Croak	-	1.03	140.03
Chen	-	0.02	13.73
Anderson	1.24	9.11	10.38
Righetti	-	1.18	15.79
Campbell	-	-	-
Branough	-	-	12.63
EBJ & Pleasanton Ranch	-	-	-
Fallon Enterprises addition	-	-	-
Total	1.24	16.55	501.76

Source: WRA Associates, 2005

Because the 2002 SEIR anticipated extensive potential CRLF aquatic habitat (and impacts) in the Project area and in similar locations as shown in Figure 3.3-D, and anticipated extensive impacts to upland dispersal habitat as well, *no supplemental impact* to this species is anticipated.

Mitigation Measures MM 3.7/20.0-22.0 of the 1993 EIR and SM-BIO-11, 12, 13, and 15 of the 2002 SEIR shall be implemented to mitigate impacts to CRLF. Mitigation measure SM-BIO-14 from the 2002 SEIR has been revised in order to distinguish the essential aquatic habitat from the dispersal habitat and to quantify the replacement ratios required for each. It is included as a supplemental mitigation measure as follows:

Supplemental Mitigation Measure SSM-BIO-2 (California red-legged frog).) If avoidance is infeasible, then mitigation lands providing similar or better habitat for CRLF shall be preserved and protected in perpetuity. Mitigation will be required at a 3:1 replacement ratio for essential aquatic habitat (including verified aquatic breeding habitat) and associated upland habitat within 100 m of essential aquatic habitat, and at a 1.5:1 replacement ratio for dispersal habitat as defined herein (Figure 3.3-D Exhibit 4.7.4). Alternately, the latter ratio may be reduced at the discretion of the City, if additional essential aquatic habitat is provided. The amount of reduction shall be proportional to the amount of additional essential habitat provided, up to a maximum reduction of fifty percent. Because aquatic breeding habitat and perennial water bodies providing summer refugia are expected to limit CRLF population size in the dry eastern Alameda/Contra Costa region more than the availability of suitable upland habitat, flexibility in this mitigation requirement (i.e., to allow for the creation of ponds to serve as partial mitigation for impacts to upland habitat) provides an opportunity to create greater benefit to CRLF populations on a landscape level. This mitigation shall be proposed in a mitigation and monitoring plan submitted to the City. In selecting off-site mitigation lands, preference shall be given to preserving large blocks of habitat rather than many small parcels, selecting mitigation land within the Livermore and Amador valleys, and their surrounding watersheds, to account for local loss of proposed critical habitat, linking preserved areas to existing open space and other high-quality habitat, and excluding or limiting public use within preserved areas.

Implementation of these mitigation measures are expected to reduce supplemental impacts to CRLF to less than significant levels.

California tiger salamander

Supplemental Program Impact BIO-3 (impacts to California tiger salamander). The listing of this species as threatened by the USFWS will not result in additional Project impacts. The Project area has recently been proposed for designation as critical habitat by the U.S. Fish and Wildlife Service and development of the Project could result in impacts to this species (*potential supplemental impact and mitigation required.*)

Impact 3.7/G of the Eastern Dublin EIR identified potentially significant impacts to aquatic breeding habitat and individuals of the CTS. The 2002 SEIR further recognized that impacts to upland habitat were potentially significant, and that suitable CTS habitat was present throughout the Project area.

Regulatory changes have occurred and substantial additional information has been provided by technical studies in the Project area, since the certification of the 2002

SEIR, necessitating supplemental analysis in this DSEIR. Since the certification of the 2002 SEIR, the CTS has been federally listed as threatened throughout its range.

As described previously studies have documented breeding by CTS in the Project area within the quarry pond on the Anderson parcel, the stock pond on the Fallon Enterprises parcel, and two small ponds on the Jordan property. Other pools on the Fallon Enterprises and Jordan parcels also provide potential breeding habitat, based on site observations by H.T. Harvey & Associates (on the Fallon Enterprises parcel) and WRA on the Jordan parcel (2003a, 2004b). Habitat assessments have determined that suitable conditions for upland habitat use by CTS are present on all parcels.

As indicated by the proposed Stage 1 Development Plan (**Exhibit 3.7**), the stock pond on the Fallon Enterprises parcel, considered known CTS breeding habitat, would be preserved. Likewise, most of the ponds on the Jordan parcel, some of which provide known or potential CTS breeding habitat would be preserved.

The only known CTS breeding pond that would be directly impacted by the proposed land plan is the quarry pond on the Anderson parcel, which is proposed for "General Commercial/Campus Office/Industrial" land use in the proposed Project. In addition, two pools in the northwestern part of the Fallon Enterprises parcel were identified by H.T. Harvey & Associates as providing potential breeding habitat for the CTS; these pools were surveyed for larvae in Spring 2005 to determine whether they pond long enough for successful breeding by CTS, with negative results (H.T. Harvey & Associates, 2005).

Potential upland habitat around the known and potential breeding ponds would also be impacted by proposed development, which would remove breeding and dispersal habitats. Table 4.7.4 lists the approximate extent of impacts to CTS habitat expected based on the proposed land plan in **Exhibit 3.7** and the extent of breeding and upland habitat depicted in **Exhibit 4.7.3**.

Table 4.7.4. Expected Project Impacts to California Tiger Salamander Habitat

Parcel	Impacts (ac)	
	Aquatic Breeding Habitat	Upland Habitat
Fallon Enterprises	0.07	204.91
Braddock & Logan	-	13.75
Jordan	0	133.14
Croak	-	97.00
Chen	-	80.69
Anderson	1.24	36.17
Righetti	-	48.24
Campbell	-	1.75
Branough	-	29.43
EBJ & Pleasanton Ranch	-	1.02
Fallon Enterprises addition	0	12.16
Total	1.31	658.26

Source: WRA Associates, 2005

Potential impacts to CTS that could occur due to the development of Fallon Village are as follows:

- Loss of aquatic breeding habitat. A total of 1.24 acres of known CTS breeding habitat (on the Anderson parcel) and 0.07 acres of potential CTS breeding habitat (on the Fallon Enterprises parcel) will be developed for residential use.
- Loss of upland habitat around breeding ponds. The area impacted was determined by calculating the undeveloped area within 2200 feet of known and potential CTS breeding ponds (including ponds that will and will not be impacted; see **Exhibit 4.7.3**).
- Loss of upland foraging and dispersal habitat.
- Reduction in dispersal capability due to the development of upland areas between drainages.
- Reduction in water quality and aquatic habitat due to increased sedimentation and input of other substances into streams from runoff.
- Increased mortality due to increased vehicular traffic, and construction of new roads.
- Loss of individuals during Project construction.
- Loss of individuals during management of conservation areas.
- Harassment and predation by feral animals and urban wildlife, and harassment by humans.
- Alteration of hydrology of ponds to be preserved by diversion of runoff from developed areas.

Because the 2002 SEIR anticipated extensive CTS aquatic and upland habitat (and impacts) in the Project area, and in similar locations and indicated that the loss of CTS habitat and individuals was a potentially significant impact, *no supplemental impact* to this species is anticipated.

All of the CTS surveys had not been completed by the release of the 2002 SEIR. Recent survey results discovered some additional CTS habitat areas, and these have been accounted for in this DSEIR. Some additional impact areas are present, but these do not represent an entirely new supplemental impact.

Mitigation measures MM 3.7/20.0-22.0 of the 1993 EIR and SM-BIO-18 of the 2002 SEIR shall be implemented to mitigate impacts to CTS; SM-BIO-15 in the 2002 SEIR, which includes measures to minimize impacts to individual CRLF, will also apply to CTS. Mitigation measure SM-BIO-19 from the 2002 SEIR has been revised and expanded in order to distinguish the aquatic breeding habitat from the upland habitat and to quantify the replacement ratios required for each. It is included as supplemental mitigation measures SSM-BIO-8 and SSM-BIO-9 below. Implementation of the mitigation measures listed above and below are expected to continue to reduce impacts to CTS to less than significant levels:

Supplemental Mitigation Measure SSM-BIO-3 (California tiger salamander). To compensate for the permanent loss of up to 1.31 acres of aquatic CTS breeding habitat, developers of individual parcels will create and/or enlarge suitable breeding ponds at a 2:1 ratio (mitigation to impact, on an acreage basis), in or

adjacent to areas currently supporting CTS and with sufficient surrounding upland habitat to provide a high likelihood of establishment and persistence of a breeding population. In selecting off-site mitigation lands, preference shall be given to preserving one large block of habitat rather than many small parcels, selecting mitigation land within the Livermore and Amador valleys, and their surrounding watersheds, to account for local loss of proposed critical habitat, linking preserved areas to existing open space and other high quality habitat, and excluding or limiting public use within preserved areas. Land selected for mitigation shall be permanently preserved through use of a conservation easement or similar method and shall be managed for use by CTS by a conservation entity. This mitigation shall be proposed in a mitigation and monitoring plan submitted to the City for approval.

Supplemental Mitigation Measure SSM-BIO-4 (California tiger salamander). To compensate for the permanent loss of up to 658.3 acres of upland CTS habitat, developers of individual parcels will acquire, preserve, and manage suitable upland habitat at a 1:1 ratio (mitigation to impact, on an acreage basis), in or adjacent to areas currently supporting CTS and within 2200 feet of a suitable breeding pond. Alternately, this ratio may be reduced (i.e., to less than 1:1 mitigation for lost upland habitat), at the discretion of the City, if additional aquatic breeding habitat (beyond that required by SM-BIO-11) is provided. The amount of reduction shall be proportional to the amount of additional essential habitat provided, up to a maximum reduction of fifty percent. Because aquatic breeding habitat is expected to limit CTS population size in the dry eastern Alameda/Contra Costa region more than the availability of suitable upland habitat, flexibility in this mitigation requirement (i.e., to allow for the creation of breeding ponds to serve as partial mitigation for impacts to aestivation habitat) may benefit CTS populations on a landscape level. This mitigation requirement may be combined with SM-BIO-11 from the 2002 SEIR so that the overall mitigation results in creation/restoration and preservation of breeding ponds (to mitigate impacts to aquatic breeding habitat according to SM-BIO-11) and preservation of associated upland habitat (to mitigate impacts to upland habitat according to SM-BIO-12). In selecting off-site mitigation lands, preference shall be given to preserving one large block of habitat rather than many small parcels, selecting mitigation land within the in Livermore and Amador valleys, and their surrounding watersheds, to account for local loss of proposed critical habitat, linking preserved areas to existing open space and other high quality habitat, and excluding or limiting public use within preserved areas. Land selected for mitigation shall be permanently preserved through use of a conservation easement or similar method, and shall be managed for use by CTS by a conservation entity. This mitigation shall be proposed in a mitigation and monitoring plan submitted to the City for approval.

Western pond turtle

Degradation of habitat of the western pond turtle was considered a potentially significant impact (IM 3.7/H), and mitigation measures (MM 3.7/20.0-22.0) were prescribed, in the 1993 EIR. The 2002 SEIR stated that the species could occur in the Project area, but did not discuss impacts to pond turtles other than to include (in a response to comments) the species in the list of species that must be addressed by

the RMP. Therefore, impacts to this species are being considered a supplemental impact in this DSEIR.

Loss of habitat for this species is not considered a significant impact. The highest-quality habitat is present within and around the largest pond on the Jordan property. Although some of this potential breeding habitat would be impacted by the extension of Central Parkway, most is expected to remain undisturbed. Some potentially perennial aquatic habitat would be lost due to development of the quarry pond, but the other ponds to be impacted are not perennial and thus do not provide high-quality habitat for this species.

However, due to the rarity of the western pond turtle in the Dublin area, the loss of individuals of this species during construction would be considered potentially significant. Implementation of mitigation measure SM-BIO-15 in the 2002 SEIR, with the western pond turtle receiving the same considerations (i.e., regarding the protection of individual turtles) as the CRLF, would reduce Project impacts to western pond turtles to a less than significant level.

Supplemental Development-level Impacts. No supplemental development-level impacts to biological resources have been identified beyond those analyzed in the Program-level analysis above.

Table 4.7.1. Special-Status Plant and Animal Species, Their Status, and Potential Occurrence on the Fallon Village Project Area, Dublin, California.

Name	*Status	Habitat	Potential Occurrence on Site
Federal or State Endangered Species			
large-flowered fiddleneck (<i>Amsinckia grandiflora</i>)	FE, SE, CNPS 1B	Grassland and foothill woodland.	Local occurrences historic. Often associated with native forbs and perennial grasses; grazed grassland unlikely to support this species. Not observed during recent floristic surveys.
Contra Costa goldfields (<i>Lasthenia conjugens</i>)	FE, CNPS 1B	Saline/alkaline vernal pools, swales, moist flats and depressions within grassland.	Seasonal wetlands on southern portion of site provide moderately suitable habitat. Not observed during recent floristic surveys.
conservancy fairy shrimp (<i>Branchinecta conservatio</i>)	FE	Highly turbid, large vernal pools.	Potential habitat in the Project area; however, not known within 10 miles of Project Area. Species not expected to occur. Focused surveys conducted in the Project area did not detect presence. Project area is not within Critical habitat.
longhorn fairy shrimp (<i>Branchinecta longiantenna</i>)	FE	Vernal pools with clear to turbid water in grass-bottomed pools and clear-water sandstone depression pools.	Potential habitat in the Project area. Focused surveys conducted in the Project area did not detect presence. Project area is not within Critical Habitat.
vernal pool tadpole shrimp (<i>Lepidurus packardi</i>)	FE	Grass or mud-bottomed swales in grasslands on old alluvial soils underlain by hardpan.	Potential habitat in the Project area; however, not known within 10 miles of Project Area. Species not expected to occur. Focused surveys conducted in the Project area did not detect presence. Project area is not within Critical Habitat.
bald eagle (<i>Haliaeetus leucocephalus</i>)	FT, SE, SP	Requires large bodies of water, or free-flowing rivers with abundant fish and adjacent snags and large trees for perching and nesting.	No nesting or foraging habitat in the Project Area; judged absent.

Table 4.7.1. Special-Status Plant and Animal Species, Their Status, and Potential Occurrence on the Fallon Village Project Area, Dublin, California.

Name	*Status	Habitat	Potential Occurrence on Site
American peregrine falcon (<i>Falco peregrinus</i>)	SE, SP	Nests primarily on cliffs, forages over open habitats.	Possibly an occasional forager during migration and winter; no nesting habitat on site.
willow flycatcher (<i>Empidonax traillii</i>)	FE (<i>extimus</i>), SE (nesting)	Breeds in southern deserts and mountains.	While Willow Flycatchers of other subspecies may forage on the site occasionally during migration, no individuals of the listed subspecies are expected to occur in the Project area.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	FE, ST	Open habitats in deserts, and grasslands.	No evidence of presence found during early evaluation or focused den monitoring in Project area. Extensive protocol surveys in adjacent areas have found no sign or individuals. Site is outside existing range of the species.
Federal or State Threatened Species			
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Grassy or mud-bottomed swales, earth slump or basalt-flow depression pools in grasslands.	Potential habitat in the Project area. Focused surveys conducted in the Project area did not detect presence. Project area is not within Critical Habitat.
California tiger salamander (<i>Ambystoma californiense</i>)	FT, CSSC	Vernal or temporary pools in annual grasslands or open woodlands.	Present within Project area. Known to breed in several ponds, aestivate within grassland habitat. Project area is partially within proposed Critical Habitat.
California red-legged frog (<i>Rana aurora draytonii</i>)	FT, CSSC	Streams, freshwater pools, and ponds with overhanging vegetation.	Present within Project area. Potentially breed in ponds, forage and disperse in seasonal wetlands, marsh, and intermittent drainages. Project area is within proposed Critical Habitat.
Alameda whipsnake (<i>Masticophis lateralis euryxanthus</i>)	FT, ST	Chaparral, coastal sage scrub, and associated scrub oak woodland.	No suitable habitat on site. Site is approximately three miles from nearest chaparral or coastal scrub/oak woodland. Determined to be absent.

Table 4.7.1. Special-Status Plant and Animal Species, Their Status, and Potential Occurrence on the Fallon Village Project Area, Dublin, California.

Name	*Status	Habitat	Potential Occurrence on Site
California Species of Special Concern			
western pond turtle (<i>Emys marmorata</i>)	CSSC	Permanent or nearly permanent water in a variety of habitats.	Not reported in the Project Area. Potential habitat occurs in Project Area although discontinuous with known occupied habitat. May occur in the Project Area.
California horned lizard (<i>Phrynosoma coronatum frontale</i>)	CSSC	Loose sandy soil within scrubland, grassland, riparian woodland, and open coniferous forests.	Marginal suitable habitat on site. No records in proximity of site. Determined to be absent.
short-eared owl (<i>Asio flammeus</i>)	CSSC (nesting)	Nests on ground in tall shrubby vegetation usually near wet meadow and grassland habitats.	Possibly a rare forager during migration and winter; not expected to breed on-site due to marginal quality of habitat and rarity as a breeder in the region.
northern harrier (<i>Circus cyaneus</i>)	CSSC (nesting)	Nests on ground in tall grass or shrubby vegetation usually near wet meadow and grassland habitats.	Forages on the site during non-breeding season. Marginally suitable breeding habitat only in the non-grazed non-native grassland.
Cooper's hawk (<i>Accipiter cooperii</i>)	CSSC (nesting)	Nests in woodlands, forages in a variety of habitats during migration and winter.	Migrant and winter visitor. Marginally suitable breeding habitat in the Project area.
Sharp-shinned hawk (<i>Accipiter striatus</i>)	CSSC (nesting)	Nests in woodlands, forages in a variety of habitats during migration and winter.	Migrant and winter visitor. Not expected to breed on-site due to absence of suitable habitat, absence as a breeder from lowland areas in the Dublin region.
ferruginous hawk (<i>Buteo regalis</i>)	CSSC (wintering)	Grasslands, desert scrub, low foothills surrounding valleys.	Rare forager during migration and winter; site is outside of breeding range.
golden eagle (<i>Aquila chrysaetos</i>)	CSSC, SP	Breeds on cliffs or in large trees isolated from disturbance.	Known to nest in Northern Drainage Conservation area, northwest of the Project Area. Forages in the Project area.
merlin (<i>Falco columbarius</i>)	CSSC (wintering)	Forages in many habitats in winter and migration.	Occasional forager during migration and winter; site is outside of breeding range.

Table 4.7.1. Special-Status Plant and Animal Species, Their Status, and Potential Occurrence on the Fallon Village Project Area, Dublin, California.

Name	*Status	Habitat	Potential Occurrence on Site
prairie falcon (<i>Falco mexicanus</i>)	CSSC (nesting)	Breeds on cliffs, forages over grasslands, desert.	Occasional forager during migration and winter; no suitable nesting habitat on site.
long-billed curlew (<i>Numenius americanus</i>)	CSSC (nesting)	Nests and forages in wetlands, fields.	May forage occasionally on-site. Site is outside of breeding range.
burrowing owl (<i>Athene cunicularia</i>)	CSSC	Open grasslands with mammal burrows.	Potentially suitable nesting, roosting, and foraging habitat present in the Project areas. Observed on-site.
loggerhead shrike (<i>Lanius ludovicianus</i>)	CSSC (nesting)	Nests in bushes or trees surrounded by open grassland or ruderal habitats.	Suitable foraging and breeding habitat on-site; observed, and expected to breed, on-site.
California horned lark (<i>Eremophila alpestris actia</i>)	CSSC	Grasslands, prairies.	Forages in grazed grasslands on-site; potentially suitable nesting habitat present as well, but not known to breed on the site.
California yellow warbler (<i>Dendroica petechia brewsteri</i>)	CSSC (nesting)	Breeds in cottonwood-willow riparian woodland.	May forage in trees on-site during migration, but riparian habitat on-site of insufficient quality for breeding.
tricolored blackbird (<i>Agelaius tricolor</i>)	CSSC (nesting colony)	Breeds in extensive stands of tall, dense, emergent herbaceous vegetation.	Nesting reported at quarry pond; may forage in grasslands in winter.
pallid bat (<i>Antrozous pallidus</i>)	CSSC	Forages over many habitats; requires cavities for roosting	Potential forager. Barns and other structures or tree cavities may supply roosting habitat on the site.
Yuma myotis <i>Myotis yumanensis</i>	FSC	Known for its ability to survive in urbanized environments. Also found in heavily forested settings. Day roosts in buildings, trees, mines, caves, bridges and rock crevices. Night roosts associated with man-made structures.	High potential. May roost in old barn/ranch buildings and trees on site.
California mastiff bat (<i>Eumops perotis californicus</i>)	CSSC	Forages over many habitats; requires tall cliffs or buildings for roosting.	No extant colony records in Alameda County. Potential forager; no roosting habitat on-site.

Table 4.7.1. Special-Status Plant and Animal Species, Their Status, and Potential Occurrence on the Fallon Village Project Area, Dublin, California.

Name	*Status	Habitat	Potential Occurrence on Site
Townsend's big-eared bat (<i>Plecotus townsendii</i>)	CSSC	Roosts in caves and mine tunnels in a variety of habitats. Will roost in undisturbed attics or abandoned building.	Known maternity colonies extirpated from Alameda County. No recent records within 10 miles. Determined to be absent.
CNPS Species			
alkali milk-vetch (<i>Astragalus tener</i> var. <i>tener</i>)	CNPS 1B	Alkaline soils in playas, vernal pools, and adobe clay areas within grassland in Alameda, Merced, Solano, and Yolo counties.	Marginal habitat present within seasonal wetland areas in the southern portion of the project site. No recent occurrences observed in vicinity; low potential for occurrence. Not observed during recent floristic surveys.
heartscale (<i>Atriplex cordulata</i>)	CNPS 1B	Alkaline soils within mesic grassland, alkali sink, and alkali meadow habitats.	Suitable habitat present within seasonal wetland and alkali meadow areas. Frequently associated with other rare species of <i>Atriplex</i> ; not observed during recent floristic surveys.
brittlescale (<i>Atriplex depressa</i>)	CNPS 1B	Alkaline soils within mesic grassland, alkali sink, and alkali meadow habitats.	Suitable habitat present on site; frequent observations in Livermore vicinity. Not observed during recent floristic surveys.
San Joaquin spearscale (<i>Atriplex joaquiniana</i>)	CNPS 1B	Alkaline soils within mesic grassland, alkali sink, and alkali meadow habitats.	Present. Species observed on site (Sycamore and Associates 2002).
big-scale balsamroot (<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>)	CNPS 1B	Grassland and rocky hillsides, frequently associated with native forbs and perennial grasses.	Grazed grassland on site unlikely to support this species. Not observed during recent floristic surveys.
big tarplant (<i>Blepharizonia plumosa</i>)	CNPS 1B	Cracked, clay soils within grassland. Endemic to the Mount Diablo foothills.	Grazed grassland on site unlikely to support this species. Not observed during recent floristic surveys.
Mt. Diablo fairy-lantern (<i>Calochortus pulchellus</i>)	CNPS 1B	Wooded or brushy slopes, or foothill woodland/grassland ecotone.	No suitable habitat present on site. Species not observed during recent floristic surveys.

Table 4.7.1. Special-Status Plant and Animal Species, Their Status, and Potential Occurrence on the Fallon Village Project Area, Dublin, California.

Name	*Status	Habitat	Potential Occurrence on Site
Congdon's tarplant (<i>Centromadia parryi</i> ssp. <i>congdonii</i>)	CNPS 1B	Mesic grasslands or other herbaceous habitats with moisture-retentive soils. In Alameda County, associated with heavy clay soils.	Present. Species observed on site (Sycamore and Associates 2002).
hispid bird's-beak (<i>Cordylanthus mollis</i> ssp. <i>hispidus</i>)	CNPS 1B	Mesic, alkaline areas within grassland, particularly in alkali meadows with saltgrass.	Known from the Springtown Wetlands Reserve near Livermore; no other local occurrences. Marginally suitable habitat present on site; not observed during recent floristic surveys.
palmate-bracted bird's-beak (<i>Cordylanthus palmatus</i>)	CNPS 1B	Alkaline, clay soils within grassland. Narrowly associated with Pescadero silty clay.	Known from the Springtown Wetlands Reserve near Livermore; no other local occurrences. Marginally suitable habitat present on site; not observed during recent floristic surveys.
Livermore tarplant (<i>Deinandra bacigalupii</i>)	CNPS 1B	Meadows and alkaline seeps between known only from two occurrences in Alameda County.	Suitable habitat present on site; only known populations occur in the vicinity of the Springtown alkali sink near Livermore. Not observed during recent floristic surveys.
Mt. Diablo buckwheat (<i>Eriogonum truncatum</i>)	CNPS 1A	Dry, exposed clay or sandy substrates within grassland and chaparral. Believed to be extinct.	No suitable habitat present on site; species presumed extinct.
diamond-petaled California poppy (<i>Eschscholzia rhombipetala</i>)	CNPS 1B	Alkaline, clay soils within grassland.	Most local occurrences historic, although species recently rediscovered at Livermore National Lab. Low potential for occurrence; not observed during recent floristic surveys.
fragrant fritillary (<i>Fritillaria liliaceae</i>)	CNPS 1B	Heavy clay or serpentine soils within grassland and foothill woodland; frequently associated within vernal pools.	Marginally suitable habitat present on site. Species not observed during recent floristic surveys.

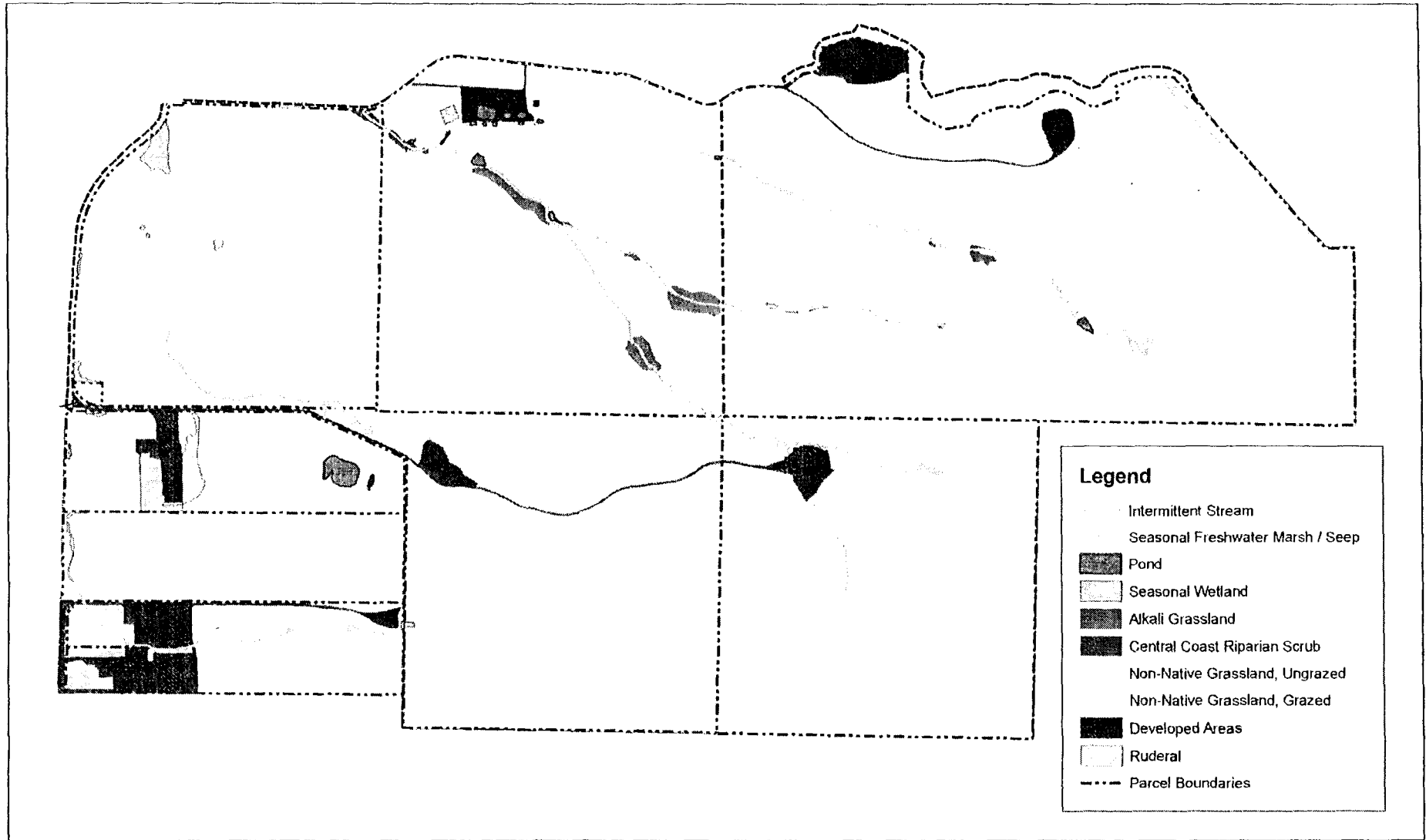
Table 4.7.1. Special-Status Plant and Animal Species, Their Status, and Potential Occurrence on the Fallon Village Project Area, Dublin, California.

Name	*Status	Habitat	Potential Occurrence on Site
showy madia (<i>Madia radiata</i>)	CNPS 1B	Heavy, friable clay or other loose substrates within grassland.	Most local occurrences historic, and only marginally suitable habitat present on site. Species not observed during recent floristic surveys.
Great Valley gumplant (<i>Grindelia camporum</i> var. <i>parviflora</i>)	----	Species recently dropped from CNPS Inventory due to taxonomic revision (CNPS 2001).	N/A
hairless popcornflower (<i>Plagiobothrys glaber</i>)	CNPS 1A	Alkaline meadows and seeps, and coastal salt marshes and swamps.	Species presumed extinct. Recently reported individuals nearby were determined to be the related species <i>P. stipitatus</i> .
rayless ragwort (<i>Senecio aphanactis</i>)	CNPS 2	Alkaline flats within grassland and foothill woodland.	Only local occurrence historic, and only marginally suitable habitat present on site. Species not observed during recent floristic surveys.
saline clover (<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>)	CNPS 1B	Edges of coastal salt marsh, brackish or alkaline seasonal wetlands.	Species recently observed nearby (H. T. Harvey and Associates 2002); marginally suitable habitat present on site. Species not observed during recent floristic surveys.
caper-fruited tropidocarpum (<i>Tropidocarpum capparideum</i>)	CNPS 1A	Once known from alkaline clay soils within grassland. Species considered extinct.	Not observed during recent floristic surveys; species presumed extinct.
State or Locally Protected Species			
White-tailed kite (<i>Elanus leucurus</i>)	SP (nesting)	Nests in trees surrounded by extensive open areas used for foraging.	Suitable foraging and breeding habitat on-site; observed, and expected to breed, on-site.

***SPECIAL-STATUS SPECIES CODE DESIGNATIONS**

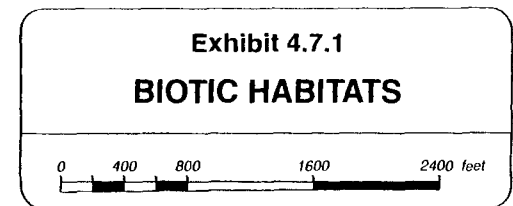
- FE = Federally listed Endangered
- FT = Federally listed Threatened
- SE = State-listed Endangered
- ST = State-listed Threatened
- CSSC = California Species of Special Concern
- CNPS 1A = Plants Presumed Extinct in California

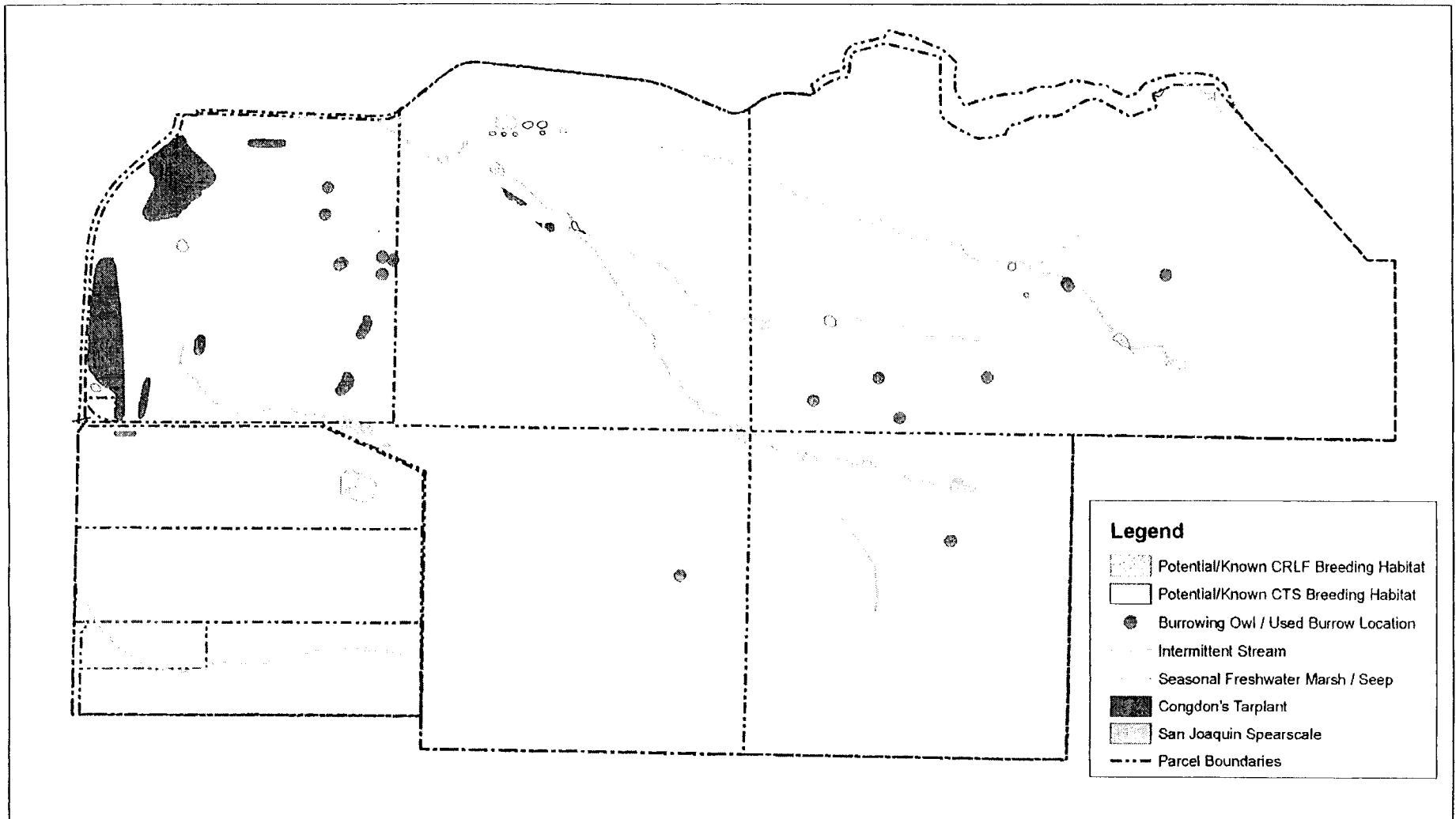
CNPS 1B = Plants Rare, Threatened, or Endangered in California and Elsewhere
CNPS 2 = Plants Rare, Threatened, or Endangered in California but more common
Elsewhere
SP = State fully protected



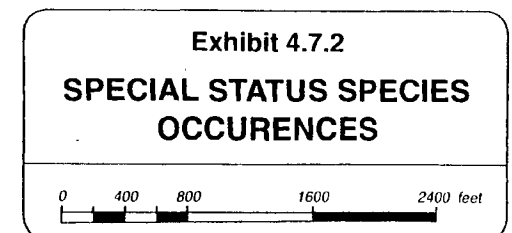
SOURCE: WRA Environmental Consultants, August 2005.

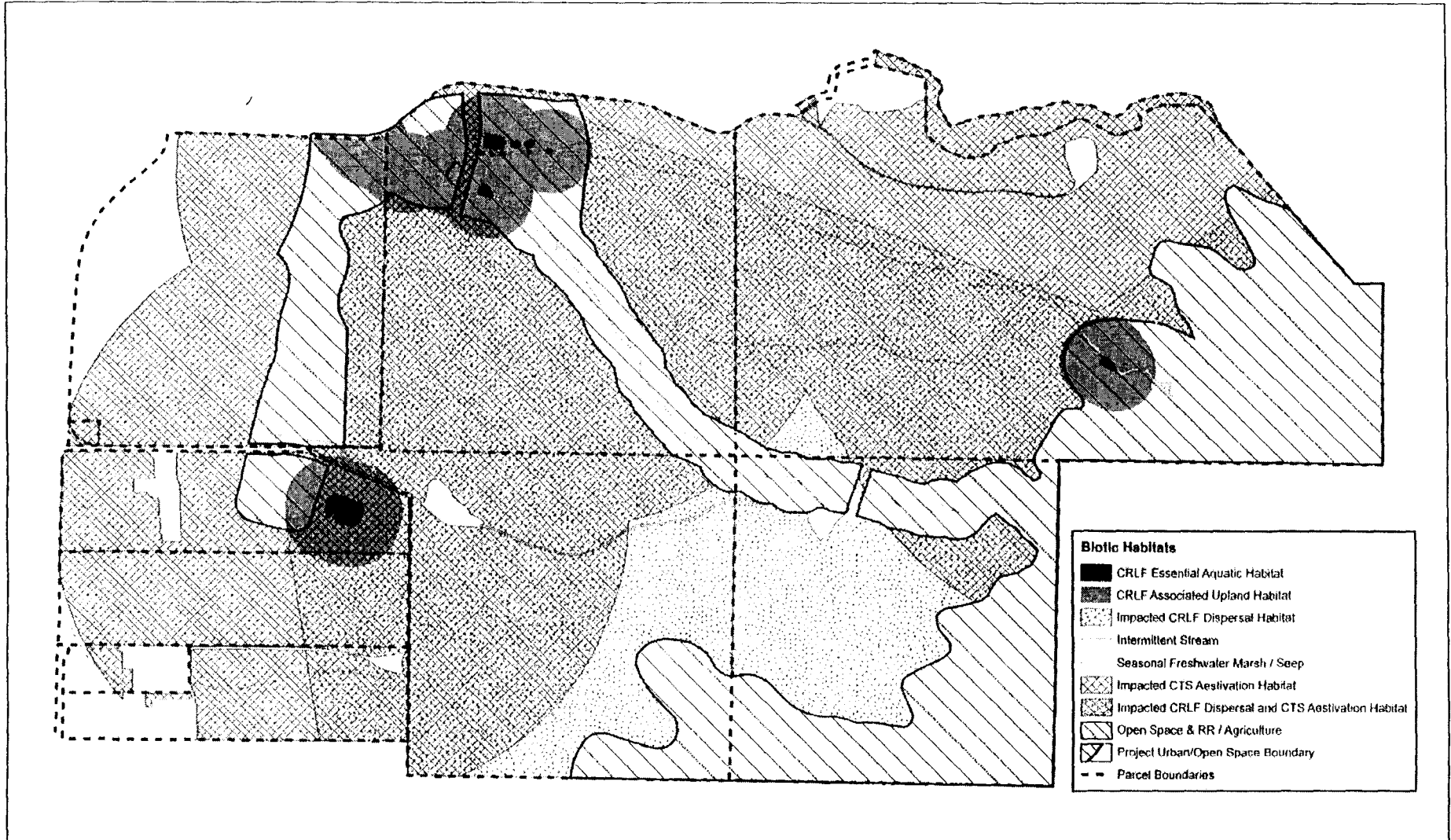
**CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT**





SOURCE: WRA Environmental Consultants, August 2005.

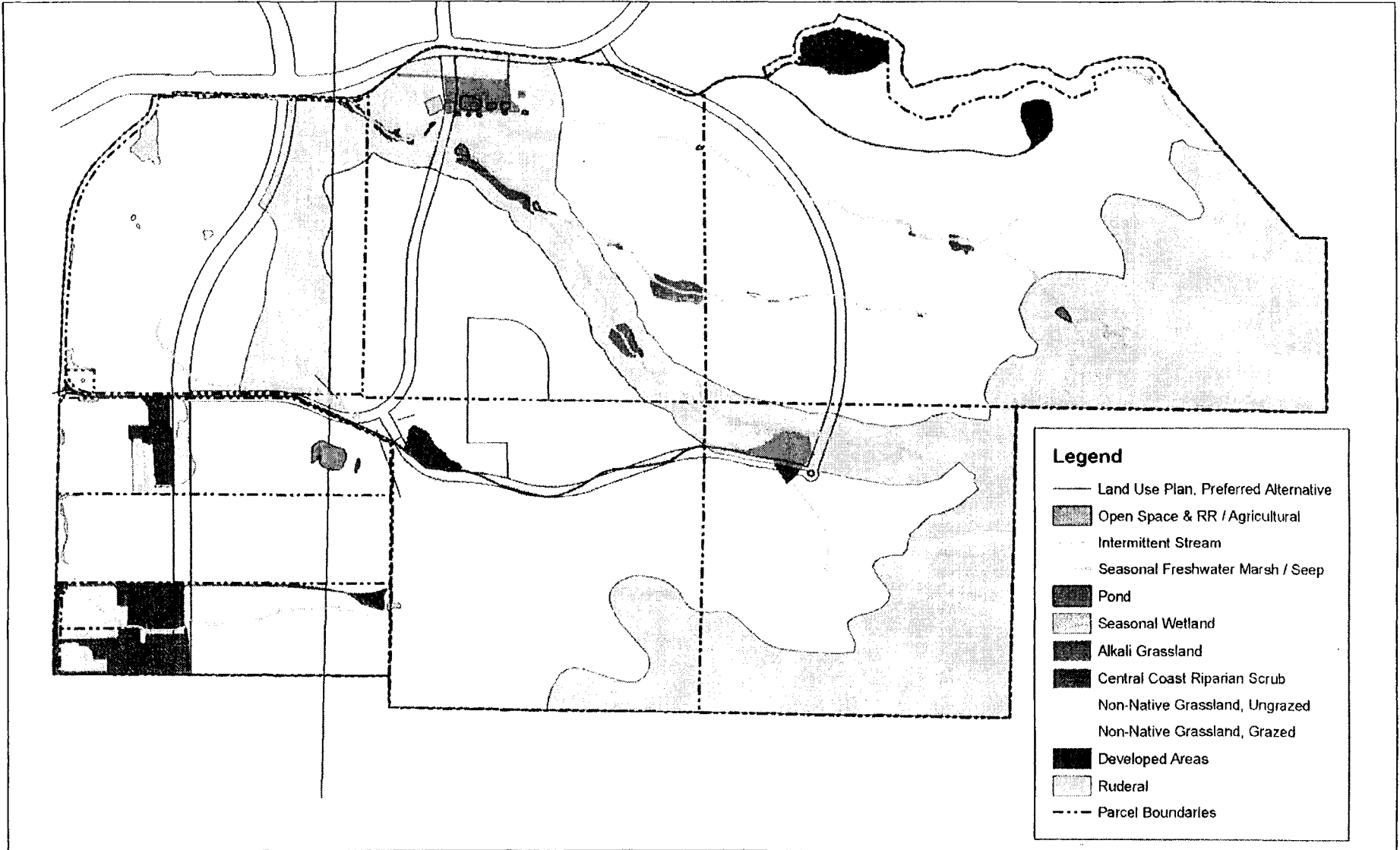




SOURCE: H.T. Harvey & Associates, Ecological Consultants, 22 April 2005.

Exhibit 4.7.3
CALIFORNIA RED-LEGGED FROG (CRLF)
AND CALIFORNIA TIGER SALAMANDER (CTS)
HABITATS

0 400 800 1600 2400 feet



SOURCE: WRA Environmental Consultants, August 2005.

Exhibit 4.7.4
ROAD PLAN OVERLAID ON
BIOTIC HABITAT MAP

4.8 VISUAL RESOURCES

INTRODUCTION

Visual quality impacts of the project were analyzed in Chapter 3.8 of the Eastern Dublin EIR. No supplemental impacts were identified in the 2002 SEIR (2002 SEIR, V.2, pp 25-27). This section of the DSEIR evaluates the potential of changes in the proposed Project since the earlier EIRs to impact scenic resources, including scenic highways near the site and to degrade the existing visual quality of the Project area.

ENVIRONMENTAL SETTING

Overview

The Eastern Dublin EIR notes that the Eastern Dublin area is visually dominated by expanses of grasslands and rolling hills. Generally, the southerly portion of the EDSP area is flat, open and covered with grasslands and agricultural field crops. In the northerly portions, steeper foothills from canyons frame canyons settled with farms and ranchettes. In 1993, the EDGPA/EDSP planning area was undeveloped at urban levels and conveys a distinct rural atmosphere characteristic of the inland coastal valleys of Northern California.

The Eastern Dublin EIR contains photographs of existing visual conditions of the Eastern Dublin planning area as of 1993.

The Fallon Village Project area presently appears as described in the Eastern Dublin EIR, which is flatter topography on the southern portion of the Project area near the I-580 freeway transitioning to lower foothills in the approximate center of the Project area and steeper hills along the northerly portion of the area. A number of scattered farmsteads and agricultural buildings are located in the center band of the Project area as previously described in the Eastern Dublin EIR.

Exhibits 4.8.1 and **4.8.2** are recent photographs of portions of the Project area adjacent to the I-580 freeway, which is identified as a Scenic Corridor in the Dublin General Plan.

Regulatory framework

Protection of visual resources in the eastern Dublin area is provided by the following:

Dublin General Plan. Policies to protect visual resources adopted as part of the Dublin General Plan are as follows.

Land Use Element (Eastern Extended Planning Area) Policy 2.1.4. C. 2. Proposed site grading and means of access will not disfigure the ridgelines.

Parks and Open Space Element (Eastern Extended Planning Area) Policy 3.1 C. Continue requiring reservation of steep slopes and ridges as open space as a condition of subdivision map approval.

Land Use and Circulation Element. Policy 5.6 A. Incorporate County-designated scenic routes and the proposed Fallon Road extension, in the General Plan as adopted City-designated scenic routes and work to enhance a positive image of Dublin as seen by through travelers.

Land Use and Circulation Element. Policy 5.6 B. Exercise design review of all projects visible from a designated scenic route.

The 2002 General Plan update also contained a Development Elevation Cap (DEC) restricting development in the Eastern Extended Planning Area, of which the Project area is a part. The purpose of the DEC is to identify geographic areas of urban development potential where orderly and logical growth can occur without major impacts to visually sensitive ridglands and biologically sensitive habitat areas, or to public services and infrastructure. The General Plan, for the purpose of the DEC, defines the term "urban development" as residential and non-residential development at or below the 770-foot elevation line. Reservoirs, water lines, grading, or other infrastructure and construction activities necessary for serving or establishing such urban development may be located at, or occur above, the 770 foot elevation.

Alameda County Scenic Route Element. In May, 1966, Alameda County adopted a Scenic Route Element of the County General Plan. The Element identifies I-580 as a scenic route within Alameda County. The Scenic Route Element has been incorporated by reference into the City of Dublin General Plan. The Element identifies scenic rights-of-way, scenic corridors and areas extending beyond scenic corridors as being major elements in the Scenic Route Element.

Scenic rights-of-way include paved roadways and adjacent lands required for roadway protection, storm drain facilities, public utilities, pedestrian travel and roadside plantings. Rights-of-way may also include roadside rest areas, bicycle paths and hiking trails.

Adjacent to the Project area, I-580 has been identified as a Scenic Route.

The Element contains the following principles that apply to scenic route rights-of-way.

- Design scenic routes to minimize grading in rights-of-way;
- Design scenic routes for leisurely rather than high speed travel;
- Enhance scenic route rights-of-way through outstanding design of highway structures;
- Landscape rights-of-way of existing and proposed routes;
- Utilize scenic route identification signs.

Scenic Corridors are those areas extending beyond the scenic route rights-of-way that are of sufficient quality to be acquired by state or local jurisdictions, or areas to which development controls are needed for the purpose of protecting and enhancing relatively nearby views or maintaining unobstructed distant views along the scenic route. The following principles apply to scenic route corridors

- Provide for normal uses of land and protect against unsightly features;
- Locate transmission towers and lines outside of scenic route corridors when feasible;

- Underground utility distribution lines when feasible; make overhead lines inconspicuous;
- Establish architectural and site design review;
- Use landscaping to increase scenic qualities of scenic route corridors;
- Acquire public ownership of open space easements or development rights of open space areas having outstanding scenic values;
- Provide and encourage continuing maintenance of scenic route corridors;
- Limit highway business and commercial development to emergency needs on scenic rural routes.

Principles applicable to areas beyond scenic route corridors include:

- Preserve and enhance natural scenic qualities in areas beyond the scenic corridor;
- Provide for normal uses of land but limit overhead utilities and outdoor advertising structures.

Eastern Dublin Specific Plan. Section 6.3.4 of the Eastern Dublin Specific Plan contains the following goals, policies and action programs regarding visual resources.

Visual Resource Goal: To establish a visually distinctive community which preserves the character of the natural landscape by protecting key visual elements and maintaining views from major travel corridors.

Policy 6-28: Preserve the natural open beauty of the hills and other visual resources, such as creeks and major stands of vegetation.

Policy 6-29: Development is not permitted on the main ridgeland that borders the planning area to the north and east, but may be permitted on the foreground hills and ridgeland. Minor interruptions of views of the main ridgeline by individual building masses may be permitted in limited circumstances where all other remedies have been exhausted.

Policy 6-30: Structures built near designated scenic corridors shall be located so that views of the backdrop ridge (identified in Figure 6.3 as “visually sensitive ridgeland-no development”) are generally maintained when viewed from scenic corridors.

Policy 6-31: High quality design and visual character will be required for all development visible from designated scenic corridors.

Policy 6-32: Visual impacts of extensive grading shall be reduced by sensitive engineering design, by using gradual transitions from graded areas to natural slopes and be revegetation.

Policy 6-33: Site grading and access roads shall maintain the natural appearance of the upper ridgeland or foreground hills within the viewshed of travelers along I-580, Tassajara Road, and the future extension of Fallon Road. Streets should be aligned to follow natural contours of the hills. Strait, linear roads of streets across the face of hillsides shall be avoided.

Policy 6-34: Alterations of existing natural contours shall be minimized. Grading shall maintain the natural topographic contours as much as possible. Grading beyond actual development areas shall be for remedial purposes only.

Policy 6-35: Extensive areas of flat grading are not appropriate in hillside areas and should be avoided. Building pads should be graded individually or stepped, whenever possible. Structures and roadways should be designed in response to the topographic and geotechnical conditions.

Policy 6-36: Building design shall conform to the natural land form as much as possible. Techniques such as multi-level foundations, rooflines which complement the surrounding slopes and topography, and variations in vertical massing to avoid a monotonous or linear appearance should be used. In areas of steep topography, structures should be sited near the street to minimize required grading.

Policy 6-37: Graded slopes shall be re-contoured to resemble existing landforms in the immediate area. Cut and graded slopes shall be revegetated with native vegetation suitable to hillside environments.

Policy 6-38: The height of cut and fill slopes shall be minimized to the greatest degree possible. Grades for cut and fill slopes should be 3:1 or less whenever feasible.

Action Program 6Q: The City should officially adopt Tassajara Road, I-580 and Fallon Road as designated scenic corridors, adopt a set of scenic corridor policies and establish review procedures and standards for projects within the scenic corridor viewshed.

Action Program 6R: The City should require projects with potential impacts on scenic corridors to submit detailed visual analysis with development project applications. Applicant will be required to submit graphic simulations and / or sections drawn from affected travel corridor through the parcel in question, representing typical views of the parcel from these scenic corridor. The graphic depiction of the location and massing of the structure and associated landscaping can then be used to adjust the project design to minimize the visual impact.

Action Program 6S: Establish techniques for implementing the long term preservation of visually significant portions of hillsides.

Eastern Dublin Scenic Corridor Policies and Standards. In 1996, the City of Dublin adopted scenic policies and standards for the Eastern Dublin area, known as the *Eastern Dublin Scenic Corridor Policies and Standards*. The purpose of this document is to implement EDSP visual protection polices as related to individual development projects.

The document contains the following overall implementing policies for Eastern Dublin scenic corridors. Scenic corridors near the Project area include Fallon Road and the I-580 freeway.

1. Maintain a sense of place for Eastern Dublin with relation to natural landforms and topography.

2. Allow the traveler along a Scenic Corridor to experience the varied features of the landscape.
3. Assure that development along the Scenic Corridors is well planned and sensitively sited to respect natural topography.
4. Achieve high quality design and visual character for all development visible for all development visible from designated Scenic Corridors, generally within 700 feet of a Scenic Corridor.
5. Assure that landscaping adjacent to the Scenic Corridor harmonizes with the scenic environment.

The following Policies and Standards apply to the Fallon Village area, which is the primary portion of the Project area covered by the *Eastern Dublin Scenic Corridors Policies and Standards* document.

Policy 12: Establish a secondary Gateway to Eastern Dublin, emphasizing foreground hills and rural heritage.

Standard 12.1: Use building setbacks to create a Gateway at Fallon Road and Dublin Boulevard, while remaining in scale with the adjacent residential and neighborhood development and in character with the semi-rural surroundings.

Standard 12.2: From Viewpoint (on Fallon Road south of the foreground hills), maintain open views of the foreground hills.

Policy 13: Provide a transition from the commercial and residential development to the open spaces to the north.

Standard 13.1: Reinforce visual connections to foreground hills and to the community park.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR identifies a number of potentially significant impacts related to implementation of the EDSP in visual resources. These include:

Impact 3.8/ A, Standardized "Tract" Development within the project area, which did not respond to natural site conditions. Adherence to Mitigation Measure 3.8/1.0, which requires consistency with EDSP Goal 6.3.4 reduces this impact to a level of insignificance.

Impact 3.8/ B, Alteration of Rural and Open Space Visual Character was identified as a significant and unavoidable impact even with adherence to Mitigation Measure 3.8/2, which would implement the EDSP plan with retention of predominant natural features and encourages a sense of place in Eastern Dublin.

Impact 3.8/ C, Obscuring Distinctive Natural Features identifies the potential of EDSP buildings and related improvements to obscure or alter existing features and reduce the visual uniqueness of the Eastern Dublin area. Implementation of Mitigation Measure

3.8/3.0, which would implement EDSP Policy 6-28 reduces this impact to a level of insignificance.

Impact 3.8/D, Alteration of Visual Quality of Hillsides notes that grading and excavation of building sites in hillside areas would compromise the visual quality of the EDSP area. Mitigation Measures 3.8/4.0 through 3.8/4.5 are included in the Eastern Dublin EIR to reduce Impact 3.8/D to a level of insignificance. These mitigation measures require implementation of EDSP Policies 6-32 through 6-38.

Impact 3.8/E, Alteration of Visual Quality of Ridges states that structures built in proximity to ridges may obscure or fragment the profile of visually sensitive ridgelines. Implementation of Mitigation measures 3.8/5.0 through 3.8/5.2 would reduce this impact to a less-than-significant level. These measures require the implementation of EDSP Policies 6-29 and 5-30 and General Plan Amendment Guiding Policy E.

Impact 3.8 F, Alteration of Visual Character of Flatlands is identified as a significant and unavoidable impact.

Impact 3.8/G, Alteration of the Visual Character of Watercourses which involves the potential for elimination of the visibility and function of watercourses would be mitigated to a level of insignificance by adherence to Mitigation Measure 3.8/6.0, which required future development to implement EDSP Policy 6-39.

Impact 3.8/H, Alteration of Dublin's Visual Identity as a Freestanding City, is mitigated to a level of insignificance by implementation of the EDSP land use plan (Mitigation Measure 3.8/5.0).

Impact 3.8/I, Scenic Vistas, which includes alteration of the character of existing scenic vistas and important sightlines. With implementation of Mitigation Measures 3.8/7.0 and 3.8/7.1, this impact would be reduced to a level of insignificance. Mitigation Measure 3.8/7.0 requires adherence to EDSP Policy 6-5 and Measure 3.8/7.1 requires the City to conduct a visual survey of the EDSP site and to identify and map viewsheds of scenic vistas.

Impact 3.8/J, Scenic Routes, identifies that urban development of the EDSP will significantly alter the visual experience of travelers on scenic routes in Eastern Dublin. Implementation of Mitigation Measures 3.8/8.8 and 8.1 will reduce this impact to a level of insignificance. These two measures require implementation of EDSP Action Programs 6Q and 6R.

The Eastern Dublin EIR also contains Figure 3.8-H, Visually Sensitive Ridgelines, depicting portions of the Eastern Dublin area that contains ridges and ridgelines which are considered to be visually sensitive. The figure in the Eastern Dublin EIR is the same as Figure 6.3 (Environmental Constraints) in the Eastern Dublin EIR. These two figures depict lower and hillside areas located closer to the I-580 freeway with topographic elevations generally ranging between approximately 460 and 480 feet above sea level. The two figures identify these areas as a "Visually Sensitive Ridgelines—restricted development."

North and east of the lower hills are higher ridges and ridgelines with topographic elevations around 900 feet above sea level. The Eastern Dublin EIR and EDSP identify these features as "Visually Sensitive Rdgelines—no development." These various scenic resources are depicted on **Exhibit 4.8.3**.

The Initial Study for the 2002 SEIR determined that the 2002 Development did not result in new or more significant impacts than identified in the Eastern Dublin EIR (2002 SEIR Initial Study, pp. 24-25).

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The proposed Project contains land use changes at both the Program level and Development (Project) level that could have an impact on Visual Resources. Proposed land use changes associated with the Project are detailed in Section 3.0 of the DSEIR, Project Description.

Significance Criteria. The following criteria have been used to identify the significant visual impacts, if the following would occur to a substantially greater degree at either the Program or Development levels than was analyzed in the Eastern Dublin EIR:

- If the Project would have a substantial adverse impact on a scenic vista;
- If the Project would damage scenic resources, including, but not limited to trees, rock outcroppings and historic buildings within a scenic highway.

Supplemental Program-Level Impacts. The Project proposes land uses changes within the Project area which could result in potentially significant impacts to visual resources, Potential supplemental impacts are identified as follows.

Impacts to scenic vistas

The proposed Project does not include major land use changes for portions of the Project area adjacent to scenic corridors, specifically the I-580 freeway. Existing Eastern Dublin General Plan and Specific Plan land use designations of General Commercial and Industrial along the north side of the I-580 freeway would be changed to a combination of commercial, office and industrial land uses as shown on **Exhibit 3.7**. The "mid-ground" lands within the Project area, approximately 57 acres of land, would be changed from Rural Residential / Agriculture to a combination of commercial, office, and industrial uses. Also, approximately 27 acres of land north of the existing Rural Residential / Agricultural area would be changed from Low Density Residential to Medium Density Residential land use designations. The general type and massing of buildings which would be located in the rolling, central hillsides are not significantly different than that analyzed in the Eastern Dublin EIR. Due to their elevation they would continue to limit views of the primary ridgeline. The type and massing of buildings that would be located along the north side of the I-580 freeway would not be significantly different than analyzed in the Eastern Dublin EIR, although very low density development in the existing Stage 1 Development Plan would be replaced by more urban uses.

As contained in the Eastern Dublin EIR, adherence to Mitigation Measure 3.8/5.0 reduces this impact to a level of insignificance. This Mitigation Measure requires the City to conduct a visual survey of the Eastern Dublin site and identify and map viewsheds of scenic vistas. This measure has been satisfied through preparation of the *Eastern Dublin Scenic Corridor Policies and Standards* document. Mitigation Measure 3.8/8.1 requires individual development projects adjacent to scenic corridors to be subject to detailed visual analyses to ensure that all applicable General Plan and EDSP policies are met.

Future individual projects within the Project area will be reviewed by the City of Dublin through the Site Development Review (SDR) process to ensure compliance with applicable policies and standards contained in this document.

Scenic resources

A portion of the proposed Project includes an amendment to the EDSP to modify Policy 6-29 and Figure 6.3 dealing with Visually Sensitive Ridglands, which are scenic resources and are visible from I-580, a scenic corridor. Specifically, the amendment would delete portions of the lower ridglands as "Visually Sensitive Ridglands." The two exhibits that show before and after conditions regarding this amendment are shown on Exhibits 4.8.3a and 4.8.3b.

An analysis of this request shows that the deletion of the lower ridglands would not affect the ridglands located between the proposed extension of Dublin Boulevard and Central Parkway and that would be highly visible from both Fallon Road and the I-580 freeway. Deletion of the mid-ground Visually Sensitive Ridglands north of the proposed extension of Central Parkway would be replaced by the Central Open Space Corridor that would provide a visual corridor northeast to the main ridglands that form the north and easterly Project area boundaries.

The City of Dublin does not support the applicant request to delete the Visually Sensitive Ridgeland located at the terminus of the proposed Central Parkway extension. This ridgeland provides visual relief between the I-580 freeway to the south and the main ridgeland to the north and would serve to screen proposed development in the Project area north of this ridgeland area. Therefore, only two Visually Sensitive Ridglands would be affected by approval of the proposed Project.

The proposed amendment would also provide a more accurate definition of the "Visually Sensitive Ridglands-No Development," which is the main ridge that forms the northerly and easterly boundary of the Project area.

The depictions of these two sets of visually sets of ridglands contained in the Eastern Dublin EIR and EDSP were originally drawn on a USGS topographic base map. More recent mapping, based on surveyed topographic information, includes more accurate locations of these ridge areas within the Project area. The proposed Amendment to refine the definition of Visually Sensitive Ridglands would therefore not result in a significant supplemental impact.

Therefore, *no supplemental impacts* have been identified in this document at the Program level beyond those than disclosed in the Eastern Dublin EIR.

Supplemental Development-Level Impacts. A Stage 2 Development Plan, including a vesting tentative subdivision map and other related applications, has been filed for the northerly one-half (approximately) of the Fallon Village Project area. This portion of the Project area exhibits steeper topography than the flatter southern portion and contains main ridgeland along the northerly and easterly portions of the area identified as visually sensitive ridgeland as discussed above. Grading necessary to implement the Stage scenic resources are discussed below.

Scenic vistas

The proposed Stage 2 Development Plan area is located on the approximate northerly one-half of the Fallon Village Project area. This portion of the Project area is largely blocked by intervening hills in the approximate center of the Project area so views of the development portion of the Project would be distant from scenic corridors (the I-580 freeway to the south) and limited by the presence of intervening hills in the central portion of the Project area.

Exhibit 4.8.4 includes an existing and simulated view of the Stage 2 Development Plan from the vantage point of the top of the Fallon Road/I-580 overpass looking northeast. The simulation shows that a band of urban development would be visible from the top of the overpass, but the view of development would be largely blocked by lower intervening hills. The primary view from the motorist from this vantage point would remain the undeveloped rural fields on the north side of the I-580 freeway. Views of the proposed Stage 2 portion of the Project would be similar to that of other portions of Eastern Dublin that have been urbanized pursuant to the EDSP, specifically Dublin Ranch to the west.

Exhibit 4.8.5 shows a simulation of proposed Project development on views from public areas of the Dublin Ranch project immediately west of the Fallon Village Project area. The exhibit shows that currently vacant hillsides and meadows as viewed towards the south and east would be converted to urban uses, but that scenic vistas from the vantage point would not be significantly blocked nor would views of distant hillsides in the Livermore and Pleasanton areas be blocked or impeded.

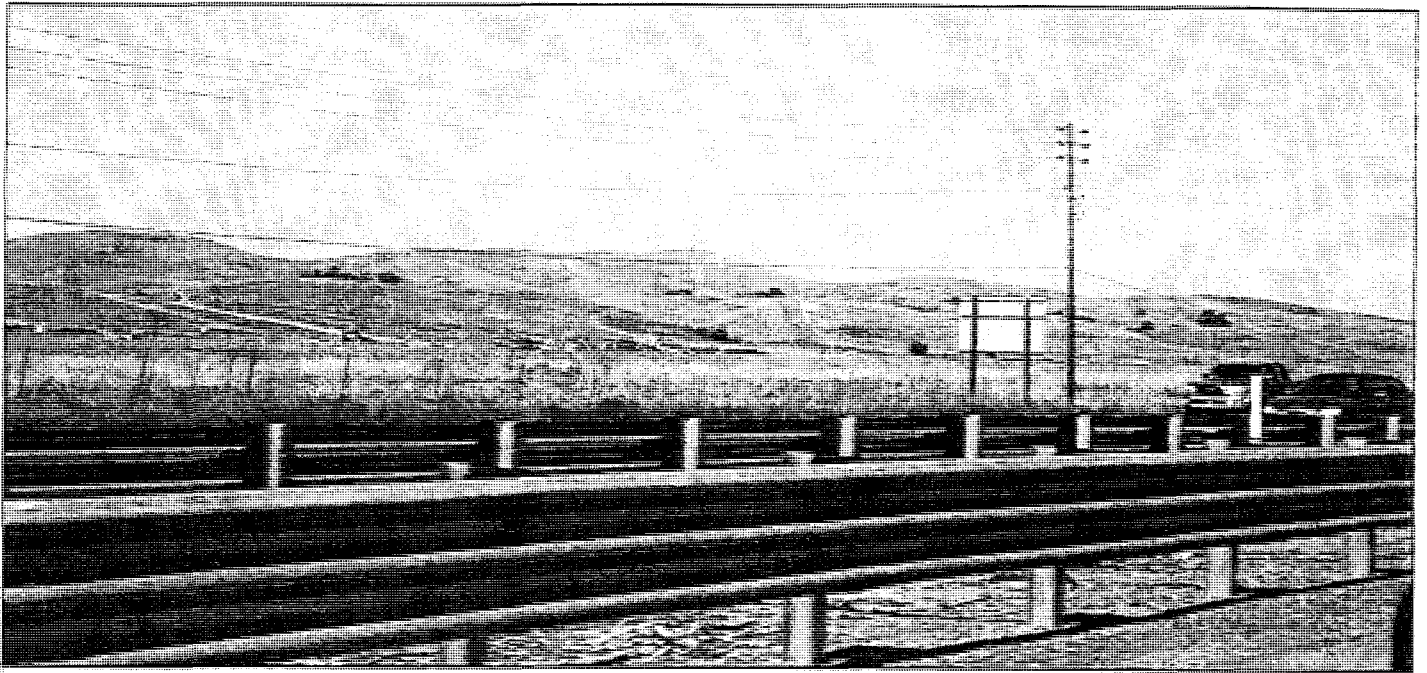
Exhibit 4.8.6 shows the proposed development of the Stage 2 Development Plan from the approximate existing northerly terminus of Croak Road near the southerly edge of the Stage 2 Development Plan area. The exhibit shows that grading and development would occur on the lower portions of the main ridgeland, however, as shown on **Exhibit 4.8.4**, visual impacts of the lower elevations of the Project area would not be visible from this distant vantage point. Overall, impacts to scenic vistas for the proposed Stage 2 Development Plan would be approximately the same as other portions of Eastern Dublin.

As shown in the photosimulations, proposed development on and adjacent to sensitive ridgeland would not result in Project structures or improvements being silhouetted against the sky. Adherence to other Eastern Dublin EIR Mitigation Measures and EDSP Policies requiring grading to match existing natural contours and revegetation of graded areas will ensure that there would be *no supplemental impacts* related to scenic vistas.

Scenic resources

As identified above, grading into scenic resources, in this case, Visually Sensitive Ridgeland, is proposed as part of the Project. The proposed Stage 1 Development Plan

proposes changes to the extent of development in the northerly portion of the Project area. This impact has been analyzed I the Project portion of this DSEIRR section and *no supplemental impact* was identified.

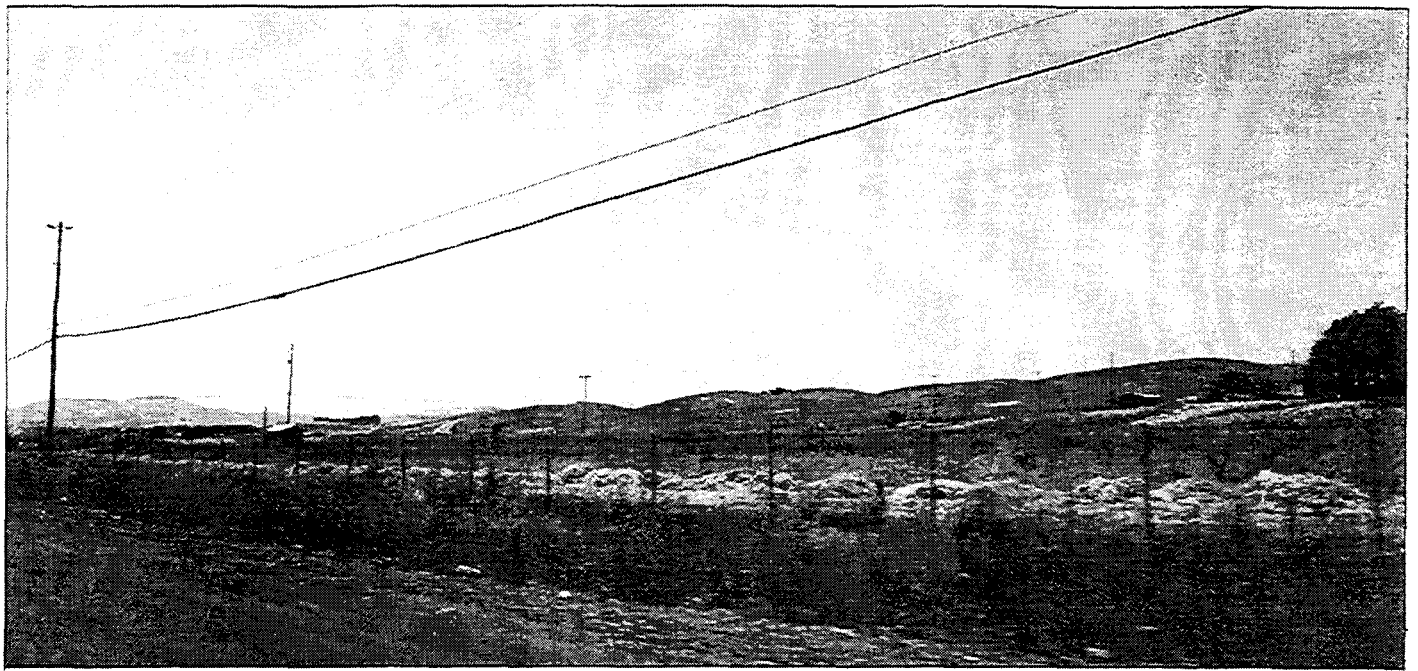


Blue Ox Associates, Berkeley, California B-17-2005

SOURCE: *Environmental Vision*, 6-27-2005.

CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

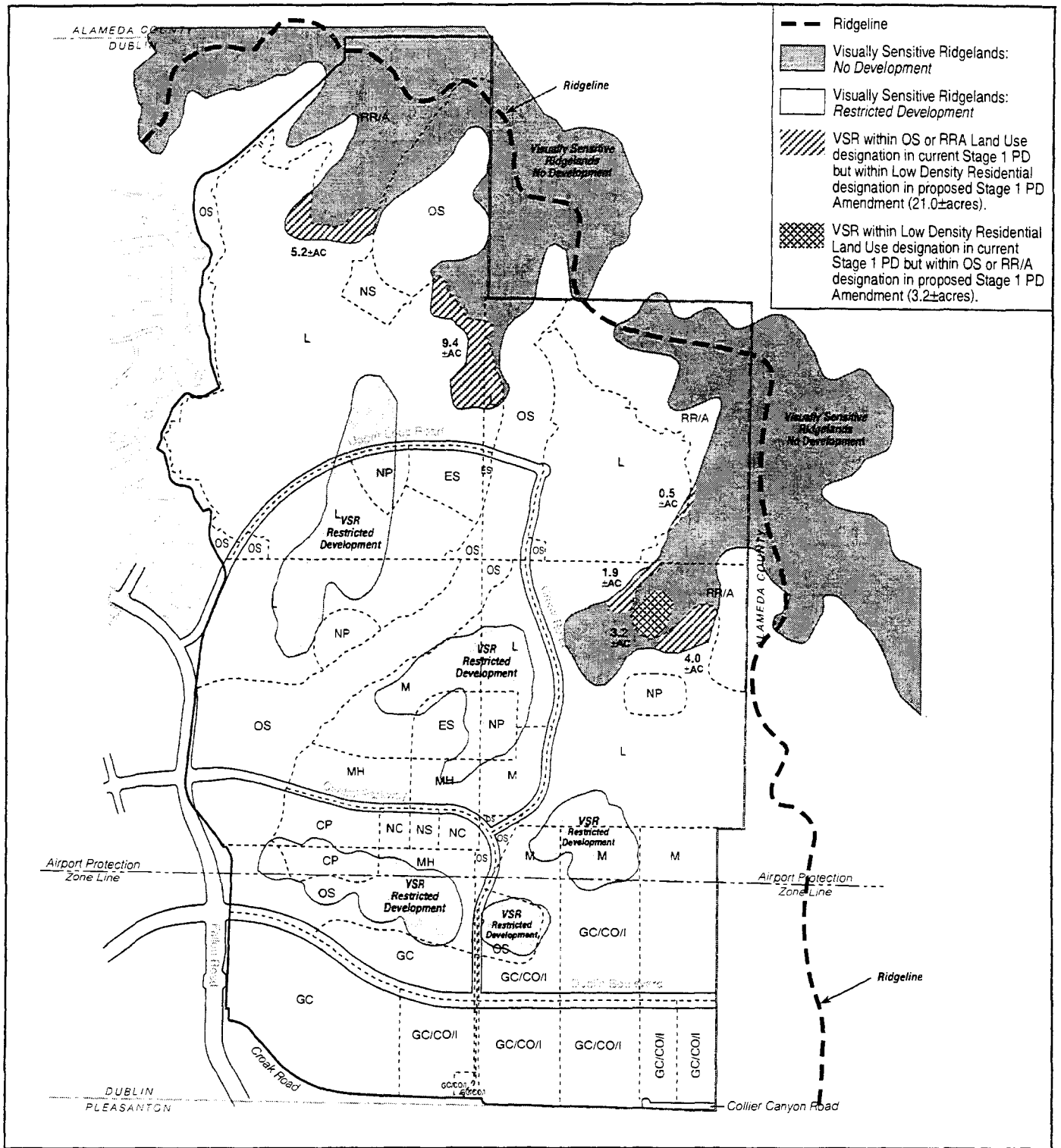
Exhibit 4.8.1
PROJECT SITE FROM I-580,
LOOKING EAST



Blute O'Associates, Berkeley, California 8-17-2005

SOURCE: *Environmental Vision*, 6-27-2005.

Blue Ox Associates, Berkeley, California 8-18-2005



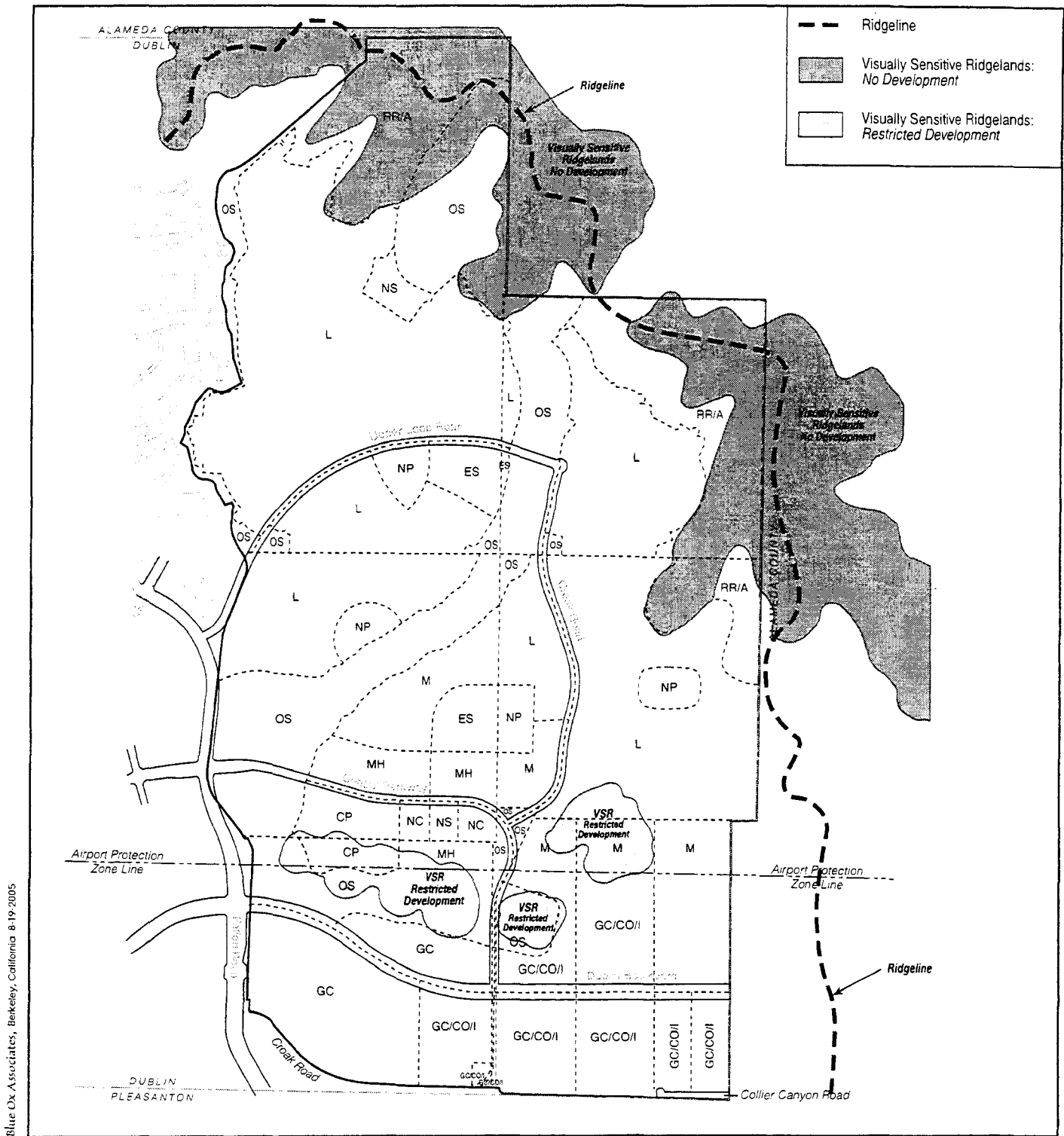
SOURCE: MacKay & Soms, 6-30-2005.

CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Exhibit 4.8.3a
EXISTING
SCENIC RIDGELAND
RESOURCES

0 400 800 1600 2400 feet





Blue Ox Associates, Berkeley, California 8-19-2005

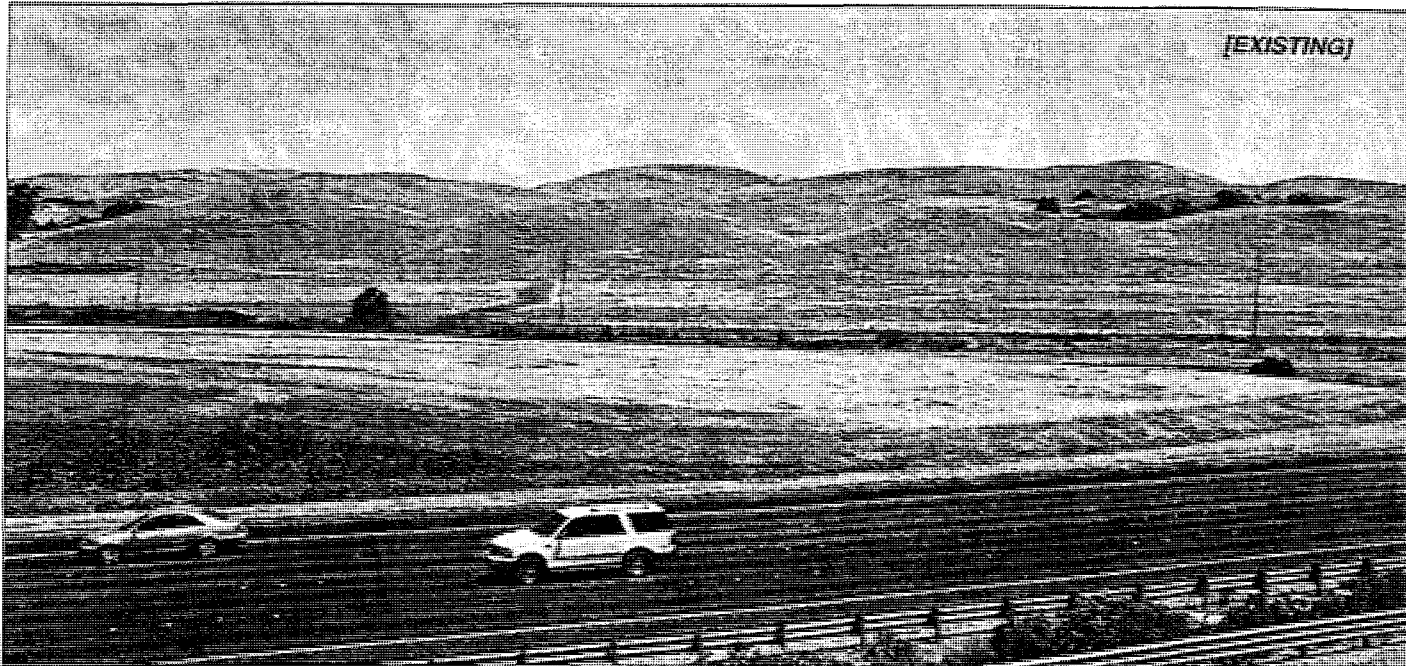
SOURCE: MacKay & Soms, 8-9-2005.

**Exhibit 4.8.3b
PROPOSED
SCENIC RIDGELAND
RESOURCES**

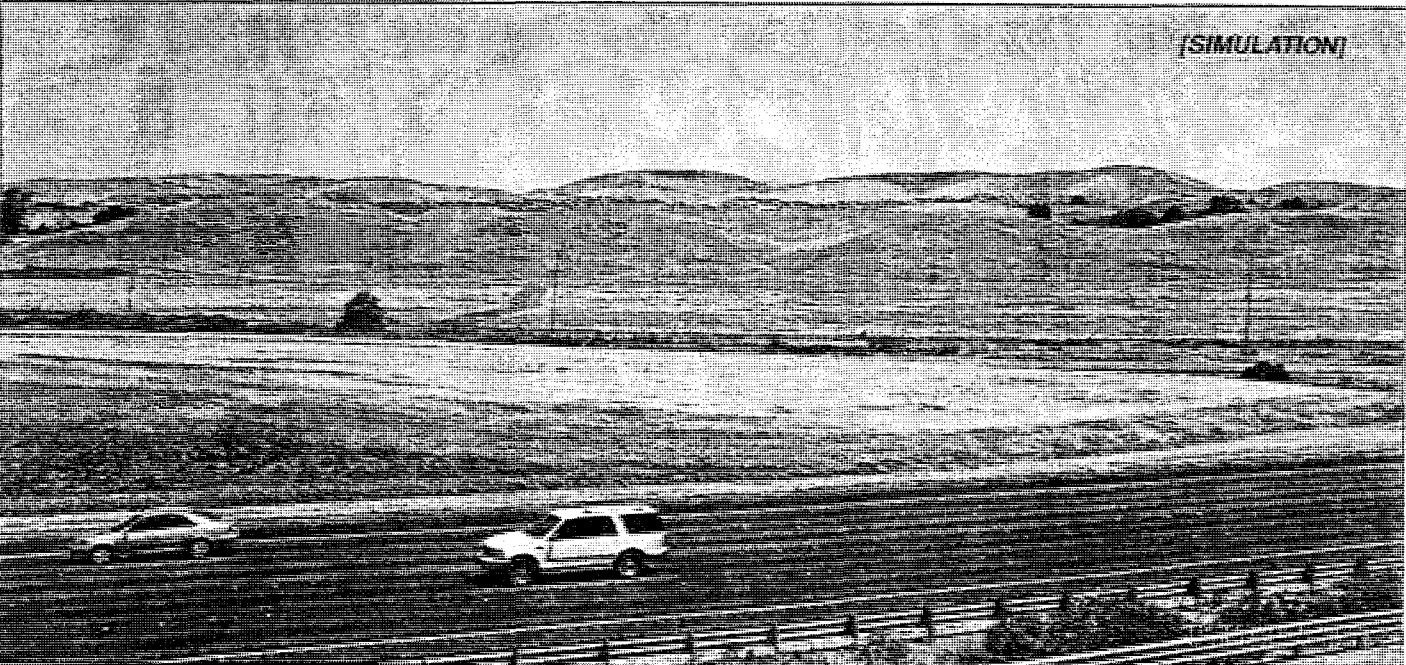
0 400 800 1600 2400 feet



[EXISTING]



[SIMULATION]

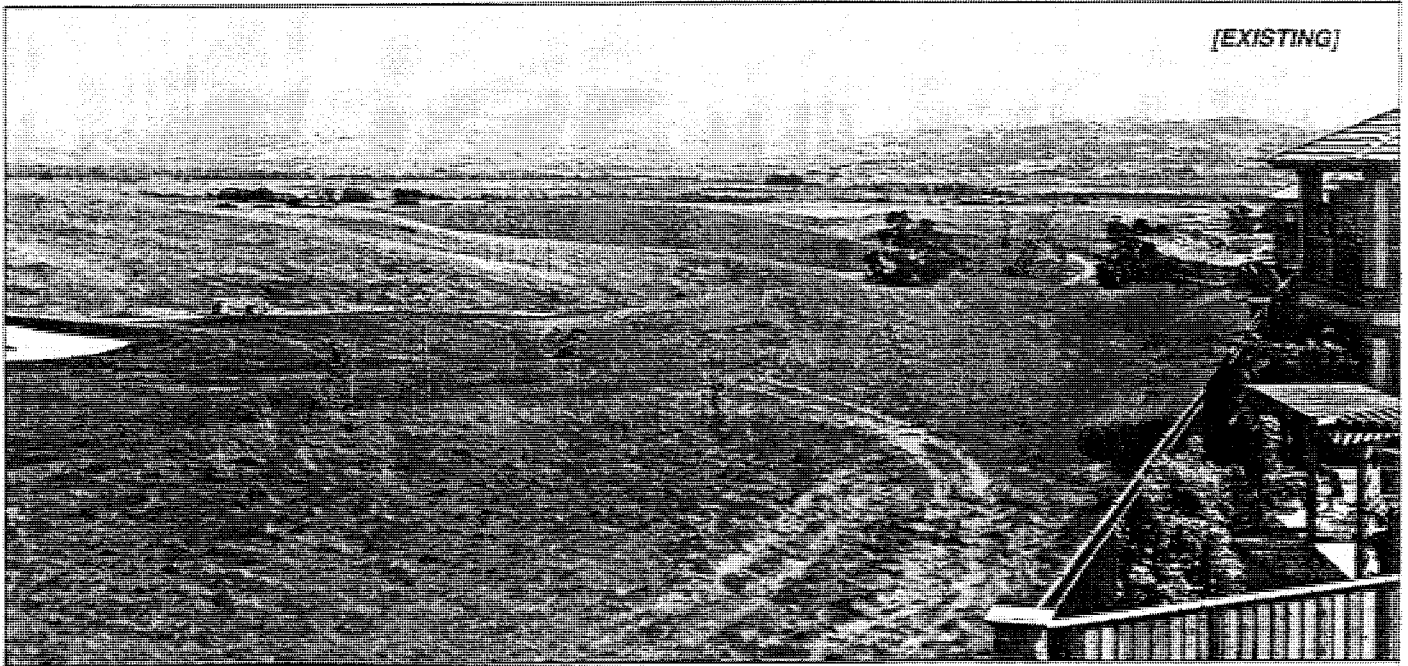


Blair Dlx Associates, Berkeley, California 8-17-2005

SOURCE: *Environmental Vision*, 8-16-2005.

Exhibit 4.8.4
LOOKING NORTHEAST
FROM I-580 FALLON ROAD
OVERCROSSING

[EXISTING]

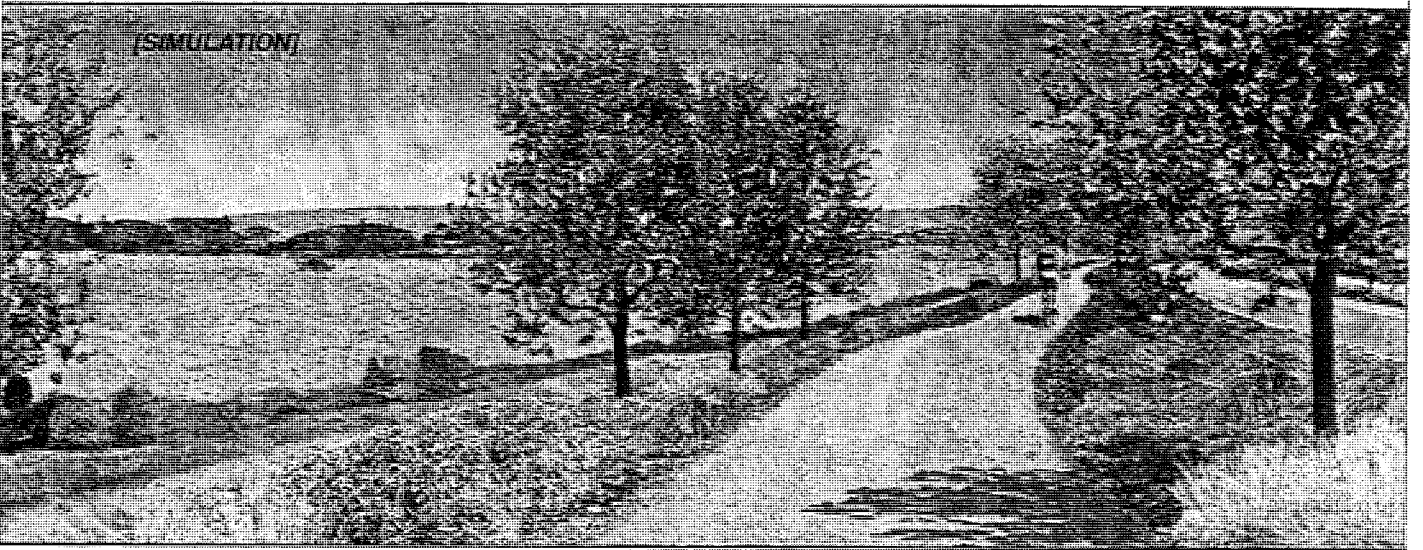
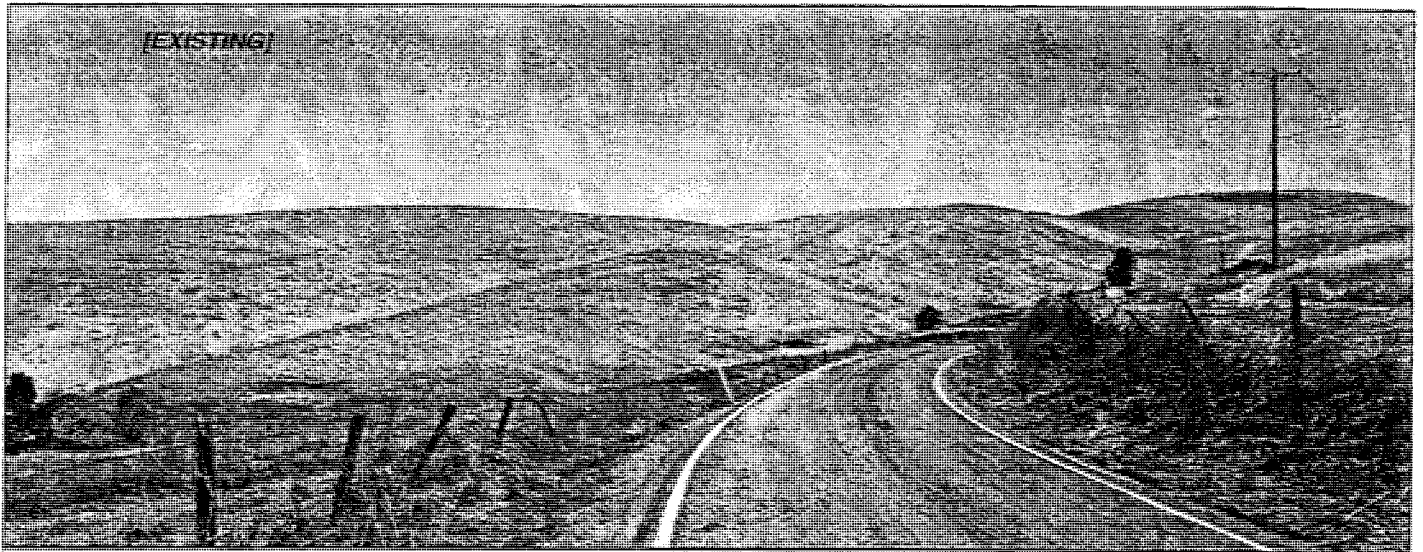


[SIMULATION]



Blue Oak Associates, Berkeley, California 8-17-2005

SOURCE: *Environmental Vision*, 7-22-2005.



Blue Ox Associates, Berkeley, California 8-18-2005

SOURCE: *Environmental Vision*, 8-17-2005.

4.9 CULTURAL RESOURCES

INTRODUCTION

Cultural (archaeological and historic) resources on the site were analyzed in Chapter 3.9 of the Eastern Dublin EIR. They were reviewed in the Initial Study for the 2002 SEIR and determined not to present any new potentially significant impact compared with the Eastern Dublin EIR, and were therefore not reassessed in detail in the 2002 SEIR. This supplement examines whether the proposed Project, revised CEQA Guidelines and case law for treatment of archeological and historic resources, respectively, and new cultural resources surveys conducted since preparation of the 2002 SEIR have resulted in any substantially changed potential cultural resources impacts since certification of the Eastern Dublin EIR.

This section of the DSEIR is based on a cultural analysis of the Project area completed by Holman & Associates in June 2005.

ENVIRONMENTAL SETTING

Tri-Valley and Arroyo Mocho subregions

Regional cultural resources conditions in the Tri-Valley and Arroyo Mocho areas are described on pages 3.9-1 and 3.9-3 of the Eastern Dublin EIR. As described in that document, the site area was occupied by Ohlone peoples, however in the sixteen surveys that were conducted in the Project area prior to 1988, only one found evidence of Native American archaeological resources. Historic uses of the area were primarily ranching and dry farming.

Project conditions

Archaeological and historic resources of the Eastern Dublin area are described on pp. 3.9-3 through 3.9-6 of the Eastern Dublin EIR. A field inspection of the Eastern Dublin area (including the Fallon Village area) and surrounding lands was originally conducted in July 1988. That survey identified six prehistoric sites that contain cultural materials, some of which were associated with midden deposits, and an additional four locations where isolated probable ground stone implements were found previously. Twelve historic sites also were identified in the 1988 survey, including a school site, two dairy farm complexes, several Victorian-era houses, two homestead/ranch complexes, and several barns.

Regulatory framework

The EDSP recommends preservation of archaeological and historic resources whenever feasible. The Plan includes four policy statements (Policies 6-24 and 6-25 for archaeological resources, and 6-26 and 6-27 for historical resources) and an Action Program (Program 6P) for cultural resources. These policies and program are included in the Mitigation Measures in the Eastern Dublin EIR, as summarized below.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Eastern Dublin EIR identified potentially significant impacts related to cultural resources, including impacts associated with the disruption or destruction of identified

prehistoric resources (Impact 3.9/A) which would be reduced to a level of less-than-significance by adherence to Mitigation Measures 3.9/1.0–4.0, which require a program of mechanical or hand subsurface testing for midden deposits, recordation of identified cultural resources on State of California site survey forms, preparing a plan testing of each resource and, if required, having the City retain the services of a qualified archeologist to develop a cultural resource protection program. Impact 3.9/B identified an impact related to the disruption or destruction of unidentified pre-historic resources. Mitigation Measures M 3.9/5.0 and 6.0 would reduce this impact to a less-than-significant level by requiring a halt to development activities that could impact unidentified cultural resources and completion of follow-on site surveys within Eastern Dublin. Impact 3.9/C, disruption or destruction of identified cultural resources would be mitigated to a level of less-than-significance by adherence to Mitigation Measures 3.9/7.0 through 12.0 that requires in-depth analysis of properties with cultural resources, encouragement of adaptive reuse of historic structures to the extent feasible, review of potential historic resources by an architectural historian and development of a preservation program for historic sites, and disruption or destruction of unidentified historic resources. Impact 3.9/D related to disruption or destruction of unidentified historic resources, which would be reduced to a less-than-significant level by adherence to Mitigation Measures M 3.9/5.0, 6.0, 7.0, 9.0, 10.0, and 12.0.

These measures would all apply to the proposed Project.

No supplemental impacts or mitigations were identified regarding cultural resources in the 2002 SEIR.

SUPPLEMENTAL IMPACTS AND MITIGATIONS

Overview. The Project proposes generally the same development areas as were assumed in the Eastern Dublin EIR and the 2002 EIR. As described in the Setting section, several new significant historic resources have been identified since the Eastern Dublin EIR analysis. Additionally, CEQA case law has evolved to consider the demolition of a historic structure to be a significant impact, which may not be mitigatable to a less than significant level by recordation (*League for Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 896, 905 [60 Cal. Rptr. 2d 821]).

Significance Criteria. Implementation of the Project would be considered to have a significant impact on cultural resources if it were to cause any of the following to a substantially greater degree than previously identified and analyzed:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant CEQA Guidelines section 15064.5.
- Directly or indirectly destroy a unique paleontological resource or site, or unique geological feature.
- Disturb any human remains, including those interred outside of formal cemeteries.

Additional cultural resource studies

Three additional cultural resources reports have been prepared by Basin Research Associates, Inc. for portions of the site in 2004. These include the *Cultural Resources Report*

in Support of Eastern Dublin Properties Resource Management Plan (RMP) (Finalized June 30, 2004 [2004a]), the Cultural Resources Report – Archaeology and Built Environment, Fallon Villages (Bankhead and Mandeville Properties) (October 22, 2004 [2004b]), and 1881 Collier Canyon Road Supplemental Cultural Resources Review (November 8, 2004 [2004c]).

The RMP updated the literature review for the Fallon Village Project area, and addressed changes in CEQA Statutes and case law. That report concluded that:

- No listed, determined, or pending archaeological sites, significant local, state, or federal historic properties, landmarks, etc. have been identified in or adjacent to the Project area.
- No known prehistoric, ethnographic, or contemporary Native American resources, including villages, known trails, sacred places, or traditional or contemporary use areas, have been identified in or adjacent to the Project area.
- Several archaeological sites and potential archaeological and historic architectural sites have been identified in the Project area. These include a combined historic/prehistoric site at the 4J Ranch site (CA-Ala-508/H; potentially eligible for the California Register of Historical Resources) and one of the potentially significant historic structures previously identified in the Eastern Dublin EIR (Croak Ranch) potentially eligible for the California Register), as well as two new potentially historic sites, the Collier Canyon Ranch (potentially eligible for the California Register), and the Fallon House (appears eligible for the California Register) that were not addressed in the Eastern Dublin EIR. A subsequent investigation for the Collier Canyon Ranch found that it did not include any structures eligible for the California Register (Basin Research Associates, November 8, 2004)
- The potential of buried prehistoric sites with undisturbed or partially disturbed cultural deposits appears high adjacent to or in the near vicinity of fresh water sources such as Tassajara Creek, Arroyo Mocho, and the Arroyo de la Laguna/Willow Marsh, and Cottonwood creek, south of the Project area.
- Areas that have not been previously inventoried for prehistoric and historic resources (e.g., Fallon Enterprises, Braddock & Logan, and Croak properties) should be inventoried, and formal evaluations should be conducted for CA-Ala-508/H, the Croak Ranch/Homestead Complex, the Collier Canyon Ranch (completed – no potentially historic structures), and the Fallon House Complex, as well as additional field checks of potential resources shown on historic maps but not previously observed.
- Mitigation Measures 3.9/1.0-12.0 in the Eastern Dublin EIR were considered to be applicable to the Project area, and if carefully implemented, would reduce impacts to on-site cultural resources to a less than significant level.

The Fallon Village study was prepared to satisfy management recommendations in the RMP, as noted above. It included site-specific evaluations of the approximate 314-acre Fallon Enterprises Property and the approximate 161-acre Braddock & Logan Property, and made the following findings:

- This report included a complete field survey of the Fallon Ranch Complex and concluded that it does not appear to retain sufficient historic integrity as a 19th century ranch to be eligible for the California register of Historic Places. However, the circa 1870 Fallon Ranch house does appear to retain its historic integrity, is

unusual in its construction, and therefore appears to be a significant historic structure eligible for the California Register of Historical Resources. The potential for finding subsurface archaeological resources at the Fallon Ranch Complex also exists.

- A survey of the Braddock & Logan property (formerly the Mandeville Ranch property) concluded that the ranch was relatively modern and not a historic property.
- There appears to be a low potential for as yet unknown prehistoric cultural resources in the general Project area, and a moderate potential for such resources at water sources and bedrock outcrops.
- Additional site-specific mitigation measures have been developed for archaeological resources and the Fallon House (See Impacts and Mitigations, below). Depending on which mitigation measures are selected, impacts to the Fallon House could be significant.

An updated archaeological literature review was conducted by Holman & Associates at the Northwest Information Center (NWIC) located at Sonoma State University on April 21, 2005 (file no. 04-952). Additional reports not yet available at the NWIC were obtained through the City's environmental consultant and directly from the authors; a series of reports done by Basin Research Associates, Ward Hill and Holman & Associates not available at the Inventory were obtained for review.

In May, 2005, Holman & Associates completed a general visual field inspection of the Fallon Village project area primarily to re-locate recorded and/or noted historic and prehistoric cultural resources, and to complete a visual inspection of the portions of the eastern half of the property not covered by the 1988 Holman & Associates survey or the subsequent 2004 survey by Basin Research Associates.

No new historic and/or prehistoric cultural resources were located during the re-survey. Photo documentation and completion of California Department of Parks and Recreation Primary Historic Record (DPR) forms for a total of three historic resources was completed, as was a intensive visual inspection of Ala-508 in order to verify the general description and location of this site, first recorded in 1988. DPR forms are the primary method for reporting and recording cultural resources and are filed with the State of California.

A short description of these resources is provided below:

The Fallon Ranch Complex. Photo documentation of this complex was prepared along with DPR 523 forms. Subsequent to completion of the field work, a copy of the October 2004 reports done by Basin Research Associates and Ward Hill were obtained; they were not yet at the Northwest Information Center at the time the updated literature review was done by Holman & Associates. These reports contain a completed set of DPR forms, along with the evaluation of California Register eligibility provided by Ward Hill.

The West of Croak Road Ranch complex (EDGPA F). This complex was photographed by Holman & Associates and DPR forms have been prepared. The 2004 Basin reports on this facility state that it is probably eligible for inclusion on the

CRHR. Holman & Associates agrees with this potential finding. To date however, the property has not been evaluated by an architectural historian.

The property consists of three structures; a barn, a small shed and a large chicken coop. The barn is located in the south end of the parcel, bordered by Croak Road to the east, and appears to be a structure dating later than 1878, as it is not visible on the Thompson and West map of 1878, but before 1940, as the structure appears on the 1940 USGS 15' Livermore Quadrangle. The barn is wood framed and sided with a corrugated metal roof. The shed is a wooden structure, with a gabled roof and tarpaper roofing, located approximately 30 feet northwest of the barn. The shed is surrounded by a variety of trees including pine, juniper, walnut and eucalyptus. The property is strewn with an assortment of historic and modern debris and is uninhabited.

This resource is potentially eligible for listing on the California Register of Historic Resources because it embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic value, in the opinion of the cultural resource specialist (Holman Associates, 2005)

The two barns at the northern terminus of Croak Road. Judged by Basin Research Associates to be ineligible for inclusion on the CRHR because they were less than 50 years old. These barns were photographed by Holman & Associates and DPR forms were prepared.

The "4-J Ranch site" / CA-Ala-508H. Originally recorded by Holman & Associates in 1988 as a prehistoric site approximately 160 meters north-south by 100 meters east-west. It is bordered by Fallon Road on the west and south, by an ephemeral drainage on the east and by corral fencing on the north.

This site was re-visited to verify its apparent size and constituents after permission was gained ultimately from the landowners. Visibility at the time of the re-inspection was poor, but rodent holes were used to approximate the known site boundaries. Several artifacts were observed including fire-affected rock, obsidian deposits, two pieces of chert deposits and trace amounts of shell.

The archaeological site appears to be in the same condition as it was when first recorded in 1988. Based upon the surface observations of 1988 and this year, the site appears to be an extremely rare example of a Native American village location in the hills north of the Highway 580 corridor: over 30 years of archaeological research in the hills north of 580 all the way to the base of Mt. Diablo have failed to turn up evidence of anything other than casual special use areas over this vast area. Actual year round occupation sites were thought to be limited to the borders of the Arroyos draining into or out of the historic Willow Marsh which was once located in the general vicinity of the Hacienda Business Park.

Given the surface indicators found at this site, it should be assumed that the recorded location contains archaeological soils (midden) containing a full inventory of artifactual and ecofactual materials typical of a seasonal village along with human burials

Supplemental Program-Level Impacts. Four supplemental impacts are identified based on the proposed Project: Potential impacts on unknown prehistoric resources on the Fallon Enterprises, Jordan and Chen Properties, potential impacts to the historic Fallon House and at the historic Croak Ranch Homestead. As noted above, an assessment of the Collier Canyon Ranch determined that no structures eligible for the California Register exist there.

Fallon Enterprises Property prehistoric resources

Based on previous field research supplemented by a more recent site visit and cultural records search, there is a possibility that prehistoric resources may be buried on the northerly portion of the Project area, more specifically on the Fallon Enterprises Property. This would be a *supplemental significant impact*.

Supplemental Program Impact CUL-1 (prehistoric resources on Fallon Enterprises Property). Project grading and construction activities could adversely affect potentially significant buried as yet unknown prehistoric resources on portions of the Fallon Enterprises Property (*supplemental impact and mitigation required*).

This impact will be reduced to a less-than-significant level by adherence to the following mitigation measure

Supplemental Mitigation Measure SM-CUL-1 (prehistoric resources on Fallon Enterprises Property).

- (a) Prior to the initiation of construction or ground-disturbing activities on the Fallon Enterprises Property, Project developer(s) shall retain the services of a qualified consulting archeologist to train construction personnel to understand the potential for exposing subsurface cultural resources and to recognize possible buried cultural resources. Training shall inform all construction personnel of the procedures that shall be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains, and their treatment.
- (b) Upon discovery of possible buried cultural materials (including potential Native American skeletal remains), work in the immediate area of the find shall be halted and the Project archaeologist notified. Once the find has been identified and evaluated, the Project archaeologist shall make the necessary plans for treatment of the find(s) consistent with CEQA Guidelines Section 15064.5. State law shall be followed in the event of the exposure of Native American skeletal remains. This measure shall be included on all grading and construction plan.

Fallon Ranch house

The old (c. 1870) Fallon Ranch house does appear to retain its historic integrity. The main exterior alterations are the asbestos shingles and the shed roof addition on the west facade, both alterations are easily reversible. The house retains its original windows and overall double gable form. Few houses of this period in the Dublin/Pleasanton area survive (McCormick 2004). The house could also be a rare example of single wall construction in Eastern Alameda County. Single wall construction was popular for modest ranch and farm houses in the post Gold Rush period in California because it required considerably less wood, thus was more economical, than standard stud-wall construction. The house, thus, appears to be a rare surviving example of an early vernacular house in the Dublin/Pleasanton style and eligible under California Register Criteria 3. Criteria 3 sets a

threshold that the potential resource embodies distinctive characteristics of a type, period, region or method of construction, or represents the work of a master, or possesses high artistic values.

Proposed Project grading would require removal or demolition of the Fallon Ranch structure which would be a *significant supplemental impact*.

Supplemental Program Impact CUL-2 (Fallon Ranch house). Project grading and construction could damage or remove the historically significant Fallon Ranch house (*supplemental impact and 1 mitigation required*).

This impact will be reduced to a less-than-significant level through adherence to subsections (a) or (b) of the following mitigation measure.

Supplemental Mitigation Measure SM-CUL-2 (Fallon Ranch house). The following steps shall be taken to preserve and protect the historic Fallon Ranch house:

- a) **Retain the building on its historic site and rehabilitate it according to the *Secretary of the Interior's Standards and Guidelines for Rehabilitating Historic Buildings* (U.S. Department of the Interior 1994). This mitigation measure would reduce the impact to a less-than-significant level. This measure may not be feasible given the residential development planned for the property.**
- b) **Move the house to a different location consistent with its historic residential character and rehabilitate it according to the *Secretary of Interior's Standards and Guidelines for Rehabilitating Historic Buildings*. The feasibility of moving the buildings can only be determined by a contractor or engineer experienced in moving historic buildings. Generally, it is feasible to move small wood-frame buildings like the house at 5781 Fallon Road. The historic integrity of a building eligible under California Register Criterion 3 is usually not seriously compromised if it is moved, thus it is not considered to be a "substantial adverse change."**

The following mitigation measures, alone or in combination, would not mitigate Supplemental Impact CUL-2 to a less-than-significant level. However, they would help to reduce the impacts if the building is demolished for the proposed residential development.

- c) **The salvage of materials and features of the house at 5781 Fallon Road is recommended. Representatives of the Dublin Planning Department, the Dublin Historical Preservation Association, and other interested parties should be given the opportunity to examine the house and provide suggestions for salvaging and relocating elements. The project impacts will be reduced commensurate with the percentage of the existing building that can be incorporated into the design for another building, or otherwise preserved.**
- d) **Document the house prior to demolition or salvage. This documentation shall be according to the general guidelines included in *Historic American Buildings Survey Guidelines for Preparing Written Historical Descriptive Data* (Pacific Coast Basin Regional Office, U.S. National Park Service, 1993) and the *Photographic Specifications-Historic American Building Survey* (U.S. National Park Service, 1993). The documentation, with original photo prints and negatives, should be placed in an historical archive or history collection**

accessible to the general public (e.g., Amador/Livermore Valley Historical Museum or the Dublin Heritage Center).

- e) **Develop a public exhibit/education program on the Fallon Ranch and history of cattle ranching in the Dublin area at the Dublin Heritage Center. The exhibit could incorporate the documentation and interpretative materials developed for Mitigation Measure 4 regarding the significant role of ranching in local history.**

Cultural resources on Jordan and Chen properties

Originally recorded by Holman & Associates in 1988 as a prehistoric site approximately 160 (approximately 480 feet) meters north-south by 100 meters (approximately 300 feet) east-west. The 4-J Ranch site on the Jordan property is bordered by Fallon Road on the west and south, by an ephemeral drainage on the east and by corral fencing on the north.

This site was re-visited as part of the DSEIR analysis to verify its apparent size and constituents after permission was gained ultimately from the landowners. Visibility at the time of the re-inspection was poor, but rodent holes were used to approximate the known site boundaries. Several artifacts were observed including fire-affected rock, obsidian deposits, two pieces of chert deposits and trace amounts of shell.

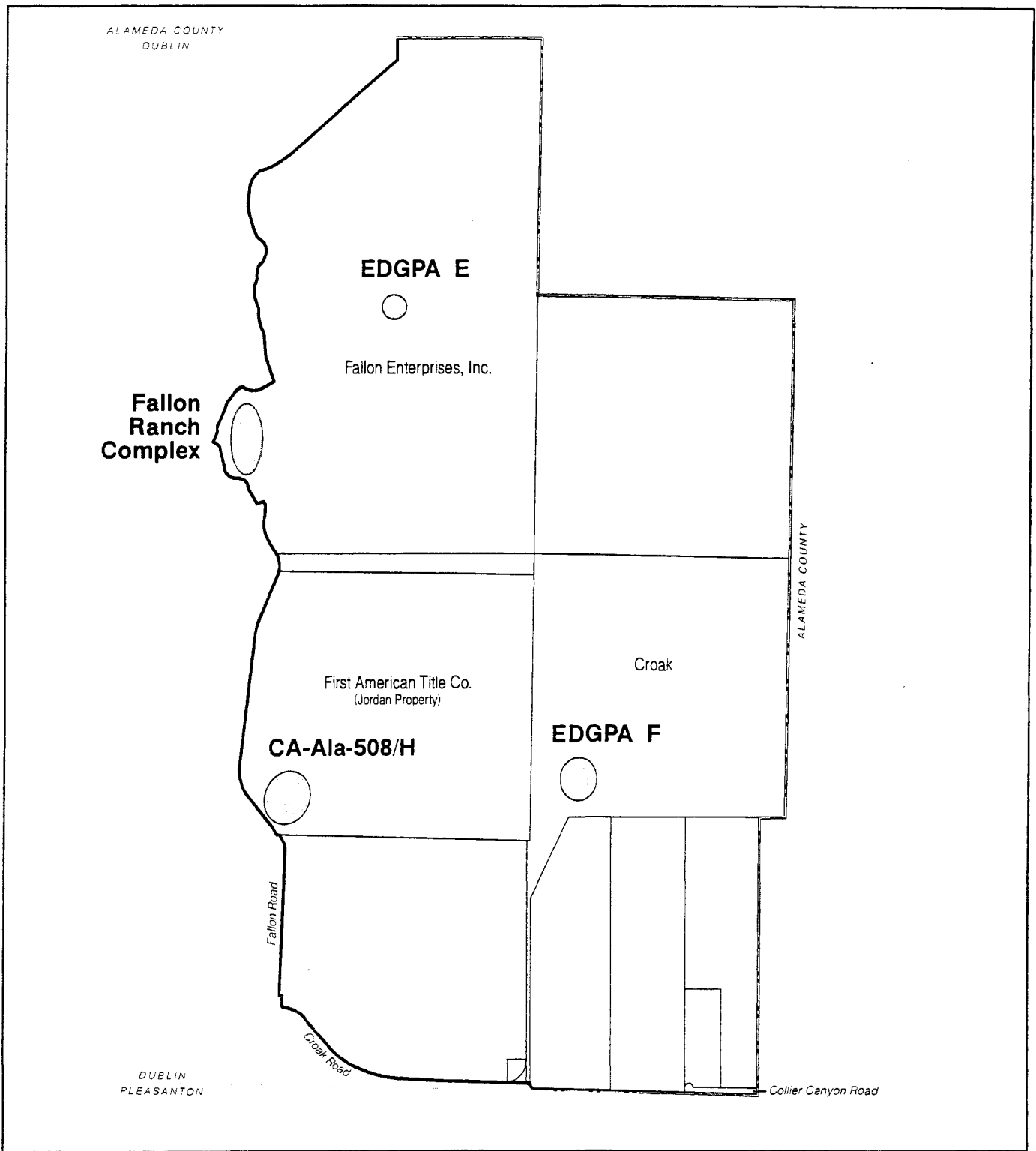
The archaeological site appears to be in the same condition as recorded in 1988. Based upon the surface observations of 1988 and this year, the site appears to be an extremely rare example of a Native American village location in the hills north of the Highway 580 corridor: over 30 years of archaeological research in the hills north of 580 all the way to the base of Mt. Diablo have failed to turn up evidence of anything other than casual special use areas over this vast area. Actual year round occupation sites were thought to be limited to the borders of the Arroyos draining into or out of the historic Willow Marsh that was once located in the general vicinity of the Hacienda Business Park.

Given the surface indicators found at this site, it should be assumed that the recorded location contains archaeological soils (midden) containing a full inventory of artifactual and ecofactual materials typical of a seasonal village along with human burials. Construction of the proposed Project has the potential to damage these sensitive cultural resources and would be a *potentially significant supplemental impact*.

Supplemental Program Impact CUL-3 (cultural resources on Jordan and Chen properties). Project grading and construction could adversely affect potentially significant buried as yet unknown prehistoric and historic resources associated with the 4J Ranch Site (CA-Ala-508H) on portions of the Jordan and Chen Properties (*supplemental impact and mitigation required*).

Adherence to the following measure would reduce this supplemental impact to a less-than-significant level.

Supplemental Mitigation Measure SM-CUL-3 (cultural resources on Jordan and Chen properties). Prior to approval of a Stage 2 Development Plan for the Jordan and Chen properties, a detailed cultural resources assessment of combined historic/prehistoric site at the 4J Ranch site (CA-Ala-508/H shall be conducted to determine if the site is eligible for the California Register of Historical Resources. All mitigation measures identified in that study shall be incorporated into the Stage 2 Development Plan approval conditions.



Blue Ox Associates, Berkeley, California 8-15-2005

SOURCE: Basin Research Associates, 2004.

Exhibit 4.9.1
CULTURAL RESOURCES

0 400 800 1600 2400 feet



Croak Ranch historic resources

This complex (has been judged to be potentially eligible for inclusion on the CRHR by both Basin Research Associates and Holman & Associates. Loss of this resource due to Project construction would be a *significant supplemental impact*.

Supplemental Program Impact CUL-4 (Croak Ranch historic resources). Project grading and construction could adversely affect potentially significant historic resources associated with the Croak Ranch Site homestead. According to the RMP studies, portions of this site could be eligible for the California Register of Historical Resources (*significant supplemental impact and mitigation required*).

Adherence to the following measure would reduce this supplemental impact to a less-than-significant level.

Supplemental Mitigation Measure SM-CUL-4 (Croak Ranch historic resources). Prior to approval of a Stage 2 Development Plan for the Croak property, a detailed historic resources assessment of Croak Ranch Homestead site shall be conducted to determine if the site is eligible for the California Register of Historical Resources. All subsequent measures identified in such study shall be incorporated into the Stage 2 Development Plan approval conditions to ensure that historic resources on the property are preserved.

Supplemental Development-Level Impacts. No supplemental Development-level cultural resource impacts have been identified in addition to the Project level impacts identified above. Cultural resources identified within the Stage 2 portion of the Project area have been identified as part of the Program analysis.

4.10 NOISE

INTRODUCTION

Noise impacts were analyzed in Chapter 3.10 of the Eastern Dublin EIR and in Section 3.4 of the 2002 Supplemental EIR. This supplement examines whether any changes in the proposed project would result in new significant or substantially increased noise impacts that were not previously identified in the previous EIRs.

This DSEIR section has been prepared by Rosen, Goldberg and Der, acoustic consultants in 2005.

ENVIRONMENTAL SETTING

Environmental noise fundamentals

Noise can be defined as unwanted sound and is commonly measured with an instrument called a sound level meter. The sound level meter “captures” sound with a microphone and converts it into a number called a sound level. Sound levels are expressed in units of decibels (dB).

To correlate the microphone signal to a level that corresponds to the way humans perceive

noise, the A-weighting filter is used. A-weighting de-emphasizes low-frequency and very high-frequency sound in a manner similar to human hearing. The use of A-weighting is required by most local agencies as well as other federal and state noise regulations (e.g. Caltrans, EPA, OSHA and HUD). The abbreviation dBA is often used when the A-weighted sound level is reported.

Because of the time-varying nature of environmental sound, there are many descriptors that are used to quantify the sound level. Although one individual descriptor alone does not fully describe a particular noise environment, taken together, they can more accurately represent the noise environment. There are four descriptors that are commonly used in environmental studies; the Lmax, Leq, L90 and DNL (or CNEL).

The maximum instantaneous noise level (Lmax) is often used to identify the loudness of a single event such as a car pass-by or airplane flyover. To express the average noise level, the Leq (equivalent noise level) is used. The Leq can be measured over any length of time but is typically reported for periods of 15 minutes to 1 hour. The background noise level (or residual noise level) is the sound level during the quietest moments. It is usually generated by steady sources such as distant freeway traffic. It can be quantified with a descriptor called the L90 which is the sound level exceeded 90 percent of the time.

To quantify the noise level over a 24-hour period, the Day/Night Average Sound Level (Ldn/DNL) or Community Noise Equivalent Level (CNEL) is used. These descriptors are averages like the Leq except they include a 10 dBA penalty for noises that occur during nighttime hours (and a 5 dBA penalty during evening hours in the CNEL) to account for peoples increased sensitivity during these hours.

In environmental noise, a change in the noise level of 3 dBA is considered a just noticeable difference. A 5 dBA change is clearly noticeable, but not dramatic. A 10 dBA change is perceived as a halving or doubling in loudness.

Description of noise environment in previous EIRs

The existing noise environment is described on pages 3.10-1 and 3.10-2 of the Eastern Dublin EIR. In general, the major noise sources affecting the project site included vehicular traffic in Interstate 580 (I-580) and aircraft flyovers from the Livermore Municipal Airport. The Eastern Dublin EIR also identified noise from of Parks Reserve Forces Training Area (Parks RFTA) near Tassajara Road as potentially affecting development in the Eastern Dublin area, including helicopter operations, gun range firings and explosions. The study also identified noise from a firing range at the Alameda County Sheriff Dept. as a noise source.

The 2002 Supplemental EIR identified the same noise sources as the Eastern Dublin EIR.

Updated noise environment

Noise measurements were recently made throughout the project site to quantify existing noise levels. The measurements included two 72 hour noise measurements, two 24-hour noise measurement and four short term, 15-minute measurements. The supplemental noise measurement locations are shown on **Exhibit 4.10.1**. Measurements were taken on June 2 through 4, 2005, which were chosen as representative dates since local schools were still in session and no holidays occurred on these dates.

The short-term measurement results were correlated with simultaneous measurements at the long-term monitoring location to determine the DNL at the short-term measurement locations. Table 4.10.1 shows the results of the short-term noise measurements. Exhibits 4.10.2 and 4.10.3 show the hourly plot of the long term noise monitoring.

Table 4.10.1. Short-Term Noise Measurement Results

	Location	Time	A-weighted Sound Level, dBA				
			L _{eq}	L ₁	L ₅₀	L ₉₀	DNL*
1	Fallon Road, 25 feet from centerline	11:15 am – 11:30 am	66	76	50	47	71
2	Croak Road at future intersection with Dublin Blvd.	11:45 am – 12:00 pm	60	76	57	53	59
3	Old Fallon road, end of road near gate	12:15 pm – 12:30 pm	49	64	45	42	56

* Estimate of DNL based on comparison with results of Long-term measurements
Source: Rosen, Goldberg & Der, 2005

Other than site grading associated with new development being constructed on the west side of Fallon Road, the noise environment on the Project area is similar to that which was present in 1993, as it is dominated by roadway noise and aircraft flyovers. Table 4.10.2 shows the average number of weekday and weekend aircraft flyovers that exceeded a maximum single event noise level of 63 dBA at monitor location A, the boundary of the Airport Protection Area. There were many more flyovers that generated maximum noise levels below 63 dBA.

Table 4.10.2. Summary of Aircraft Flyovers at Measurement Location A

Day	Average number of daily aircraft flyovers with maximum noise level greater than 63 dBA		
	Daytime (7am – 7pm)	Evening (7 pm -10 pm)	Nighttime (10 pm – 7 am)
Weekday	157	25	5
Weekend	176	7	1

Source: Rosen, Goldberg & Ser 2005

An Environmental Noise Management Plan was prepared in December 2000 under the auspices of the Department of the Army. The Plan identifies noise levels from the Parks RFTA and possible effects on surrounding areas. The suggested noise disclosure zone shown in Figure 6-1 of the Plan does not extend onto the Project area.

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRS

The Eastern Dublin EIR identified a number of potentially significant impacts related to noise. These include:

Impact IM 3.10/ A (Exposure of Proposed Housing to Future Roadway Noise) identified future vehicular traffic associated with development proposed in Eastern Dublin as potentially significant to future residents of Eastern Dublin. This impact would be mitigated to a level of insignificance through adherence to Mitigation Measure 3.10/1.0 that requires acoustic studies for all future residential development in the Eastern Dublin area.

Impact IM 3.10/ B (Exposure of Existing Residences to Future Roadway Noise) would be a potentially significant impact to existing residents in the Eastern Dublin area as development occurs in accord with the Eastern Dublin General Plan Amendment and Specific Plan. This impact would be reduced through adherence to Mitigation Measure 3.10/2.0, which required future development projects to provide noise protection to existing residential uses in Eastern Dublin; however, noise impacts to existing residents along Fallon Road would remain significant and unavoidable.

Impact IM 3.10/ C (Exposure of Existing and Proposed Development to Airport Noise) Was considered an insignificance impact and no mitigation was required.

Impact IM 3.10/ D (Exposure of Proposed Residential Development to Noise from Future Military Training Activities at Parks Reserve Forces Training Area and the County Jail) identified potentially significant noise for future residents within 6000 feet of Parks RFTA. This impact would be reduced through adherence to Mitigation Measure 3.10/3.0 that requires acoustic studies for development near Parks RFTA for the Alameda County Government facility; however, reduction of noise from Parks RFTA may not be feasible, so this impact would be significant and unavoidable.

Impact IM 3.10/ E (Exposure of Existing and Proposed Residences to Construction Noise) would be a potentially significant impact related to noise associated with construction of the proposed Eastern Dublin Specific Plan improvements, including but not limited to buildings, roads, and utilities. Adherence to Mitigation Measures 3.10/4.0 and 5.0 would reduce construction noise impacts to a level of insignificance through preparation and submittal of Construction Noise Management Plans and compliance with local noise standards.

Impact IM 3.10/ F (Noise Conflicts due to the Adjacency of Diverse Land Uses Permitted by Plan Policies Supporting Mixed-Use Development) would result from close proximity of different land use types that may result in potentially significant impacts. Mitigation Measures 3.10/6.0 requires the preparation of noise management plans for all mixed-use developments within the Eastern Dublin area. This measure would reduce noise generated by mixed-use development to a level of insignificance.

The 2002 SEIR addressed potentially changed noise conditions and concluded that I-580 noise levels had not significantly changed since the Eastern Dublin EIR. The 2002 SEIR identified that helicopter flyover noise from Camp Parks Reserve Forces Training Area (Parks RFTA) may reach 70 to 80 dBA on the Project site but that the Project area had been deemed outside the area of concern for noise as described in the Environmental Noise Management Plan for Parks RFTA. This was a new finding since the original EIR identified Parks RFTA as a potentially significant impact. The 2002 SEIR presents noise contours for the Livermore Airport and they show (consistent with the original EIR) that the 60 dBA

CNEL contour does not extend onto the Project area.

The 2002 Supplemental EIR identified three supplemental noise impacts, identified below.

Supplemental Impact NOISE 1 identified a potentially significant impact related to the exposure of proposed and existing housing to noise levels in excess of General Plan land use standards. Previously adopted mitigation measures would reduce this supplemental impact to a less-than-significant level however, the impact would remain significant and unavoidable impact since exterior areas of existing residences could not be reduced to levels consistent with City of Dublin noise standards.

Supplemental Impact NOISE 2 disclosed that exposure of future commercial, office and industrial uses to noise levels in excess of General Plan standards would be a potentially significant impact. Supplemental Mitigation Measure NOISE 2 requires insulation plans for commercial, office and industrial buildings indicating how these future buildings would meet the City CNEL 70 dBA standard.

Supplemental Impact NOISE 3 identified exposure of people to generation of excessive ground borne vibration or groundborne vibration levels as a potentially significant impact. Adherence to Supplemental Mitigation Measure SM-NOISE-2 would require restrictions of heavy truck traffic to designated arterial roadways and truck routes and also during daytime hours as established by the City. With this supplemental mitigation measure, the impact would be less-than-significant.

All of these impacts and mitigation measures would apply to the currently proposed Project.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The project generally consists of the same development areas as were assumed in the original EIR and 2002 SEIR. The 2002 SEIR did not include new land use designations that were different from the Eastern Dublin EIR and generally located residential development away from I-580 and outside the Airport Protection Area. Proposed land use designations have not been significantly changed since the 2002 SEIR, as residential uses are still located north of and outside of the Airport Protection Area boundary. The current Project proposes approximately 1 million additional square feet of commercial, office and industrial square footage above that analyzed in the 2002 SEIR and 582 dwellings not analyzed in the 2002 SEIR. The roadway network is generally the same with slightly different alignments. For example, a Loop Road still connects Croak Road to Fallon Road and there remains the extension of Dublin Boulevard.

The proposed Project includes development level plans for single-family residential homes at the terminus of Croak Road, extending westerly along the proposed Upper Loop Road to Old Fallon Road. There would also be new residential development just west of the site across old Fallon Road that is not part of this project and was not present at the time the Eastern Dublin EIR was certified. There is the potential for development level impacts for both the existing and proposed residences due to vehicular traffic and construction noise. These development level impacts are identified below.

The thresholds of significance are essentially the same as the previous EIR with the exception that a threshold for schools and neighborhood parks is added.

Significance Criteria. The thresholds of significance are the same as the previous EIR with the exception that a threshold for new non-residential land uses is added. In addition to the criteria outlined in the previous EIRs, implementation of the Project would be considered to have a significant impact if would:

- Result in exterior noise exposure that exceeds City noise standards;
- Result in a substantial increase in ambient noise levels;
- Expose non-residential uses to roadway noise levels in excess of those considered normally acceptable according to the City Noise Element;
- Result in excessive noise levels from airport operations.

Regulatory framework

The City of Dublin has a Noise Element and Noise Ordinance. The Dublin Noise Element is found in Chapter 9 of the City's General Plan. It contains a guiding policy to mitigate traffic noise levels to those indicated by Table 9.1 of the Noise Element.

For residential development, a CNEL of 60 dBA or less is considered "Normally Acceptable." A CNEL of 60 to 70 dBA is "Conditionally Acceptable" and requires that noise insulation features be included in the project design. A CNEL of 70 to 75 dBA is "Normally Unacceptable" for residences. For offices and retail commercial, the City is more lenient since these uses are considered less noise sensitive. A CNEL of 70 dBA or less is normally acceptable while a CNEL of 70 to 75 dBA is conditionally acceptable.

The current Airport Land Use Policy Plan for Alameda County was adopted by the Alameda County Airport Land Use Commission on July 16, 1986. The ALUC Plan also contains noise contour maps and a referral area map.

In 2004, The California Legislature passed AB 2776. AB 2776 requires disclosure of all existing and proposed airports within two statute miles of a residential subdivision. The disclosure documents must also include a statement regarding noise from aircraft overflights if the subdivision is located within an Airport Influence Area (AIA).

According to discussion with County staff (personal communication between Alan Rosen and Cynthia Horvath, Alameda County Airport Land Use Commission, 7/1/05) the ALUC considers the general referral zone to be equivalent to the airport influence area as discussed in AB 2776. Therefore proposed subdivisions within 4000 feet of the I-580 centerline would be located within the AIA and require disclosure statements regarding airport noise as per the requirements of AB 2776.

On January 13, 1993 the Alameda County ALUC adopted resolution 93-01 which incorporates policies and standards to create an Airport Protection Area (APA) around Livermore Airport. The APA area was established to ensure continued safety in the airport region and to avoid potential noise incompatibilities between the airport and encroaching

residential uses. The APA is running generally east to west, parallel to and north of a perpendicular distance of 5000 feet from Runway 25R-7L. **Exhibit 4.10.1** shows the APA and AIA boundary.

Supplemental Program-Level Impacts. Three supplemental impacts are identified based on the proposed Project: Impact of traffic generated noise, impacts of aircraft flyovers on residential uses, and impact of noise from Parks RFTA on residential uses.

Noise from aircraft flyovers

The Eastern Dublin EIR and 2002 SEIR addressed noise from aircraft flyovers and found that noise from aircraft would not exceed a CNEL of 60 dBA within the Project area. The future aircraft noise contours (CNEL contours) have not changed since the Eastern Dublin EIR. However, the regulatory framework has changed. The County ALUC has adopted an Airport Protection Area (APA) around the Livermore Airport and the State Assembly has adopted AB 2776, which requires disclosure of aircraft flyover noise if a project is within a designated Airport Influence Area (AIA).

The proposed Project has located all residential uses outside the APA in an attempt to minimize noise incompatibilities. There are some residential uses being proposed within the Airport Influence Area. AB 2776 requires that residential subdivisions within an AIA provide full disclosure regarding the presence of noise from aircraft overflights. Though aircraft flyovers would be audible throughout the program area during weekdays and on weekends, residences in the program area would not be exposed to aircraft noise in excess of a CNEL of 60 dBA, however, such aircraft overflights could result in noise complaints by future residents of the proposed Project. This would be a *potentially significant supplemental impact* with regard to aircraft overflights.

Supplemental Program Impact NOISE-1 (aircraft flyovers). Residential land uses are proposed be located within the AIA boundary. AB 2776 requires that subdivisions within the AIA must provide full disclosure regarding the presence of noise from aircraft flyovers. Although future aircraft noise would not exceed a CNEL of 60 dBA in the Project area, aircraft overflights would likely be a nuisance for all residents of the proposed Project (*potentially significant supplemental impact and mitigation required*).

Adherence to the following measure will mitigate this impact to a less-than-significant level.

Supplemental Mitigation Measure SM-NOISE-1 (aircraft flyovers). All occupants of the residential dwellings within the proposed Project shall receive written notification at the time of sale, rental or lease of the potential for aircraft overflights of the Fallon Village Project area. Written notices shall be approved by the Dublin Community Development Director.

Noise from Parks RFTA

The Eastern Dublin EIR identifies noise from Parks RFTA as a potential impact and requires that proposed residential uses within 6000 feet of Parks have a noise study to indicate whether noise from Parks would be within acceptable limits. As proposed, the project does not include any residential development within 6,000 feet of Parks RFTA. An environmental noise management plan was prepared by the Army in 2000. The plan

indicates areas where it is suggested that disclosure be made about potential for noise disturbance. Although residences in the Project area may be subject to noise from helicopter flyovers, the Project area is outside the disclosure area as identified in the Army's 2000 noise management plan and there would be *no supplemental impacts* with regard to noise from Parks RFTA.

Supplemental Development-level impacts. Three supplemental development-level impacts are identified. The first is vehicular noise affecting the proposed low density housing along Upper Loop Road and Croak Road. The second impact is the potential for noise from Upper Loop Road impacting parks and schools in the Stage 2 Development Plan area. The third is noise from Upper Loop Road affecting existing residences west of the site.

Future vehicle noise on Upper Loop Road

Anticipated vehicles using Upper Loop Road is anticipated to generate noise levels in excess of City Noise Element standards. This would be a *significant supplemental impact*.

Supplemental Development Level Impact NOISE-2 (future roadway noise affecting proposed residential development north of Upper Loop Road and East of Croak Road). Traffic noise along Upper Loop Road and Croak Road is expected to exceed a CNEL of 60 dBA. Therefore, proposed residences that abut these roadways would be exposed to noise levels considered conditionally acceptable (*potentially significant supplemental impact and mitigation required*).

Adherence to the following measure would reduce this supplemental impact to a less-than-significant level.

Supplemental Mitigation Measure SM-NOISE-2 (future roadway noise affecting proposed residential development). An acoustical study must be prepared for the project. The study shall show how the project will meet an indoor goal of 45 dBA CNEL. In addition, the study must show how noise in outdoor areas will meet the level of a CNEL of 60 dBA (CNEL of 65 dBA at City's discretion). Based on preliminary site development information it is likely that the project can meet the indoor goal with regular double glazed windows (no special sound rating). A noise barrier may be required if backyards or other primary outdoor use spaces are located adjacent to either Croak Road or Upper Loop Road.

Future roadway noise affecting schools and neighborhood parks

The Eastern Dublin EIR identified acceptable levels for various land uses but only recommends mitigation for residential uses. The 2002 SEIR identifies potential impacts to commercial, office and industrial uses but does not specifically provide for mitigation of non-residential noise sensitive uses such as schools or neighborhood parks. The proposed Stage 2 Development Plan shows an elementary school and neighborhood park along the Upper Loop road. These uses could be exposed to noise levels in excess of the City's normally acceptable level (CNEL of 60 dBA), which would be a *significant supplemental impact*. Exhibit 4.10.4 shows the CNEL noise contours due to future roadway traffic.

Supplemental Development-level Impact NOISE-3 (compatibility of school and neighborhood park with future roadway noise). Neighborhood park and elementary

school parcels along the Upper Loop Road would be exposed to a CNEL in excess of 60 dBA, which would exceed the normally acceptable exterior noise standard adopted by the City of Dublin (*significant supplemental impact and mitigation required*).

Adherence to the following measure would reduce this supplemental impact to a less-than-significant level.

Supplemental Mitigation Measure SM-NOISE-3 (compatibility of school and neighborhood park with future roadway noise). The design of the elementary school and neighborhood park shall consider noise reduction measures to comply with City exterior noise exposure limits including but not limited to appropriate siting of improvements, use of noise barriers and similar noise reduction techniques as may be needed.

Noise impacts to existing residences

Future vehicles traveling along Upper Loop Road to and from the Project area are anticipated to generate noise levels in excess of City exterior noise levels that could impact existing residences that have been constructed west of old Fallon Road, adjacent to the Project area. This would be a *significant supplemental impact*.

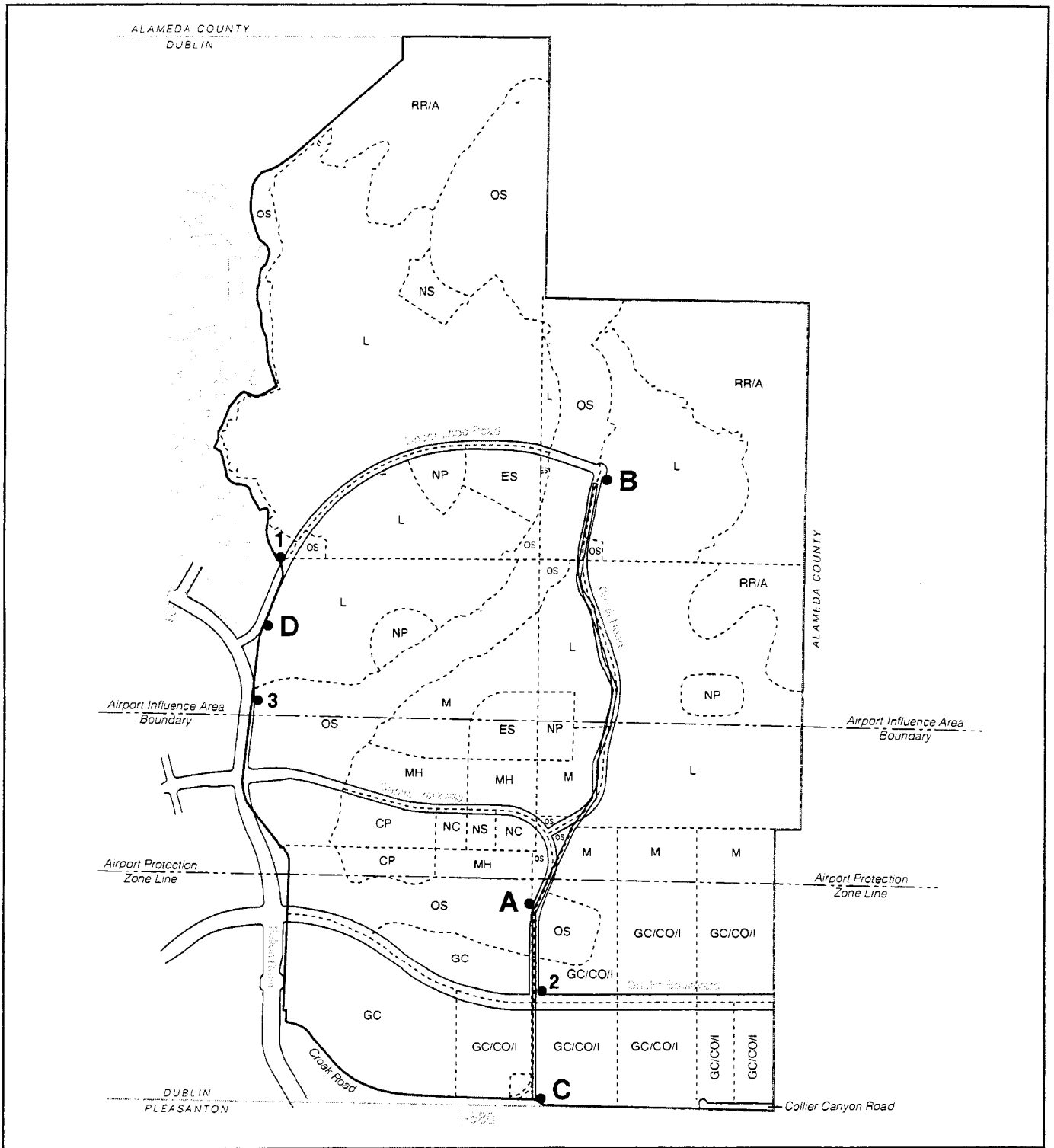
Supplemental Development Level Impact NOISE-4 (noise from Upper Loop Road affecting existing residences). Traffic noise from the new Upper Loop Road could impact existing residences west of the existing alignment of Fallon Road (*significant impact and mitigation required*).

Adherence to the following measure would reduce this supplemental impact to a less-than-significant level.

Supplemental Mitigation Measure SM-NOISE-4 (noise from Upper Loop Road affecting existing residences). Noise from Upper Loop Road is expected to generate a CNEL in excess of 60 dBA. The existing homes along the existing alignment of Fallon Road are currently exposed to an Ldn of about 56 to 59 dBA. It is unlikely but possible that the noise from Upper Loop Road would cause noise levels to increase by more than 6 dBA at these existing homes. However, an evaluation of noise from Upper Loop Road on existing dwellings shall be made and if it is found that the road would increase noise by more than 6 dBA in backyards of those existing homes, then appropriate noise mitigation measures (i.e. roadway alignment or noise barrier) shall be included in the new roadway design.

With adherence to the above mitigation measures, identified supplemental noise impact would be *less-than-significant*.

Blue DX Associates, Berkeley, California 8-8-2005

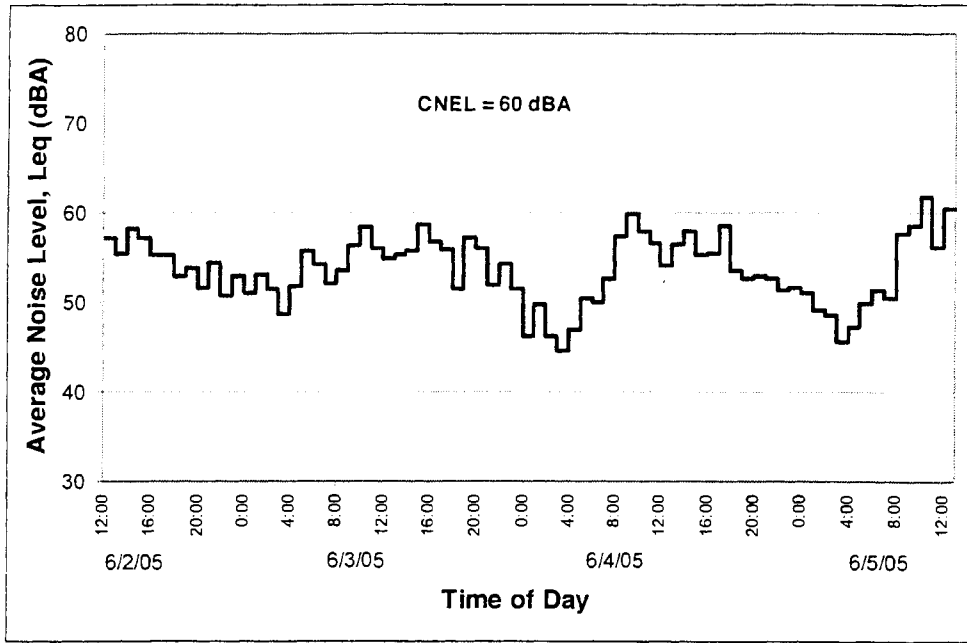


SOURCE: Rosen Goldberg & Der, Inc., Consultants in Acoustics, 7-9-2005.

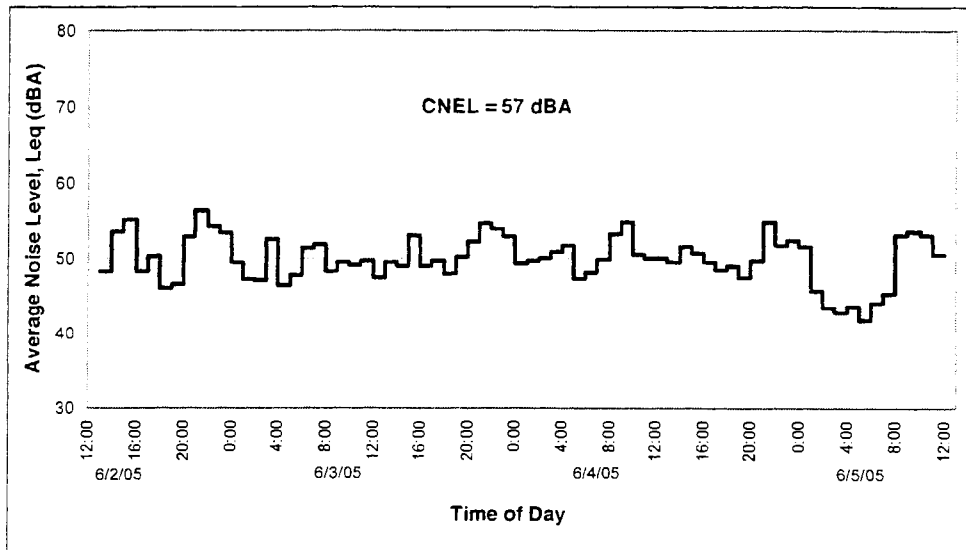


Exhibit 4.10.1
NOISE MEASUREMENT
LOCATIONS

0 400 800 1600 2400 feet



LOCATION A: Airport Protection Area Boundary

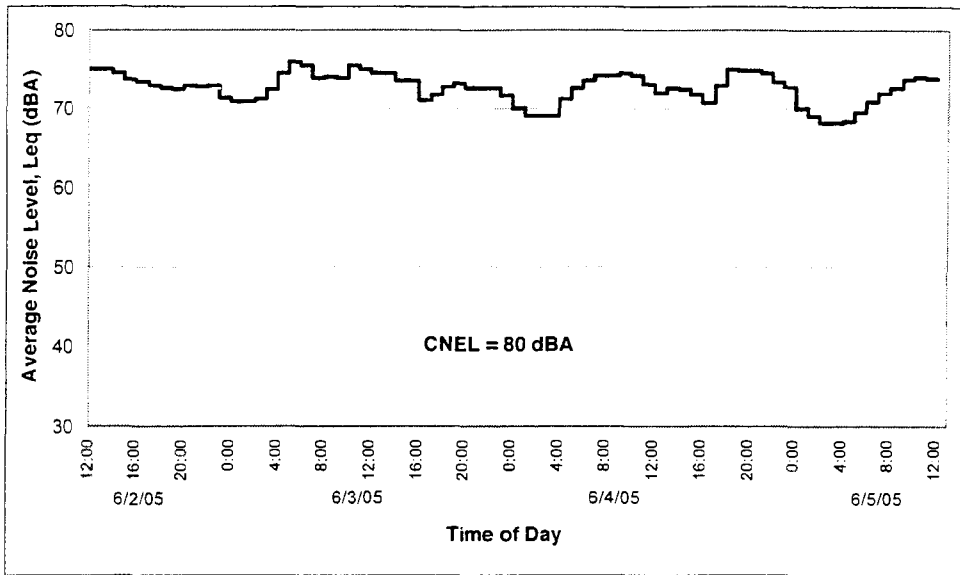


LOCATION B: End of Croak Road

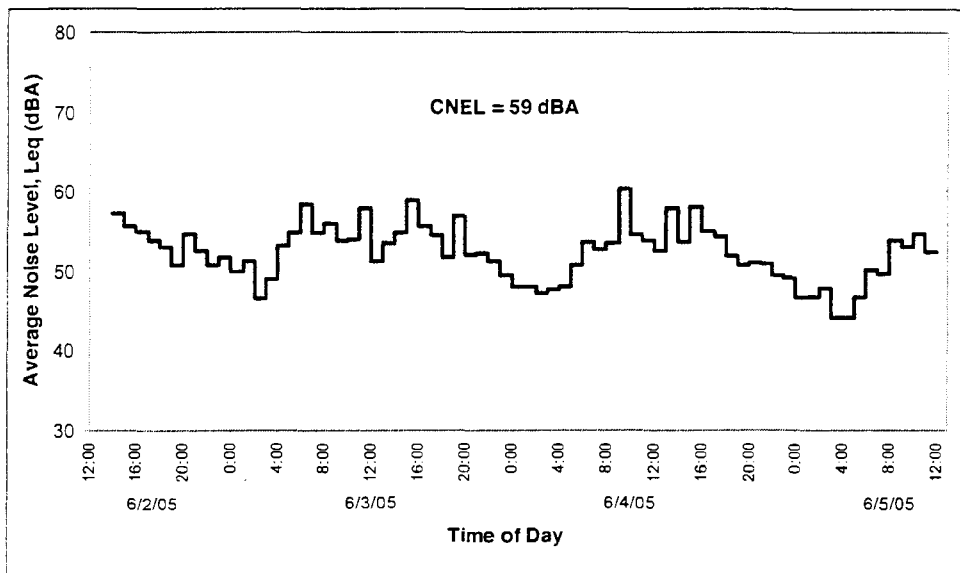
Blue Ox Associates, Berkeley, California 8-8-2005

SOURCE: Rosen Goldberg & Der, Inc., Consultants in Acoustics, 7-9-2005.

Blue Ox Associates, Berkeley, California 8-8-2005

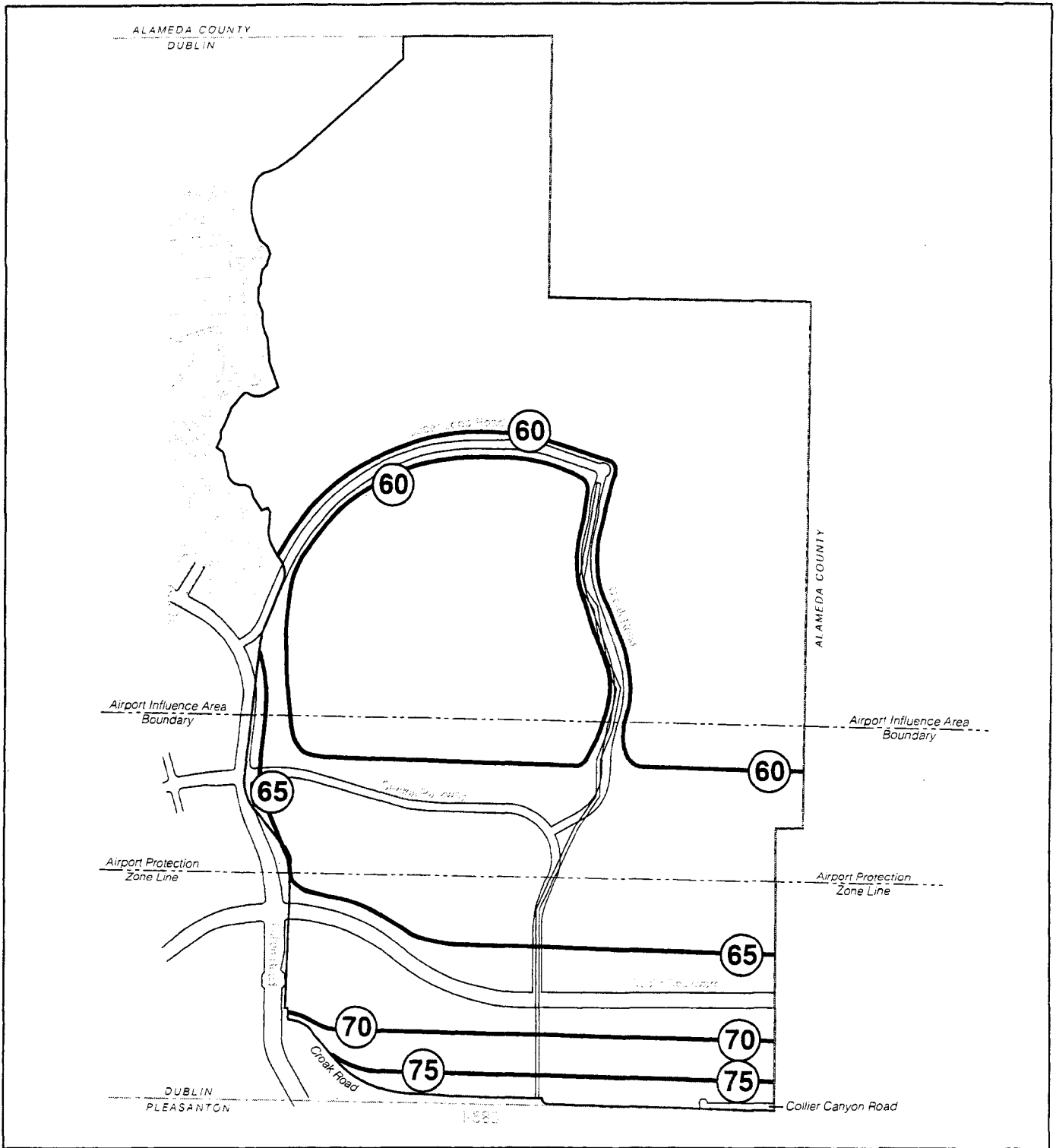


LOCATION C: Croak Road near Interstate-580



LOCATION D: Old Fallon Road near Existing Homes

SOURCE: Rosen Goldberg & Der, Inc., Consultants in Acoustics, 7-9-2005.



Blair Ox Associates, Berkeley, California 8-8-2005

SOURCE: Rosen Goldberg & Der, Inc., Consultants in Acoustics, 7-9-2005.

CITY OF DUBLIN
 FALLON VILLAGE
 DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT



Exhibit 4.10.4
FUTURE CNEL CONTOURS
 (Community Noise Equivalent Level, in dBA)

0 400 800 1600 2400 feet

4.11 AIR QUALITY

INTRODUCTION

Air quality impacts were analyzed in Chapter 3.11 of the Eastern Dublin EIR. Air quality impacts were also examined in the 2002 Supplemental EIR. This supplement to the EIRs examines compliance with applicable significance thresholds, related changes to the Project since the prior EIRs, utilizes updated methods of analysis, and is based on current traffic forecasts that reflect changes in roadway improvements and travel patterns that have occurred since certification of the Eastern Dublin EIR. This supplement also examines changes in the regulatory standards since the previous EIR.

This section of the DSEIR is based on a supplemental air quality analysis prepared by Donald Ballanti in 2005 and is available for review at the Dublin Community Development Department during normal business hours.

ENVIRONMENTAL SETTING

The Project is within the Livermore-Amador Valley. The Livermore-Amador Valley forms a small subregional air basin distinct from the larger San Francisco Bay Area Air Basin. The Livermore-Amador Valley air basin is surrounded on all sides by high hills or mountains. Significant breaks in the hills surrounding the air basin are Niles Canyon and the San Ramon Valley, which extends northward into Contra Costa County.

The terrain of the Livermore-Amador Valley influences both the climate and air pollution potential of the sub-regional air basin. As an inland, protected valley, the area has generally lighter winds and a higher frequency of calm conditions when compared to the greater Bay Area.

The occurrence of episodes of high atmospheric stability, known as inversion conditions, severely limits the ability of the atmosphere to disperse pollutants vertically. Inversions occur during all seasons in the Bay Area, but are particularly prevalent in the summer months when they are present about 90% of the time in both morning and afternoon.

According to the Bay Area Air Quality Management District, air pollution potential is high in the Livermore Valley, especially for ozone in the summer and fall (BAAQMD, 1999). High temperatures increase the potential for ozone, and the valley not only traps locally generated pollutants but also can be the receptor of ozone and ozone precursors from upwind portions of the greater Bay Area. Transport of pollutants also occurs between the Livermore Valley and the San Joaquin Valley to the east.

During the winter, the sheltering effect of terrain and its inland location results in frequent surface-based inversions. Under these conditions, pollutants such as carbon monoxide from automobiles and particulate matter generated by fireplaces and agricultural burning can become concentrated.

IMPACTS AND MITIGATIONS FROM PREVIOUS EIRs

The Eastern Dublin EIR identified significant impacts related to construction, mobile source and stationary source emissions (Impacts 3.11 / A, B, C, E). Mitigation measures were adopted to control construction dust and exhaust emissions, and to minimize mobile and stationary source emissions through, among other things, cooperative transportation and air quality planning and transportation demand management. All mitigation measures adopted upon approval of the Eastern Dublin GPA/SP continue to apply the proposed Project. Even with mitigation, however, significant cumulative construction, mobile source and stationary source impacts remained. (Impacts 3.11 / A, B, C, E). Upon approval of the Eastern Dublin GPA/SP, the City adopted a Statement of Overriding Considerations for these significant unavoidable impacts. (Resolution No. 53-93.)

Supplemental air quality impacts were analyzed in the 2002 SEIR. Supplemental Impact AQ-1 identified supplemental project and cumulative impacts with regard to mobile source emissions from reactive organics (RO), nitrogen oxide (NO_x) and particulate matter (PM-10). Implementation of mitigation measures included in the Eastern Dublin EIR would still apply to the 2002 Project, but would not have achieved a significant reduction in mobile source emissions. Therefore, the 2002 SEIR noted that this impact would be a significant and unavoidable impact.

The 2002 SEIR also identified a second supplemental impact (Supplemental Impact- AQ-2) related to mobile source emission of carbon monoxide (CO). Based on an analysis of 19 Project intersections for increases in carbon monoxide, this impact was deemed less-than-significant.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The proposed General Plan and Specific Plan amendment would change land uses and development intensity from those analyzed in the Eastern Dublin EIR and 2002 SEIR (See Section 4.2, Transportation and Circulation).

Since preparation of the Eastern Dublin EIR there have been several regulatory changes, methods for air quality analysis as well as changes to applicable thresholds of environmental significance, however, these new standards and thresholds were used in the 2002 SEIR. Pursuant to Guidelines Section 15162 and 15163, this supplement assesses whether new or intensified air quality impacts will result from increased regional traffic and changed regulatory standards.

Regulatory framework

Ambient Air Quality Standards. The federal and California ambient air quality standards are summarized in Table 4.11.1 for important pollutants. The federal and state ambient standards were developed independently with differing purposes and methods, although both federal and state standards are intended to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and PM₁₀.

The U.S. Environmental Protection Agency established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The existing 1-hour ozone standard of 0.12 PPM (microns or less) is to be phased out and replaced by an 8-hour standard of 0.08 PPM. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the U. S. Supreme Court in a decision issued in February of 2001. However, the new federal ozone standard is not yet in effect pending final resolution of this litigation and adoption of implementing regulations.

In 1997 new national standards for fine Particulate Matter (diameter 2.5 microns or less) were adopted for 24-hour and annual averaging periods. The current PM₁₀ standards were to be retained, but the method and form for determining compliance with the standards were to be revised. Implementation of this standard was delayed by litigation and will not occur until the U. S. Environmental Protection Agency has issued court-approved guidance.

The State of California regularly reviews scientific literature regarding the health effects and exposure to PM and other pollutants. On May 3, 2002, the California Air Resources Board (CARB) staff recommended lowering the level of the annual standard for PM₁₀ and establishing a new annual standard for PM_{2.5} (particulate matter 2.5 micrometers in diameter and smaller). The new standards became effective on July 5, 2003.

Table 4.11.1. Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour	0.12 ppm	0.09 ppm
	8-Hour	0.08 ppm	--
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.05 ppm	--
	1-Hour	--	0.25 ppm
Sulfur Dioxide	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.05 ppm
	1-Hour	--	0.25 ppm
PM ₁₀	Annual	50 ug/m ³	20 ug/m ³
	24-Hour	150 ug/m ³	50 ug/m ³
PM _{2.5}	Annual	15 ug/m ³	12 ug/m ³
	24-Hour	65 ug/m ³	--
Lead	30-Day Avg.	--	1.5 ug/m ³
	3-Month Avg.	1.5 ug/m ³	--

ppm = parts per million

ug/m³ = Micrograms per Cubic Meter

Source: Donald Ballanti, 2005

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. Toxic Air Contaminants (TACs) are injurious in small quantities and are regulated despite the absence of criteria documents. The

identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants.

Current Air Quality. The Project is within the nine-county Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) operates a network of air quality monitoring sites in the region. The closest to the site is located in central Livermore on Old First Street. Table 4.11.2 shows a summary of air quality data for this monitoring site for the period 2000-2002. Data are shown for ozone, carbon monoxide, PM₁₀, PM_{2.5}, and nitrogen dioxide. The number of days exceeding each standard is shown for each year.

Table 4.11.2 shows that concentrations of carbon monoxide and nitrogen dioxide at the Livermore monitoring site meet state/federal standards. Ozone concentrations exceed both the state and federal standards, and exhibit wide variations from year-to-year related to meteorological conditions. Years where the summer months tend to be warmer than average tend to have higher average ozone concentrations while years with cooler than average temperatures tend to have lower average ozone concentrations.

Table 4.11.2. Air Quality at Livermore Monitoring Site, 2000-2002

Pollutant	Standard	Days Standard Exceeded During:		
		2000	2001	2002
Ozone	Federal 1-Hour	1	0	2
Ozone	State 1-Hour	7	9	10
Ozone	Federal 8-Hour	2	2	6
PM ₁₀	Federal 24-Hour	0	0	0
PM ₁₀	State 24-Hour	2	3	0
PM _{2.5}	Federal 24-Hour	0	1	0
Carbon Monoxide	State/Federal 8-Hour	0	0	0
Nitrogen Dioxide	State 1-Hour	0	0	0

Source: CARB, 2003

Levels of PM₁₀ at Livermore meet the federal ambient standards but exceed the more stringent state standards. PM_{2.5} emissions at the Livermore station exceeded state standards one day in 2001.

Attainment Status. The federal Clean Air Act and the California Clean Air Act of 1988 require that the California Air Resources Board (CARB), based on air quality monitoring data, designate air basins within the state where the federal or state ambient air quality standards are not met as "non-attainment areas". Because of the differences between the federal and state standards, the designation of non-attainment areas is different under the federal and state legislation.

In 1995, after several years of minimal violations of the federal one-hour ozone standard, the U.S. Environmental Protection Agency (EPA) revised the designation of the Bay Area Air Basin from "non-attainment" to "attainment" for this standard. However, with less favorable meteorology in subsequent years, violations of the one-hour ozone standard again were observed in the basin, particularly at the Livermore monitoring station. Effective August 1998, the EPA downgraded the Bay Area's classification for this standard from a "maintenance" area to an "unclassified non-attainment" area. Also in 1998, after many years without violations of any carbon monoxide (CO) standards, the attainment status for CO was upgraded to "attainment."

The California Air Resources Board and U. S. Environmental Protection Agency have both proposed that the San Francisco Bay Area be classified as a nonattainment area for the federal 8-hour standard. The California Air Resources Board and U. S. Environmental Protection Agency have both proposed that the San Francisco Bay Area be considered unclassifiable with respect to the federal PM_{2.5} standards. Unclassifiable means that an area cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. U.S. EPA plans to finalize PM_{2.5} designations by December 15, 2004.

The San Francisco Bay Area Air Basin is currently non-attainment for ozone (state and federal standards) and PM₁₀ (state ambient standard). However, in April 2004, the U.S. EPA made a final finding that the Bay area has attained the national one-hour standard. The finding of attainment does not mean the Bay area has been reclassified as an attainment area for the 1-hour standard. The region must submit a redesignation request to the EPA in order to be reclassified as an attainment area.

While air quality plans exist for ozone, none exists (or is currently required) for PM₁₀. The *Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard* (BAAQMD, 2001) is the current ozone air quality plan required under the federal Clean Air Act. The state-mandated regional air quality plan is the *Bay Area 2000 Clean Air Plan* (BAAQMD, 2000). These plans contain mobile source controls, stationary source controls and transportation control measures to be implemented in the region to attain the state and federal ozone standards within the Bay Area Air Basin.

BAAQMD CEQA Guidelines. The document *BAAQMD CEQA Guidelines* was published subsequent to the publication of the East Dublin EIR although after the 2002 SEIR. These Guidelines provide recommended mitigation practices during construction based on the size of the Project and expanded recommended mitigations for operational impacts of commercial projects.

Significance criteria. The BAAQMD has revised recommended thresholds of significance since publication of the East Dublin EIR (BAAQMD, 1999). The document *BAAQMD CEQA Guidelines* establishes the following impact criteria:

- A significant impact on local air quality is defined as an increase in carbon monoxide concentrations that causes a violation of the most stringent ambient air quality standard for carbon monoxide (20 ppm for the one-hour averaging period, 9.0 ppm for the eight-hour averaging period).

- A significant impact on regional air quality is defined as an increase in emissions of an ozone precursor or PM₁₀ exceeding the BAAQMD thresholds of significance. The current significance thresholds are 80 pounds per day (or 15 tons/year) for ozone precursors or PM₁₀.
- Any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact.
- Any project with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

Despite the establishment of both federal and state standards for PM_{2.5} (particulate matter, 2.5 microns), the BAAQMD has not developed a threshold of significance for this pollutant. For this analysis, PM_{2.5} impacts would be considered significant if project emissions of PM₁₀ exceed 80 pounds per day.

The current BAAQMD significance threshold for construction dust impact is based on the appropriateness of construction dust controls. The BAAQMD guidelines provide feasible control measures for construction emission of PM₁₀. If the appropriate construction controls are to be implemented, then air pollutant emissions for construction activities would be considered less-than-significant.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The following supplemental air quality impacts and mitigation measures are identified in this DSEIR.

Supplemental Program-level impacts. Anticipated impacts at the Program level include dust generated by construction activities, Project and cumulative ozone emissions and carbon monoxide emissions.

Construction activities

Construction activities related to grading, construction and other improvement would generate wind-blown dust from the Project area off of the site.

Supplemental Project Impact AQ-1 (construction related air quality impacts).

Construction activities would have the potential to result in greater amount of dust and PM-10 due to greater portions of the Project area being proposed for development than previously analyzed (potentially significant supplemental impact and mitigation required).

The current BAAQMD significance threshold for construction dust impact is based on the appropriateness of construction dust controls. If the appropriate construction controls are to be implemented, then air pollutant emissions for construction activities would be considered less-than-significant. Mitigation Measure MM 3.11/1.0 in the East Dublin EIR implements most, but not all, of the currently recommended measures.

According the current BAAQMD CEQA Guidelines, implementation of the following mitigation measure would reduce construction period air quality impacts to a less-than-significant level.

Supplemental Mitigation SM-AQ-1 (construction related air quality impacts). In addition to measures identified in Mitigation Measure 3.11/1.0 of the East Dublin EIR, the City of Dublin shall:

- a) Require construction contractors to water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.
- b) Require construction contractors to sweep daily (preferably with water sweepers) all paved access road, parking areas and staging areas at construction sites.
- c) Require construction contractors to install sandbags or other erosion control measures to prevent silt runoff to public roadways.

Regional air quality emissions

Vehicle trips associated with the Project, which includes approximately 1.0 million square feet of non-residential development above development analyzed in the both the Eastern Dublin EIR and 2002 SEIR would result in potentially significant regional air quality emissions.

Supplemental Program-level Impact AQ-2. The Project would result in a regional emission increase that would exceed the BAAQMD significance thresholds for ozone precursors (*potentially significant supplemental impact and mitigation required*).

Construction of the proposed Project and associated vehicle trips would result in air pollutant emissions affecting the entire San Francisco Bay Air Basin. Regional emissions associated with Project vehicle use have been calculated using the URBEMIS-2002 emission model.

The incremental daily emission increase associated with Project operational trip generation is identified in Table 4.11.3 for reactive organic gases and oxides of nitrogen (two precursors of ozone) and PM₁₀. Also shown is the emission increase under the existing Specific Plan designations. The Bay Area Air Quality Management District's thresholds of significance for these pollutants are also shown. Proposed Project emissions shown in Table 4.11.3 would exceed these thresholds of significance for ROG and NO_x, so the proposed Project would have a significant effect on regional ozone air quality.

Table 4.11.3. Project Regional Emissions in Pounds Per Day

	Reactive Organic Gases	Nitrogen Oxides	PM₁₀
Project	116.9	116.6	89.9
Development under Existing Specific Plan	109.5	102.9	78.9
BAAQMD Significance Threshold	80.0	80.0	80.0

Source: Donald Ballanti, 2005

Supplemental Mitigation SM-AQ-2. In addition to measures identified in MM 3.11/5.0-11.0 of the East Dublin EIR, the City of Dublin shall require that the following be implemented:

- a) The Project proponent should coordinate with LAVTA for the eventual extension of transit service to the Project area. Project proponents should construct or reserve necessary right-of-way for transit facilities such as bus turnouts/bus bulbs, benches, etc.
- b) Bicycle land and/or paths, connected to community-wide network should be provided as part of the Stage 1 Development Plan.
- c) Sidewalks and/or paths, connected to adjacent land uses, transit stops, and/or community-wide network should be provided as part of the Stage 1 Development Plan.
- d) Consider shuttle service to regional transit system or multimodal center.
- e) Consider providing a satellite telecommute center for Project residents if this is feasible in terms of a convenient location.
- f) Provide interconnected street network, with a regular grid or similar interconnected street pattern.

Implementation of the mitigation measures in the Eastern Dublin EIR (Mitigation Measures 3.11/5.0-11.0) together with the above measures will not achieve the more than 30% reduction in Project-related emissions that would be needed to reduce emissions below the BAAQMD thresholds of significance. Ozone air quality impacts will continue to remain *significant and unavoidable*.

Cumulative air quality impacts

The Project would also contribute to cumulative air quality impacts.

Supplemental Program-level Impact AQ-3 (Project contribution to regional air quality). Project-related regional emissions would exceed the BAAQMD thresholds of significance for ozone precursors (*significant supplemental cumulative impact*).

According to BAAQMD significance criteria, any proposed Project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact. Since the proposed Project, after Mitigation Measure SM-AQ-2, would exceed the BAAQMD thresholds of significance for Reactive Organic Gases and Nitrogen Oxides, the Project would continue to have a *significant unavoidable cumulative impact* on regional air quality. This significant and unavoidable cumulative impact was included in both the Eastern Dublin EIR and 2002 SEIR and would not be a new supplemental impact related to the proposed Project.

Supplemental Mitigation Measure SM-AQ-3. Same as Supplemental Mitigation AQ-2.

Carbon monoxide impacts

Proposed Project changes to add non-residential development could result in increased levels of carbon monoxide levels.

On the local scale, the Project would change traffic on the local street network (see Section 4.2, Transportation and Circulation), changing carbon monoxide levels along roadways used by Project traffic. Carbon monoxide is an odorless, colorless poisonous gas whose

primary source in the Bay Area is automobiles. Concentrations of this gas are highest near intersections of major roads. New vehicle trips add to carbon monoxide concentrations near streets providing access to the site.

The Bay Area Air Quality Management District's *BAAQMD CEQA Guidelines* recommends estimation of carbon monoxide concentrations for projects where project traffic would impact intersections or roadway links operating at Level of Service D, E, or F or would cause Level of Service to decline to D, E, or F.

The analysis of intersection Level of Service (LOS) prepared for the Project found that, of the 19 existing intersections studied, none would operate at LOS D or worse after addition of Project traffic in either the AM or PM peak traffic hour. Therefore, the BAAQMD threshold trigger level for estimating carbon monoxide modeling of concentrations would not be exceeded.

Considering that the proposed Project is in an attainment area for carbon monoxide (the state and federal ambient standards are met), that Dublin has relatively low background levels of carbon monoxide compared to other parts of the Bay Area and that Levels of Service at intersections affected by Project traffic would remain acceptable (see Section 4.2, Transportation and Circulation), there would be *no significant supplemental impact* with regard to local carbon monoxide concentrations emissions.

Supplemental Development-level impacts. No supplemental development-level impacts related to air quality have been identified beyond those analyzed in the Project-level portion of the DSEIR.

4.12 HAZARDS AND HAZARDOUS MATERIALS

INTRODUCTION

Hazards and hazardous materials issues within the Project area were not analyzed in the Eastern Dublin EIR. They were reviewed in the Initial Study for the 2002 SEIR and determined not to present any potentially significant impacts and were therefore not reassessed in detail in the 2002 SEIR. A number of Environmental Site Assessments (ESA's) for hazardous materials have since been conducted for the various Project area parcels both before and after preparation of the 2002 SEIR. This supplement examines whether these hazardous materials surveys have resulted in any substantially changed potential hazardous materials impacts since certification of the 2002 SEIR.

This section also examines the possibility of hazards to the Project site posed by the proximity of Livermore Municipal Airport, a topic addressed in the Initial Study for the 2002 SEIR, but based on proposed Rural Residential development proposed in the APA as opposed to commercial, office and industrial uses now proposed for the APA area.

ENVIRONMENTAL SETTING

Environmental Site Assessments

Environmental Site Assessments have been prepared to assess the potential for contamination of the site with hazardous materials as follows. Refer to **Exhibit 3.3**, which depicts Project area ownerships.

Overall Fallon Village site: A Phase 1 assessment was prepared for the entire EDPO site in April 2005 (ENGEO, Inc., May 2005). That report incorporated and summarized the findings of the reports identified below, and provided additional information on the EBJ Partners, Bankhead, and Brannaugh properties.

Fallon Enterprises Site (Bankhead Property): Phase I assessments prepared for the approximately 303 acres of the 313-acre site in 2000 (ENGEO, Inc., May 23, 2000). Two five-acre areas that included residences on the Bankhead property were not included in that assessment. Those sites were addressed in the Phase 1 ENGEO 2005 study; however access to the houses on the site was not available. Based on the available information, ENGEO 2005 recommended that a Phase II ESA be conducted for portions of that site.

Braddock and Logan Site: A Phase I site assessment was completed for the entire 161-acre site, and A Phase II ESA was completed for an underground storage tank area on that site in 2000 (ENGEO, Inc., April 27, 2000).

Croak Property: A Phase I ESA was completed for the approximately 125-acre Croak property in 2000 (ENGEO Inc., November 2, 2000).

First American Title Company (Jordan) Property: A Phase I ESA was completed for the 173-acre property in 2001 (Berlogar Geotechnical Consultants, September 14, 2000), and a limited Phase II ESA was completed for a portion of that site in January 2001 (Berlogar Geotechnical Consultants, January 25, 2002).

Chen Property: A Phase I ESA for the site was completed for this approximately 136-acre site in 2000 (KCE Matrix, November 21, 2000).

Branough, Righetti, Anderson, Monte Vista Properties (Campbell), and Pleasanton Ranch Investments Properties: A single Phase I ESA was completed for these five properties (totaling approximately 146.5 acres) in 2001 (Eckland Consultants, Inc., February 9, 2001). No Phase II studies were recommended for these properties per se; however additional subsurface (Phase II) investigations were noted as required for the EBJ Partners site (see below).

EBJ Partners Property: Analysis of potential conditions on this site are included in the April 2005 ENGEO report, and some discussion of possible site hazards also is contained in the Eckland Consultants and KCE Matrix studies for adjacent properties, referenced above.

Project site conditions

Most of the project site properties are and have historically been agricultural in use and therefore have little potential for contamination with hazardous materials. However, the

storage and use of agricultural chemicals as well as underground fuel storage tanks on some of the site properties, lead paint and asbestos in some of the buildings to be demolished, and a former gas station on the EBJ Partners property at Croak Road could potentially have contributed to contamination of soil and groundwater with hazardous materials, as discussed below for each property.

Fallon Enterprises Site (Bankhead Property). A site reconnaissance and records search was conducted for this property in 2000. That study found that the property had been used primarily for ranching purposes, with some limited commercial use, since at least the 1950's. Commercial activities included the storage of metal scrap, cement processing, activities, and vehicle parts. Existing storage noted on the site was limited to less than 150 gallons of miscellaneous petroleum products, within the commercial storage area. According to the property owner, no underground storage tanks have existed on the property. The property is not listed on any of the state, county, or federal databases for hazardous wastes or materials. (ENGEO, Inc., May 23, 2000).

An additional assessment of the Bankhead site was conducted in 2005 (ENGEO, April 2005). That assessment identified a buried household waste dump on the property, and recommended that a Phase II ESA be conducted for the dump and underlying soils.

Braddock and Logan (Mandeville) Property. A site reconnaissance and records search was conducted for this property in 2000. That study found that the property had been used primarily for ranching purposes, with some limited commercial use, since at least 1957. Existing storage of chemicals including petroleum products, pesticides/herbicides, paint products, and batteries was noted in a barn and sheds on the site. A former gasoline underground storage tank was located adjacent to a barn on the site. Soil sampling was conducted for the underground storage tank site and the soils were found to be free of any contaminants associated with the former tank. The property is not listed on any of the state, county, or federal databases for hazardous wastes or materials (ENGEO, Inc., April 27, 2000).

Croak Property. A site reconnaissance, air photo review, and records search was conducted for this property in 2000. Those studies found that the property had been used primarily for residential and dry farming/ranching purposes since at least 1957. No evidence of past industrial or intensive agricultural uses was identified. Some small (five-gallon or less) empty chemical and storage containers and two empty 55-gallon drums used for water transport and tree protection were noted on the property. The property is not listed on any of the state, county, or federal databases for hazardous wastes or materials (ENGEO Inc., November 2, 2000).

First American Title Company (Jordan) Property. A records search, site reconnaissance, air photo review, and database review was conducted for the property and vicinity in 2000. The site is, and was historically, primarily used for grazing, with a ranch complex including two houses, several barns, and equipment sheds. Materials on the site included propane tanks, farm equipment/machinery, 1-, 5-, and 55-gallon drums (containing diesel fuel, weed killer, and other unknown liquids), metal water tanks, a removed underground storage tank (UST), and piles of scrap wood, asphalt, and metal. The property is not listed on any of the state, county, or federal databases for hazardous wastes or materials (Berlogar Geotechnical Consultants, September 14,

2000). Because of the existence of several areas of hazardous materials storage in the ranch complex, Berlogar recommended removal of the existing potentially hazardous wastes and preparation of a limited Phase II EA focusing on sites of potential contamination. (Berlogar Geotechnical Consultants, September 14, 2000).

The limited Phase II ESA was completed in January 2001, and included soil sampling during the removal of potentially contaminated soils identified in the Phase I ESA. During the investigation of the removed UST site, gasoline odors were detected in the sampled soils, and follow-up testing of soils at both ends of the pit for various hydrocarbon and petrochemical-related contaminants was conducted. Relatively high levels of diesel and gasoline were found in the tested soil samples. Other areas on the ranch complex where spills of hydrocarbons were noted in the Phase I investigation, and where Phase II studies were recommended, have not yet been sampled. These areas are proposed for sampling after their suspected contaminant sources are removed. (Berlogar Geotechnical Consultants, January 25, 2001).

The ENGEO April 2005 study recommended that a limited Phase II ESA be conducted on this property, including soil and groundwater sampling and testing to evaluate the potential impact to underlying soils and groundwater within the area of the diesel storage drums, weed killer, and other storage containers in Barn No. 2, as well as in the vicinity of the stored fuel containers and beneath farm equipment in Barn No. 1.

Chen Property. A records search, site reconnaissance, air photo review, database review, and agency consultation was conducted for the property and vicinity in 2000. The site is, and was historically, primarily grazing land with some evidence of former structures and some broken sheds on the west-central part of the site. Six 55-gallon drums were observed in the central portion of this site, five of which were empty and one of which appeared to be filled. Two empty 500-gallon above-ground tanks also were observed on the site (KCE Matrix, November 21, 2000).

The study also found that a former gasoline service station facility was located adjacent to the site on the EBJ parcel. The gas station was operated from at least 1957 through 1969, and could possibly have had "a detrimental impact to the subject property". Additional research was recommended in order to better assess the likelihood of this adjacent property having had such a detrimental effect (KCE Matrix, November 21, 2000).

Branough, Righetti, Anderson, Monte Vista Properties (Campbell), and Pleasanton Ranch Investments Properties. A records search, site reconnaissance, air photo review, document and database review, and property-owner survey consultation, were conducted for the property and vicinity in 2001. The properties are used for a horse ranch, trucking facility, landscaping materials/supplies storage facilities, a residence/office, and a former quarry. Chemical storage was identified on the landscaping, excavation, and trucking facility sites. Although a complete list of chemicals stored on the properties was not obtained, herbicides, fertilizers, gypsum, ammonium nitrate, petroleum oils, gasoline and diesel fuels, paint thinner, acetylene, carbon dioxide, and nitrogen (welding gasses), were observed. An 8,000 gallon underground storage tank containing domestic water exists on the Branough site, and a number of above-ground water storage tanks exist on other site properties. Above-ground diesel

storage tanks formerly existed on the Branaugh property. Spills and leaks were not noted in the vicinity of the empty aboveground storage tanks. Some of the site buildings may contain asbestos-containing materials and lead-based paints (Eckland Consultants, Inc., February 9, 2001). ENGEO (May 2005) also lists the Anderson property as potentially contaminated.

This study also noted the former gasoline service station facility adjacent to the site on the EBJ parcel and considers it both a historic and current "recognized environmental condition" that could affect groundwater and soil conditions on the subject properties. Consistent with the KCE Matrix report discussed previously, limited subsurface investigation was recommended in order to better assess the likelihood of this adjacent property having a detrimental effect (Eckland Consultants, Inc., February 9, 2001). ENGEO (April 2005) recommended that a Phase II ESA, including soil and groundwater testing, be performed on portions of the Branaugh Properties site used by Branaugh Excavating, Branaugh Transportation, and the Golden State/ Executive Landscaping Companies, and the Pleasanton Ranch Investments site.

EBJ Partners Site. The ENGEO May 2005 Phase I ESA generally addressed this 0.81-acre site. As noted above, the presence of a former gas station on this property could have resulted in contamination to both on-site and adjacent off-site properties, and therefore a Phase II ESA to evaluate potential soil and groundwater contamination from those past uses is recommended for this site (ENGEO, May 2005).

Livermore Municipal Airport

The City of Livermore owns and operates the Livermore Municipal Airport ("Airport"), a public utility airport located approximately three miles northwest of downtown Livermore and approximately one-third of a mile south of the I-580 Freeway. The Airport is sited approximately south and east of the Project area as shown on **Exhibit 4.12.1**. The Airport is situated on approximately 590 acres of land.

The facility has two parallel runways including a 5,255-foot lighted main runway and a 2,700-foot unlighted training runway. The Airport complex includes 24 buildings with a 2,400 square foot terminal building and storage for 392 aircraft. The Airport logs approximately 200,000 aircraft operations per year.

The Airport operates under a 1975 Master Plan prepared by August Compton & Associates. A Master Plan Update has been commenced by the City but is currently being held in abeyance based on a recent discussion with the Airport Manager (personal conversation with Leander Hauri, 6/17/05).

The *Alameda County Airport Land Use Policy Plan* establishes an Airport Land Use Commission (ALUC) General Referral Area for the Airport of 4,000 feet north of the I-580 Freeway. This requires that all land use applications within the General Referral Area be sent to the ALUC prior to final City approval. The General Referral Area is depicted on Figure 3.1-D in the Eastern Dublin EIR. According to the ALUC Land Use Policy Plan document (page xi), the General Referral Area includes land near an airport which is now or could in the future be affected by airport operations. This Area generally encompasses adopted ALUC hazard prevention, safety and noise zones. The ALUC has the authority to

determine of proposed land use development plans are consistent with ALUC safety and noise standards.

The *Alameda County Airport Land Use Policy Plan* establishes the Safety Zone for Livermore Municipal Airport south of the I-580 freeway as shown on Exhibit 4.12.1. Safety Zones are established to restrict population density and structural development in order to limit harm to persons on the ground and aircraft occupants in the event of an accident (*Alameda County Airport Land Use Policy Plan*, page 9). No portion of the Safety Zone is included within the Project area.

The ALUC Land Use Policy Plan also establishes a Height Referral Area for the Airport, which includes a conical shaped area at a 100:1 ratio measured within a 20,000-foot distance of the boundaries of Airport runways. The Airport Height Referral area is also depicted on Eastern Dublin EIR Figure 3.1-D.

The Project area does not lie within an identified Safety Zone of Livermore Municipal Airport as shown on Map XXIII of the ALUC Airport Land Use Policy Plan (See **Exhibit 4.12.1**).

IMPACTS AND MITIGATION MEASURES FROM PREVIOUS EIRs

The Initial Study for the 2002 SEIR noted that Phase I Environmental Site Assessments have been completed for each individual parcel comprising the Project area and concluded that levels of organics, pesticides, and petroleum-based products typical of agricultural uses have been discovered near existing agricultural outbuildings were less-than-significant. That IS also noted that, should the Project be approved, Phase II Environmental Site Assessments will be performed as needed on each parcel prior to construction. Remediation measures, if needed, would be recommended and completed in accordance with State and Federal requirements. This issue was not assessed further in the 2002 SEIR.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The same general development areas are proposed for this Project as were assumed in the Eastern Dublin EIR and the 2002 SEIR. As described in the Setting section, several new hazardous materials studies have been identified since the Eastern Dublin EIR and SEIR Initial Study analyses. Supplemental impacts are identified based on the recent Environmental Site Assessments for the project properties.

The issue of potential impacts of aircraft safety from Livermore Municipal Airport is also analyzed.

Significance Criteria. Implementation of the Project would be considered to have a significant impact with respect to hazardous materials if it were to:

- Create a significant hazard through transport of hazardous materials or release or emission of hazardous materials
- Develop on a site listed as a hazardous materials site
- Expose people and structures to a significant risk of loss, injury or death
- For a project located within an airport land use plan result in a safety hazard for people living or working in the project area.

Supplemental Program-Level Impacts. The Project proposes several land uses changes within the Project area, including converting the former "Future Study Area" land use designation to non-residential land uses. This SEIR also addresses the potential for hazards from release of hazardous materials into the atmosphere from demolition of existing buildings and remediation of potentially contaminated sites.

Anticipated supplemental impacts are identified as follows.

Asbestos and lead-based paint release during demolition

Supplemental Program Impact HAZ-1 (*Potential for Exposure to Asbestos-containing Materials and Lead-based Paints*). Demolition of certain residences on the site (i.e. on the Fallon Enterprises (Bankhead), Branaugh, Monte Vista (Campbell), and Croak properties, could subject workers to asbestos containing materials (ACM's) and lead-based paints (LBP's), and otherwise release those materials into the environment (*potentially significant impact and mitigation required*).

Adherence to the following measure will mitigate this impact to a less-than-significant level.

Supplemental Mitigation SM-HAZ-1. Prior to the demolition of any structures identified in the Environmental Site Assessments as potentially containing ACM's or lead-based paints, Project developer(s) shall undertake comprehensive asbestos and LBP surveys of those structures and implement appropriate ACM and LBP handling and disposal methods based on those surveys. As recommended in the ENGE0 2005 report, an environmental professional shall be present during demolition and pre-grading activities to inspect for potential environmental contaminants.

Soil and/or groundwater contamination from surface hazardous materials

Supplemental Program Impact HAZ-2 (*Potential for Soil/Groundwater Contamination and Exposure Hazards from Existing Hazardous Materials*). Containers of potential hazardous materials and conditions identified in Environmental Site Assessments on some of the Project parcels could result in potential soil and/or groundwater contamination. Exposure of workers, future occupants of Project properties and/or visitors to these materials could present a safety hazard (*potentially significant impact and mitigation required*).

Adherence to the following measures will mitigate this impact to a less-than-significant level.

Supplemental Mitigation HAZ-2 (*potential for soil/groundwater contamination and exposure hazards from existing hazardous materials*). As identified in the Environmental Site Assessments for each property, all observed hazardous or potentially hazardous materials and potential containers of those materials shall be removed from the properties by licensed waste contractors prior to building demolition. If no building demolition is required, this removal shall be completed prior to any grading activities on an individual site. The contents of potential hazardous material containers shall be identified and disposed of accordingly, including specific methods to preclude airborne release of materials. All dumped scrap and miscellaneous material and equipment shall be removed from the site prior to any on-site development activities. If recommended in

the ESA (i.e. Mandeville, Anderson, and Fallon Enterprises properties), an environmental professional shall view the property during demolition and pre-grading activities to ensure compliance with this measure.

Soil and/or groundwater contamination from subsurface contamination

Supplemental Program Impact HAZ-3 (*potential for soil/groundwater contamination from subsurface contamination*). Potential site contamination may have resulted from former or existing underground storage tanks, materials dumped into wells or septic systems, and spills of petroleum products and other hazardous materials on portions of the site. This issue is of particular concern on and adjacent to the former gasoline station site on the EBJ Partners property (including portions of the Anderson and Chen properties), and on the Jordan Ranch complex site, where relatively high levels of petroleum hydrocarbons have been found in the soil. In addition, the buried household garbage dump on the Bankhead property could pose a potential for soil and/or groundwater contamination (*potentially significant impact and mitigation required*).

Adherence to the following measures will reduce this impact to a less-than-significant level

Supplemental Mitigation SM-HAZ-3a (*potential for soil/groundwater contamination from subsurface contamination*). A Phase II ESA shall be conducted for the former gas station site north and west of Croak Road to obtain information with regard to operation, demolition, and removal of the former gasoline service station in order to better assess the likelihood of this use having a detrimental impact to soils and water quality at the EBJ site and adjacent sites. This Assessment shall be completed and approved by the Alameda County Fire Department prior to any demolition or site grading, whichever is first. Additionally, a limited subsurface investigation shall be conducted for the EBJ parcel and adjacent areas of the Anderson and Chen/Tseng properties to better assess whether impacts to soil and shallow groundwater have resulted from the former gas station.

Supplemental Mitigation SM-HAZ 3b (*potential for soil/groundwater contamination from subsurface contamination*). All identified potentially contaminated areas on the Jordan Ranch site shall be remediated as identified in the Phase I ESA. In addition, as identified in the Phase II ESA, the Jordan Ranch owner shall inform the Alameda County Environmental Health Services Department (ACEHSD) of an unauthorized release of fuel hydrocarbons as diesel and gasoline in the vicinity of the removed underground fuel tank at the site. The property shall be subject to further subsurface investigations to evaluate the lateral and horizontal extent of the contamination, and to evaluate whether ground water has been affected, and shall be remediated as directed by the ACEHSD. Further site assessment, including soil and groundwater sampling and testing, shall be conducted to evaluate the horizontal and lateral extent of impact to underlying soils and groundwater. A limited Phase II ESA, including soil and groundwater sampling, shall be conducted to evaluate the potential impact on underlying soils and groundwater within the area of the diesel storage drums, weed killer, and other storage containers in Barn 2, as well as in the vicinity of the stored fuel containers and farm equipment in Barn 1.

During removal of hazardous material contaminant sources at the Jordan Ranch site, a qualified environmental assessor shall be present to observe the removal and conditions exposed during that removal. After the removal of these sources from the site, and any

excavation to remove contaminated soil, additional soil sampling and laboratory testing shall be conducted to confirm that the contaminated materials have been removed. If potentially hazardous substances are identified, remediation plan(s) shall be prepared by a qualified consulting and approved by an appropriate oversight agency. A worker safety plan shall be included in all remediation plans.

Supplemental Mitigation SM-HAZ 3c (*potential for soil/groundwater contamination from subsurface contamination*). A Phase II ESA shall be conducted for the portion of the Fallon Enterprises property where the buried household garbage dump is located. The assessment shall include soil sampling and testing to evaluate the potential impact to underlying soils. The assessment shall be completed and approved by the Alameda County Fire Department prior to site grading operations. If potentially hazardous substances are identified in the Phase II ESA, remediation plan(s) shall be prepared by a qualified consulting and approved by an appropriate oversight agency. A worker safety plan shall be included in all remediation plans.

Supplemental Mitigation SM-HAZ 3d (*potential for soil/groundwater contamination from subsurface contamination*). A Phase II ESA shall be conducted for the portion of the Anderson property used by Pleasanton Trucking and Materials. That assessment shall include soil sampling and groundwater testing to evaluate the potential impact to underlying soils. If potentially hazardous substances are identified in the Phase II ESA, remediation plan(s) shall be prepared by a qualified consulting and approved by an appropriate oversight agency. A worker safety plan shall be included in all remediation plans..

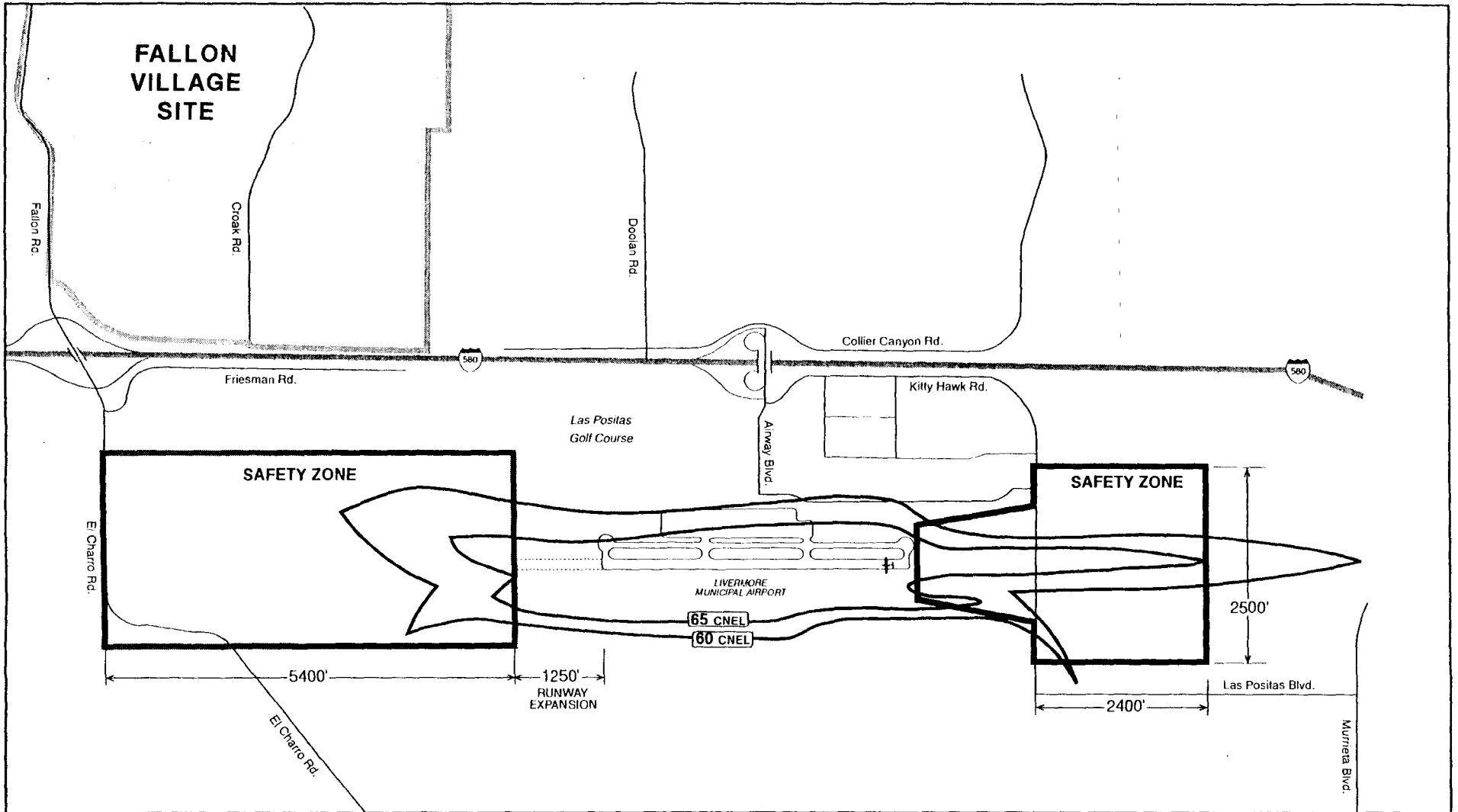
Supplemental Mitigation SM-HAZ 3e (*potential for soil/groundwater contamination from subsurface contamination*). A Phase II ESA shall be conducted for the portion of the Branaugh properties used by Branaugh Excavating, Branaugh Transportation, and the Golden State/Executive Landscaping Companies. That assessment shall include soil sampling and groundwater testing to evaluate the potential impact to underlying soils. If potentially hazardous substances are identified in the Phase II ESA, remediation plan(s) shall be prepared by a qualified consulting and approved by an appropriate oversight agency. A worker safety plan shall be included in all remediation plans.

Supplemental Mitigation SM-HAZ 3f (*potential for soil/groundwater contamination from subsurface contamination*). Upon development of each site, all existing wells shall be abandoned under permit from Zone 7 Water Agency and in accordance with all applicable regulations.

Supplemental Mitigation SM-HAZ 3g (*potential for soil/groundwater contamination from subsurface contamination*). When, or prior to, the existing structures are demolished, all existing septic systems and associated leach fields shall be pumped out and removed under permit from the Alameda County Health Department.

Potential aircraft safety hazards

The proposed Stage 1 Development Plan would convert the "Future Study Area" designated portion of the Project area, generally located along the north side of the proposed extension of Dublin Boulevard and east of Croak Road, to a combination of General Commercial and Campus Office land uses. Under the existing Future Study Area,



SOURCE: Alameda County Airport Land Use Policy Plan, 1986.

CITY OF DUBLIN
 FALLON VILLAGE
 DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT



Exhibit 4.12.1
ALUC SAFETY AND NOISE ZONES,
LIVERMORE MUNICIPAL AIRPORT

0 2000 4000 feet

there would be employees and visitors on this portion of the Project area. If the proposed Stage 1 Development Plan is approved, a significantly greater number of employees and visitors would be present within this portion of the Project area than are currently allowed. Although the southerly portion of the Project area lies within the Livermore Municipal Airport General Referral and Height Referral Areas and the Project area has and will continue to be subject to aircraft overflights, none of the Project area is within an Airport Safety Zone as identified in the Alameda County Airport Land Use Commission *Airport Land Use Policy Plan*. Although there is a possibility of fire and/or explosion from aircraft crashes onto properties that would be re-designed as "General Commercial/Campus Office/Industrial" as part of the proposed Stage 1 Development Plan, the use and storage of flammable materials will be controlled by the Alameda County Fire Department pursuant to City and state regulations. Therefore, the potential for aircraft safety impacts related to the proposed Project land use change is anticipated to be less-than-significant and would result in *no supplemental impacts*.

Developers of future subdivisions within the Project area will be required under AB 2776, adopted in 2004, and Supplemental Mitigation Measure SM-NOISE-1 to provide notification to future purchasers of the presence of the Livermore Municipal Airport and associated aircraft operations.

Supplemental Development-Level Impacts. No additional supplemental impacts related to the potential for hazardous material have been identified on the northerly portion of the Project area. The Initial Study prepared for this Project (see Appendix 8.3) identifies no aircraft safety issues on the Development portion of the Project area.

4.13 PARKS AND RECREATION

INTRODUCTION

Parks and recreation facilities were analyzed in Chapter 3.4 of the Eastern Dublin EIR. This Supplemental EIR examines whether proposed changes in the number and size of local parks and recreation facilities as part of the proposed Dublin Ranch West Project would substantially change environmental impacts identified in the Eastern Dublin EIR.

The Recreation discussion prepared for the 2002 SEIR Initial Study determined that there were no supplemental impacts to parks and recreation, so this topic was not addressed in the 2002 SEIR.

ENVIRONMENTAL SETTING

The Eastern Dublin EIR identifies existing City facilities and park standards and East Bay Regional Park District facilities.

City facilities and standards

The City of Dublin's inventory of park and recreational facilities is composed of neighborhood and community facilities, community parks and community centers. Table 3.4.4 contained in the Eastern Dublin EIR identifies parks in the City of Dublin existing at the time the Eastern Dublin General Plan Amendment and Specific Plan were approved.

Park and open space standards for the City was 2.5 acres of active parkland per 1,000 residents at the time the EDSP was adopted.

Regional facilities

Regional parkland and open space facilities in the Tri-Valley and adjacent areas within Alameda and Contra Costa Counties are provided by the East Bay Regional Park District (EBRPD). The nearest EBRPD facility to the Project area is the Tassajara Creek Regional Trail Corridor located approximately two to three miles west of the Project area.

IMPACTS AND MITIGATIONS FROM PREVIOUS EIRs

The Eastern Dublin EIR identified a number of impacts related to parks and recreational facilities. Impact 3.4/K indicated that increased demand for parks as a result of buildout of the Eastern Dublin area would represent a significant impact on the ability of the City of Dublin to provide park service for future residents. It would also be a potentially significant cumulative impact for the community due to lack of sufficient city-wide park facilities that would not meet a standard of 5 acres of parkland per 1000 population. Mitigation Measures 3.4/20.0-28 were included in the Eastern Dublin EIR to reduce this impact to a less-than-significant level. These measures call for the acquisition and development of new parks and other outdoor facilities in Eastern Dublin, requiring land dedication and/or park in-lieu fees for new subdivisions and similar techniques to provide for additional park and recreational features. Implementation of all of the mitigation measures identified in the Eastern Dublin EIR would result in a ratio of 6.7 acres of parkland per 1000 population in Eastern Dublin.

Impact 3.4/L identified a park facility fiscal impact on the City of Dublin. The fiscal strain of providing new park facilities would be a potentially significant impact. Mitigation Measures 3.4/29.0-31.0 would require that each new development in Eastern Dublin provide a fair share of parks and open space facilities. Development of a parks implementation plan was also called for, to identify and prioritize parkland in Eastern Dublin. Finally, adoption of a park in-lieu fee program was required as a mitigation measure to reduce this impact to a level of insignificance. Consistent with these mitigations, the City requires residential project developers to dedicate parkland at the time of subdivision approval and pay Public Facility Fees (which includes park in-lieu fees) to fund both the development of neighborhood and community park facilities as well as other community facilities. Developer(s) of the Fallon Village Project would pay Public Facility Fees at the time building permits are issued for individual dwelling units.

Impacts 3.4/ M and N dealt with the regional trail system and open space connections. Development of residential and commercial areas in Eastern Dublin was anticipated to have a potentially significant impact to the construction of a regional trail system (Impact 3.4/M). Adherence to Mitigation Measure 3.4/ 32.0 would require the establishment of a trail system with connections to planned regional and subregional trails, which would reduce this impact to an insignificant level.

Urban development along stream corridors and ridgelines would adversely impact outdoor recreational opportunities for future Dublin residents and potentially obstruct the formation of an interconnected open space system (Impact 3.4/ N). Adherence to Mitigation Measures 3.4/ 33.0-36.0 would reduce this impact to an insignificant level. These

measures call for use of natural stream corridors and major ridgelines to create a comprehensive, integrated trail system that allows safe and convenient pedestrian access, and required developers to dedicate public access along ridgetops and stream corridors to accommodate trail and staging areas.

The 2002 SEIR described a proposed action of that project to detach the Project area from the Livermore Area Recreation and Parks District (LARPD) as part of the larger reorganization that also included annexation of the Project area to the City of Dublin and Dublin San Ramon Services District. Under the reorganization proposal, the City of Dublin would provide parks and recreation facilities and services to Project area residents as part of the larger spectrum of municipal services. The reorganization was approved by the Alameda County Local Agency Formation Commission in 2002 and the Project area now receives parks and recreation facilities and services provided by the City of Dublin.

SUPPLEMENTAL IMPACTS AND MITIGATION MEASURES

The Eastern Dublin Specific Plan identifies a portion of a community park, four neighborhood parks and one neighborhood square within the Fallon Village Project area. This totals approximately 46.8 acres (gross) of parkland.

In 1995, the City adopted a Parks and Recreation Master Plan to establish goals, long-term policies and standards to guide the acquisition, development and management of the City's park and recreation facilities.

In February 2004, the City of Dublin adopted an updated Parks and Recreation Master Plan. The purpose of the Master Plan is to establish goals, long-term policies and standards to guide the City of Dublin in the acquisition, development and management of Dublin's park and recreation facilities for the next twenty years following adoption (page 3). The Master Plan depicts the approximate location of future parks, by type, design standards for parks and recreation facilities, the location and design of trail and parks and recreation maintenance and operations. The Master Plan also establishes standards of 1.5 acres of neighborhood parkland and 3.5 acres of community parkland (total of 5.0 acres) per 1,000 residents (Master Plan Table 1).

The Master Plan uses net acres, rather than gross, to depict park facilities. The Master Plan shows four neighborhood parks and neighborhood squares and a portion of a Community Park within the Project area.

The City has constructed several parks in Eastern Dublin as residential construction has occurred. Phase II of Emerald Glen Community Park has also been constructed at the southwest corner of Tassajara Road and Central Parkway. Emerald Glen Park now encompasses approximately 30 acres. A third development phase of this park is now underway with two additional phases anticipated for the future. The ultimate size of Emerald Glen Park is planned to be 48 acres.

A second community park is being planned in Eastern Dublin that would be bounded by Lockhart Street, Gleason Drive, Fallon Road and Central Parkway. This is anticipated to include approximately 60 acres of land and would include primarily active sports fields.

Significance Criteria. Park impacts are considered significant if construction of the proposed project would result in a demonstrable increase in the use of a local or community park, playground or recreational facility, or would conflict with an adopted agency park and recreation regulatory document, such as a park and recreation master plan.

Supplemental Program Impacts. A potential Program-level supplemental impact identified in Initial Study for this Project would be the adequacy of parkland within the proposed Fallon Village Project.

Based on the following analysis, construction of residential land uses as shown in the proposed Stage 1 Development Plan would not result in a potential supplemental impact over and above those addressed in the Eastern Dublin EIR dealing with the adequacy of community and local neighborhood parks. Table 4.13.1, below, summarizes the estimated number of residents within the Fallon Village Project at buildout of all land uses proposed within the Project.

Table 4.13.1. Fallon Village Estimated Population at Project Buildout

Residential Land Use	Proposed Dwellings	Population/Dwelling Factor ⁽¹⁾	Total est. Population
Rural Residential	2	3.2	6
Low Density	1,737	3.2	5,558
Medium Density	601	2.0	1,202
Medium High Density	672	2.0	1,334
Village Commercial/ Residential	96	2.0	192
Total	3,108		8,282

Note 1: Population per dwellings based on factors included in the EDSP
Source: Haag, 2005

The proposed Stage 1 Development Plan includes 46.8 acres (gross) of local parkland. This is composed of 18.3 acres of a portion of a community park located adjacent to Fallon Road in the westerly part of the Project and 38.5 acres of neighborhood parks and a neighborhood square dispersed throughout the Project area.

Based on an estimated build out Project population of 8,282 residents and at a ratio of 5.0 acres of parkland per 1,000 residents, a total of 42.3 acres of public parkland would be required per City standards. Therefore, the amount of total parkland provided in the proposed Project (46.8 acres) would be, approximately 4.5 acres greater than the amount of total parkland required in the City's Master Plan of Parks and Recreation (42.3 acres).

The amount of community parkland proposed in the Project (18.3 acres) would be less than the City standard of 3.5 acres of community parkland per 1000 residents, which would be 30 acres. Developers within the Project area will be required to pay Public Facility Fees to the City of Dublin for individual developments that do not meet City park dedication standards. Neighborhood park acreage proposed in the proposed Project (28.5 acres) would exceed the City's neighborhood park standard of 1.5 acres per 1,000 residents of

12.4 acres. Overall, sufficient community parkland would be provided in the Stage 1 Development Plan as required by the Parks and Recreation Master Plan.

Based on information provided by the Dublin Parks and Community Services Department (conversation with D. Lowart, 6/27/05), the location and sizes of community and neighborhood parkland shown in the proposed Project is consistent with the current City of Dublin Parks and Recreation Master Plan so there would be *no significant supplemental impacts* with regard to provision of City parks.

The City of Dublin Parks and Recreation Master Plan also indicated the provision of a Class II bicycle trail along Fallon Road through the Project area.

Therefore, there would be *no supplemental project-level impacts* with regard to provision of park and recreation facilities.

Supplemental Development-level Impacts. The number, location and size of parks within the Development portion of the Project is consistent with that included in the Program-level Stage 1 Development Plan and the City of Dublin Parks and Recreation Master Plan. Therefore there would be no supplemental level Development-level impacts related to park and recreation facilities.

5.0 Alternatives to the Proposed Project

The California Environmental Quality Act requires identification and comparative analysis of feasible alternatives to the proposed Project which have the potential of achieving most of the project objectives, but would avoid or substantially lessen any significant impacts of the project.

The following discussion considers alternative development scenarios. Through comparison of these alternatives to the proposed Project, the advantages of each can be weighed and considered by the public and by decision-makers. CEQA Guidelines Section 15126.6 requires a range of alternatives "governed by the rule of reason" and require the EIR to set forth a range of alternatives necessary to permit a reasoned choice.

5.1 Alternatives Identified in the Eastern Dublin EIR

The Eastern Dublin EIR was prepared for a General Plan Amendment encompassing approximately 6,920 acres of land and for a Specific Plan for 3,328 acres within the General Plan Amendment area. The General Plan Amendment and Specific Plan (GPA/SP) proposed a variety of types and densities of housing, as well as employment-generating commercial, campus office and other land uses. Other portions of the planning area were designated schools, open space and other community facilities. Protection for natural features of the planning area, including riparian corridors and principal ridgelines, was provided through restrictive land use designations and policies. The land use plan reflected the Eastern Dublin Project objectives as set forth in the Eastern Dublin EIR, Section 2.5.

As required by CEQA, the Eastern Dublin EIR identified project alternatives that could eliminate or reduce significant impacts of the Eastern Dublin Project. The four identified alternatives included: No Project, Reduced Planning Area, Reduced Land Use Intensities and No Development. These are described below:

No Project Alternative. The No Project alternative evaluated potential development of the GPA/SP area under the then-applicable Dublin General Plan for the unincorporated portion of the planning area under the Alameda County General Plan.

Reduced Planning Area Alternative. The Reduced Planning Area Alternative evaluated development of the Specific Plan as proposed, but assumed development beyond the Specific Plan only to the Dublin Sphere of Influence boundary. The effect of this alternative was to exclude Upper and Lower Doolan Canyon properties from the project.

Reduced Land Use Intensities Alternative. The Reduced Land Use Intensities Alternative evaluated potential development of the entire GPA/SP area, but reduced some higher traffic generating commercial uses in favor of increased residential dwellings.

No Development. The No Development Alternative assumed no development would occur in the planning area other than agricultural, open space and similar land uses then in place.

The Dublin City Council certified the Eastern Dublin EIR on May 10, 1993, under Resolution No. 51-93. The City Council found the No Project, Reduced Land Use Intensities and No Development alternatives infeasible and then approved a modification of the Reduced Planning Area Alternative rather than the GPA/SP project as proposed (Resolution No. 53-93). This alternative was approved based on City Council findings that this alternative land use plan would reduce land use impacts, would not disrupt the Doolan Canyon community, would reduce growth-inducing impacts on agricultural lands and would reduce traffic, infrastructure and noise impacts of the originally proposed Eastern Dublin Project. Even under this alternative project, however, significant unavoidable impacts would remain. Therefore, upon approval of the GPA/SP, the City Council adopted a Statement of Overriding Considerations (Resolution No. 53-93).

5.2 Alternatives Identified in the 2002 Supplemental EIR

The 2002 Eastern Dublin Properties Stage 1 Development Plan and Annexation Supplemental EIR acknowledged Alternatives considered in the Eastern Dublin EIR and considered the following additional alternatives.

Mitigated Traffic Alternative. Under this Alternative, the number of residential dwelling units and non-residential floor area was reduced by twenty-five (25) percent. This would result in a total of 1,895 dwellings and 1.06 million square feet of non-residential floor space being developed in the Project area. Even with this reduction, the Supplemental EIR noted significant and unavoidable impact with regard to Project and cumulative air quality and cumulative biological impacts. All other impacts were less-than-significant or could be mitigated to a less-than-significant level.

Development under Alameda County General Plan (ECAP). A second alternative analyzed in the 2002 Supplemental EIR was not to implement the proposed Stage 1 Development Plan and allow development of the Project area under the auspices of the Alameda County East County Area Plan (ECAP). This Alternative identified significant and unavoidable impacts associated with mobile source air quality emissions, cumulative biological impacts and cumulative transportation and circulation impacts. All other impacts were less-than-significant or could be mitigated to a less-than-significant level.

No Development. Under the no development alternative no significant impacts were identified.

The 2002 SEIR identified the "no development" alternative as the environmentally superior alternative; however, this alternative was rejected as being infeasible since it did not fulfill Project objectives. The second-ranked Alternative was the "no Project/ECAP" Alternative which would result in similar traffic impacts and, for a small number of intersections, could have a greater traffic impact, than the 2002 Project. Also, greater mobile and stationary impacts would be generated than the 2002 Project and this Alternative may not meet all of the stated Project objectives. The Mitigated Traffic Alternative would reduce transportation and air quality impacts but would not have substantially reduced visual, biological or noise impacts.

5.3 Alternatives Identified in the 2005 Supplemental EIR

Alternatives selected for analysis in this Supplemental DEIR document include:

- Alternative 1: No development.
- Alternative 2: Development pursuant to the 2002 Stage 1 Development Plan.
- Alternative 3: Reduced Project Development, which assumes reduced residential and non-residential land use densities.
- Alternative 4: Relocated Central Parkway, which assumes a different location for Central Parkway through the Project area
- Alternative 5: Replacement of General Commercial/Campus Office/Industrial land use designations with an Industrial land use designation.
- Alternative 6: Changed Development Pattern on the Jordan property.

Alternatives are described and evaluated below.

5.3.1 Alternative 1-No Development

CEQA requires an analysis of a "No Project" alternative. Under this alternative, it is assumed that all of the properties would remain as they presently exist and no development would occur on any of the parcels comprising the Project area. Dwellings and other structures would remain as they currently exist.

This alternative would avoid the range of environmental impacts described in the Eastern Dublin EIR, the 2002 Supplemental EIR and this DSEIR, including:

- *Land Use and Planning:* Land use within the Project area would remain as they currently exist-primarily open space and grazing lands with scattered farmsteads.
- *Transportation and Traffic:* Project area streets and roads would remain as they presently exist. No new roadways, trails or similar circulation improvements would be constructed, including the extension of Dublin Boulevard. Since current land uses would remain, there would be no new vehicles generated from the Project area that would be added to existing roadways and freeways. There would be no significant and unavoidable impacts related to Project contributions to congested freeway conditions.
- *Community Services and Facilities:* There would be no increases in the number of calls for service for the Dublin Police Department and Alameda County Fire Department based on the small number of dwellings within the Project area. Impacts to the Dublin Unified School District would also be minimal with no increase in the number of dwellings that would generate school-aged children.
- *Sewer, Water & Storm Drainage:* There would be no increased demand for water service within the Project area since no new dwellings would be created. Similarly, wastewater generation would be limited and would be accommodated by existing on-site septic systems so there would be no increase in wastewater treatment demand at DSRSD's regional treatment plant. There would be no contribution to LAWVMA's wastewater disposal pipeline since no wastewater would flow off of the Project area. Stormwater runoff would flow in existing natural drainage channels with existing natural erosion into surface bodies of water. There would likely be minimal contributions to the regional salt loading issue since recycled water would not be used for irrigation.

- *Soils, Geology and Seismicity:* There would be no grading or excavation occurring on the Project site since no development would occur. Existing hillsides and ridges would remain in their existing, natural conditions. There would be fewer residents, employees and visitors to the Project area that could be subject to seismic hazards such as severe groundshaking or liquefaction or to other soils hazards, such as landslides.
- *Biological Resources:* No impacts would result to biological resources within the Project area since no development would occur. This includes special status plants, animals and their respective habitats. Wildlife movement would only be limited to the extent of existing fencing. Wetlands and other waters of the U.S. would remain as they currently exist.
- *Visual Resources:* There would be no impacts to visual resources since there would be no change to existing land use. Hillsides and ridges within the Project area would remain in their present condition without alteration.
- *Cultural Resources:* There would be no impacts to prehistoric, historic or Native American resources within the Project area since no construction or disruption of the soil would not occur to impact these resources. Existing historic structures would remain in their present locations.
- *Noise:* Existing noise generators on and near the Project area would remain as currently constituted. Since the area is largely undeveloped, increased noise caused by vehicles associated with increased development would be minimal.
- *Air Quality:* Existing source of air emissions would remain. There would be no short-term air quality impacts associated with construction of new buildings and other public and private improvements envisioned in the Stage 1 Development Plan. The Project's contribution to long-term, cumulative air quality emissions would not change, since no new vehicular traffic would be attracted to the site.
- *Hazards and Hazardous Materials:* Existing sources of contamination within the Project area would remain and would not be remediated as a result of the proposed Project. There would be no risk of fire or explosion due to aircraft crashes in the Project area, since no commercial or office development would be constructed.
- *Recreation:* There would be very limited increased use or demand for local or regional recreational facilities since the population of the site would not significantly increase.

5.3.2 Alternative 2-No Project/Development Under Existing Stage 1 Development Plan

Under this alternative, the Project would not be built; instead, the Project area would be developed consistent with the existing 2002 Stage 1 Development Plan was analyzed in the 2002 Supplemental EIR. This Alternative considers construction of up to 2,526 dwelling units at varying densities, up to 581,090 square feet of commercial land use, up to 840,360 square feet of industrial land use, 14.1 acres of a Community Park, 26.7 acres of neighborhood parkland, 32 acres reserved for schools and 77 acres for permanent, non-

buildable open space. This alternative also includes extensions of roadways and utilities to serve planned uses. See **Exhibit 3.6** for the existing Stage 1 Development Plan.

This alternative was found to result in generally the same type and intensity of impacts as analyzed in the Eastern Dublin EIR, including:

- *Land Use and Planning*: This Alternative would result in approximately the same impacts as the proposed Project, since approximately the same type of development would occur. Although the number of residential dwellings would be higher by 582 dwellings in the proposed Project and the amount of non-residential development would be higher by 1,081,725 square feet, impacts of this amount of additional development has been evaluated in other sections of the alternatives analysis, below.
- *Transportation and Traffic*: Eleven supplemental transportation and traffic impacts would occur with the Alternative over and above those identified in the Eastern Dublin EIR. These supplemental impacts that are identified in the 2002 SEIR include: unacceptable Level of Service at Hacienda Drive/I-580 eastbound freeway ramps, which would be mitigated by contribution of pro-rata fees to upgrade the Hacienda Drive/I-580 interchange; unacceptable Level of Service at Hacienda Drive/I-580 westbound ramps, which would be mitigated through the same fee program; unacceptable Level of Service at Santa Rita Road/I-580 eastbound ramps, which could be mitigated through payment of pro-rata fees to upgrade this interchange; unacceptable Level of Service at the Dublin Boulevard/Street D intersection during the PM peak, which would be mitigated by installation of a traffic signal at this intersection; unacceptable Level of Service at the Fallon Road/Project Road during both the AM and PM peak hours, which would be mitigated to a less-than-significant level by installation of a traffic signal at this intersection; unacceptable Level of Service at the Dougherty Road/Dublin Boulevard intersection during both the AM and PM peak hours in the year 2025 under cumulative conditions, which could not be fully mitigated and would be a significant and unavoidable impact; unacceptable Level of Service at the Hacienda Drive/Dublin Boulevard intersection during the PM peak condition under 2025 cumulative conditions, which could not be fully mitigated and would be a significant and unavoidable impact; unacceptable Level of Service at the Fallon Road/Dublin Boulevard intersection in the PM peak hour under 2025 cumulative conditions, which could not be fully mitigated and would be a significant and unavoidable impact; traffic overloading on Fallon Road at planned interim lane configurations in the future base plus Project scenario, which would be mitigated to a less-than-significant level by requiring developers to widen Fallon Road to its ultimate configuration; Central Parkway would be overloaded with traffic at the planned interim condition in the future base with Project scenario which would be mitigated by requiring Project developers to widen Central Parkway to its ultimate configuration; the addition of Project traffic to segments of the I-580 and I-680 freeways under the cumulative buildout scenario in the year 2025 in both the AM and PM peak hours, which could not be fully mitigated and would remain a significant and unavoidable impact.

Overall, this alternative would have approximately the same transportation and traffic impacts as the proposed Project, including the same significant and unavoidable impacts.

- *Community Services and Facilities:* This Alternative would result in fewer impacts to the Dublin Police Department and Alameda County Fire Department than the proposed Project and Alternatives 4, 5 and 6, since there would be fewer calls for service based on a smaller Project population and smaller non-residential component. There would be somewhat more calls for service under this Alternative than Alternative 3, which proposes less development than the Proposed project and the other Alternatives identified above. The number of calls for service for this Alternative would be approximately the same as analyzed in the Eastern Dublin EIR, since the amount of residential and non-residential would be the same. Impacts to the Dublin Unified School District would be less than the proposed Project and Alternatives 4, 5 and 6, since fewer school-aged children would be generated by fewer dwellings units. This Alternative would likely generate more school aged children than Alternative 3, which includes less development within the Project area. All impacts related to community services and facilities could be reduced to a less-than-significant impact by adherence to mitigation measures contained in the Eastern Dublin EIR and as recommended for the proposed Project.
- *Sewer, Water & Storm Drainage:* This Alternative would result in less demand for potable and recycled water than the proposed Project and Alternatives 4, 5 and 6, since less residential and non-residential development would occur. Alternative 3, the Reduced Project Alternative, would have less impact on utility services, since less development would occur. Wastewater treatment and disposal impacts would also be less than anticipated for the proposed Project based on less development. Stormwater runoff from the Project area would be slightly less than the proposed Project and Alternatives 4, 5 and 6, since smaller amounts of paved surfaces would be needed to accommodate a smaller amount of development within the Project area. Measures included in the Eastern Dublin EIR would reduce impacts to sewer water and storm drainage to a less-than-significant level.
- *Soils, Geology and Seismicity:* Somewhat less impacts to soils, geology and seismicity would result under this Alternative than the proposed Project and Alternatives 4, 5 and 6, since less grading and excavation would be required on upper hillsides to the north and east of the Project area to accommodate a fewer number of residential dwellings. This Alternative would not include encroachment into Visually Sensitive Ridgeland areas to allow for development. Alternative 3 would likely result in fewer impacts to soils, geology and seismicity than the proposed Project and Alternatives 4, 5 and 6 since less of the Project area would need to be graded or otherwise disturbed for development. Mitigation measures contained in the Eastern Dublin EIR would reduce these impacts to a less-than-significant level.
- *Biological Resources:* The 2002 SEIR identified a number of additional supplemental impacts with regard to biological resources from the Eastern Dublin EIR. These include: direct and indirect habitat loss, which would be mitigated to a less-than-significant level by the completion of a Resource Management Plan to identify site-specific biological impacts and related items; loss of special-status plant species,

which would be mitigated to a less-than-significant level by follow-on plant surveys, avoidance of plant locations and a mitigation plan if special-status plant species cannot be avoided; loss or degradation of botanically sensitive habitats, which could be partially mitigated to a less-than-significant level by avoidance of botanically sensitive habitats, although this would be a significant and unavoidable cumulative impact; impacts to San Joaquin kit fox, which would be mitigated to a less-than-significant level by implementing the Eastern Dublin San Joaquin Kit Fox Protection Plan and analyzing kit fox habitat in the Resource Management Plan; impacts to California red-legged frog, which would be mitigated to a less-than-significant level by conducting focused follow-on surveys for red-legged frog species, protecting habitat area through the RMP and preparing a mitigation program for red-legged frog; impacts to special-status invertebrates, which could be mitigated to a less-than-significant level by protecting these species in the RMP, conducting follow-on surveys and developing a protection plan for these species; impacts to California tiger salamander, which would be mitigated to a less-than-significant level through including California tiger salamanders in the RMP analysis and developing a detailed protection plan for this species; impacts to nesting raptors, which could be reduced to a less-than-significant level.

Biological resource impacts associated with this Alternative as identified in the 2002 SEIR included impacts to Golden Eagle, burrowing owl, nesting passerines and bat species. These impacts could be reduced to a less-than-significant level by adherence to mitigation measures contained in the Eastern Dublin EIR and 2002 SEIR..

Both the proposed Project and the No Project Alternative would have a significant and unavoidable impact related to the cumulative loss of botanically sensitive habitat.

- *Visual Resources:* This Alternative would result in somewhat less impacts than the proposed Project and Alternatives 4, 5 and 6, since less grading would be required on visually sensitive hillsides and ridgetops to accommodate anticipated development. Alteration of the Eastern Dublin area from a rural and open space area to an urbanized area would be a significant and unavoidable impact, the same as the Eastern Dublin EIR. Visual impacts of this Alternative would be different than the proposed Project and the other three Alternatives that propose development in that the Central Open Space Corridor that would not be provided under Alternative 2. Measures contained in the Eastern Dublin EIR and as included in this Supplement would generally reduce visual impacts to a less-than-significant level.
- *Cultural Resources:* Approximately the same impacts to historic, prehistoric or Native American resources would occur under this Alternative as under the proposed Project and Alternatives 4, 5 and 6, since approximately the same amount of surface area of the Project area would be disturbed for grading and excavation purposes. Cultural resource impacts would be less under Alternative 3 than the proposed Project and other Alternatives that propose development. Impacts could be mitigated to a less-than-significant level by adherence to mitigation measures contained in the Eastern Dublin EIR and as identified for the proposed Project.

- *Noise*: Noise impacts would be slightly less than the Project and Alternatives 4, 5 and 6, since this Alternative includes 582 fewer residential dwellings and approximately 1,081,725 square feet less of commercial, office and similar non-residential land uses than the proposed Project and Alternatives 4, 5 and 6. This Alternative would result in greater noise impacts than Alternative 3, since less development is proposed under Alternative 3. The 2002 SEIR identified significant and unavoidable noise impacts to the extent that development would increase traffic noise for existing residences. The proposed Project includes mitigation for this impact. The same measures recommended for the proposed Project would otherwise reduce noise impacts associated with this Alternative to a less-than-significant level. Mitigation measures contained in the Eastern Dublin EIR and 2002 SEIR would also apply to this Alternative
- *Air Quality*: Air quality emissions would be somewhat less under this Alternative than the proposed Project and Alternatives 4, 5 and 6, since 582 fewer dwellings and 1,081,725 less square feet of non-residential development would be constructed. However, the amount of development would still exceed Bay Area Air Quality Management District thresholds for ozone precursors and a significant and unavoidable impact would result with project and cumulative air quality. Emission of carbon monoxide impacts would be less-than-significant, as documented in the 2002 SEIR and impacts from construction activities could be mitigated to a less-than-significant level with adherence to measures contained in the Eastern Dublin EIR, the 2002 SEIR and as recommended for the proposed Project in this Supplement.
- *Hazards and Hazardous Materials*: Impacts related to hazards and hazardous materials, including airport safety, would be less than the proposed Project and Alternatives 4, 5 and 6, since less commercial and industrial development would occur. Typically these would use, store and transport greater quantities of potentially hazardous materials than other uses. Similar to the proposed Project, no significant safety impacts have been identified for this Alternative, although the Future Study Area land use designation would remain instead of commercial/office/industrial uses included in the proposed Project. Other mitigation measures for remediation of contaminated soils on the Project site recommended for the proposed Project to mitigate these impacts to a less-than-significant level would apply to this Alternative as well.
- *Recreation*: Impacts to the City of Dublin parks system would be less under this Alternative than the proposed Project and Alternatives 3, 4 and 5 since 582 fewer dwellings would be constructed. At the same time, the City would receive less revenue for parkland acquisition from impact fees collected on a per-unit basis.

5.3.3 Alternative 3-Reduced Project Development

Alternative 3 reduces both residential and non-residential development by 25%, so that up to a total of 2,331 residences would be built and up to 1,877,381 square feet of office, commercial, industrial and similar non-residential development would occur. The amount of development in this Alternative would be somewhat less than approved in the 2002 Stage 1 Development Plan. The same roadway network and infrastructure improvements would be built as included in the proposed Project and the amount of parks would be reduced proportionate to the amount of residential development. The Open Space

Corridor would be constructed to protect biological resources. The amount of other open space, in addition to the Open Space Corridor, would be somewhat greater than the proposed Project since fewer residences would be built.

An analysis of the impacts of the Reduced Density Alternative is as follows:

- *Land Use and Planning:* This Alternative would have fewer land use impacts since less development would occur within the Project area. More open space would be preserved, but a majority of the Project area would still transition to urban uses.
- ***Transportation and Traffic: Less impacts to roadways, freeways, consistency with the Congestion Management Plan and to public transit systems as identified for the proposed Project as well as Alternatives 2, 3, 4, 5 and 6 would result under Alternative 3. The proposed reduction of Project development would not reduce or eliminate any traffic and transportation impacts identified for the proposed Project.***
- *Community Services and Facilities:* This Reduced Density Alternative would result in generally fewer impacts to the Dublin Police Department since there would be fewer calls for service based on a smaller Project population and non-residential component than the proposed Project and Alternatives 2, 4, 5 and 6. Although the number of calls for service to the Alameda County Fire Department would be less for residential and non-residential development, there could be more calls for service for wildland fires due to a greater amount of open space preserved in the Project area. All of these impacts could be reduced to a less-than-significant impact through mitigation measures included in the Eastern Dublin EIR that continue to apply to the proposed Project.
- *Sewer, Water & Storm Drainage:* This Alternative would result in less demand for potable and recycled water than the proposed Project and Alternatives 4, 5 and 6 since less residential and non-residential development would occur. Wastewater treatment and disposal impacts would also be less than anticipated for the proposed Project and the other Alternatives that include development, based on less development proposed under Alternative 3. Stormwater runoff would be less than the proposed Project and other Alternatives that propose development, since smaller amounts of paved surfaces would be needed for a reduced amount of development within the Project area. Mitigation measures contained in the Eastern Dublin EIR would continue to apply to this Alternative to reduce sewer, water and storm drainage impacts to a less-than-significant level.
- *Soils, Geology and Seismicity:* This Alternative would result in fewer and less intense impacts related to soil hazards, seismicity and geotechnical issues than the proposed Project and Alternatives 4 through 6, since less grading would be required to construct Project improvements. There would be no encroachment onto the lower portions of visually sensitive ridgelines as included in the proposed Project and Alternatives 2, 4, 5 and 6. Fewer residents and visitors would be exposed to seismic groundshaking than the proposed Project and the other Alternatives that propose development. Mitigation measures included in the Eastern Dublin EIR regarding

soils, geology and seismicity would apply to this Alternative to reduce impacts to a less-than-significant level.

- *Biological Resources:* Fewer impacts to biological resources would occur under this Alternative than the proposed Project and Alternatives 4, 5 and 6, since less of the Project area would need to be disturbed to accommodate development. The Open Space Corridor would be constructed in the approximate center of the Project area as in the proposed Project and Alternatives 4, 5 and 6. The same mitigation measures contained in the Eastern Dublin EIR and 2002 SEIR would apply to this Alternative as the proposed Project to reduce most biological impacts to a less-than-significant level. This Alternative would not avoid the Project's significant unavoidable cumulative impact regarding loss or degradation of botanically sensitive habitat.
- *Visual Resources:* There would be the less impacts to visual resources and changes to the natural condition of hillsides and ridgetops as under the proposed Project and Alternatives 2, 4, 5 and 6. Alteration of the Eastern Dublin area from a rural and open space area to an urbanized area would still be a significant and unavoidable impact, since a large portion of the Project area would be developed. Visual impacts of this alternative would be less than anticipated that the proposed Project and the other Alternatives that propose development on the Project site, since less grading would occur on hillside area to accommodate development. Eastern Dublin EIR mitigation measures related to visual resources would continue to apply to this Alternative.
- *Cultural Resources:* Somewhat fewer impacts to historic, prehistoric or Native American resources would occur under this Alternative as under the proposed Project and Alternatives 4, 5 and 6, since less of the surface area of the Project area would need to be disturbed for grading and excavation purposes. Impacts could be mitigated to a less-than-significant level with the imposition of measures included in the Eastern Dublin EIR and this Supplemental EIR.
- *Noise:* Noise impacts would be less under this Alternative than the proposed Project or Alternatives 2, 4-6, since less residential and non-residential trips would be generated from the Project area. There would likely be the same impacts to off-site dwellings on existing Fallon Road as associated with the proposed Project and Alternatives 2, 4, 5 and 6. The same measures recommended for the proposed Project in this Supplement, the Eastern Dublin EIR and 2002 SEIR would reduce noise impacts associated with this Alternative to a less-than-significant level.
- *Air Quality:* Air quality construction impacts would be similar to the proposed Project and would be potentially significant; however, construction air quality impacts could be reduced to a less-than-significant level with adherence to the mitigation measures recommended for the proposed Project as well as for the Eastern Dublin EIR and 2002 SEIR. Local impacts regarding concentrations of carbon monoxide concentrations along streets and roadways would be proportional to the amount of traffic generation. This Alternative would generate approximately 25% fewer daily trips than the proposed Project and would not result in violation of state

or federal ambient air quality standards. Therefore, emission of carbon monoxide from Project vehicles under this Alternative would be less-than-significant.

Regional air quality emissions associated with Project traffic would be 25% less than those of the proposed Project. This Alternative would generate an estimated 172.4 pounds per day of Reactive Organic Gases (ROG), 166 pounds per day of Nitrogen monoxide (NOx) and 712.6 pounds per day of PM-10. Similar to the proposed Project and Alternatives 2, 4, 5 and 6, these emissions would exceed the daily threshold of 80 pounds per day of each of these three emissions. Mitigation of mobile sources of emissions would not be sufficient to meet Bay Area Air Quality Management District standards would not be feasible so that cumulative air quality impacts would be significant and unavoidable with this Alternative as well.

- *Hazards and Hazardous Materials:* Impacts related to hazards and hazardous materials would be approximately the same as the proposed Project and Alternatives 4, 5 and 6. Measures recommended for the proposed Project to mitigate these impacts to a less-than-significant level would continue to apply to this Alternative.
- *Recreation:* Impacts to the City of Dublin parks system would be less than anticipated for the proposed Project and Alternatives 4, 5 and 6, since 25% fewer residences would be constructed. As noted in the analysis for the previous Alternative, the Reduced Development Alternative would also provide less impact fee revenue to the City to provide parks within the Project area.

5.3.4 Alternative 4-Offset Central Parkway

Exhibit 5.1 shows the Alternative of relocating Central Parkway through the Project area. Under this Alternative, Central Parkway would extend more in a northwest-southeast direction than the east-west alignment shown in the proposed Project. Central Parkway would still fulfill the function of providing a generally northerly route to relieve traffic using Dublin Boulevard.

Under this Alternative, land uses within the Fallon Village area would be slightly adjusted to allow for the offset alignment of Central Parkway. This would include a providing slightly greater amount of Neighborhood Commercial development (approximately 8.6 acres) than anticipated for the proposed Project (6.4 acres). The amount of land devoted to Medium High Density housing on the north side of Central would be somewhat greater under the Alternative (15.0 acres) than the proposed Project (13.7 acres), while the acres of Medium Density Residential would be somewhat less along the north side of Central (16.5 acres in this Alternative versus 23 acres within the proposed Project). Other land uses within the Village Center area would be approximately the same.

No other changes to the type, density or location of land uses or roads within the Project area other than those described above would occur. The same maximum number of dwelling units (3,108) and the maximum amount of non-residential development (2,503,175 square feet) would be developed.

An analysis of the impacts of the Offset Central Parkway Alternative is as follows:

- *Land Use and Planning:* Except for the minor land use changes noted above, this Alternative would result in approximately the same impacts as the proposed Project and Alternatives 2, 3, 5 and 6. Although not noted as a land use impact, the offset Central Parkway Alternative would place this roadway further from existing occupied residences on the Jordan property and would result in a beneficial land use impact to the owner of this property in terms of proximity to a major roadway.
- *Transportation and Traffic:* This Alternative would result in the same supplemental cumulative impact as the proposed Project, since the same amount of development would occur as in the proposed Project. However, as identified in the traffic analysis, Alternative 4 would result in one additional significant supplemental development-level impact that would not occur with the proposed Project or any of the other alternatives. Based on the CCTA Model, by offsetting Central Parkway east of Fallon Road, traffic shifts would occur on the street network in Eastern Dublin in response to this change. Although these traffic shifts may be limited in magnitude, they are significant enough to cause the Tassajara Road/Dublin Boulevard intersection to deteriorate from LOS D ($v/c = 0.89$ under Buildout plus Project) to LOS E ($v/c = 0.91$ under Buildout plus Project with Offset Central Parkway) in the a.m. peak hour, a net increase of 0.02 in the v/c ratio. This would be a *significant supplemental cumulative impact*.

Supplemental Impact ALT 4-1 (Project contribution to impacts at the Tassajara Road/Dublin Boulevard intersection in the p.m. peak hour). In the year 2025 Buildout plus Project with Offset Central Parkway scenario, the Tassajara Road/Dublin Boulevard intersection would operate at an unacceptable level of service during the a.m. peak hour (significant supplemental cumulative impact).

This impact could be partially mitigated by adherence to the following measure.

Supplemental Mitigation SM-ALT 4-1 (Project contribution to impacts at the Tassajara Road/Dublin Boulevard intersection in the p.m. peak hour). Project developers shall pay a pro-rata share of the cost to construct the planned improvements at Tassajara Road/Dublin Boulevard through payment of the Eastern Dublin Traffic Impact Fee. The City of Dublin will implement these improvements or, alternatively, project developers will construct the improvements and receive Fee credits.

However, these improvements will not be sufficient to reduce the intersection impacts to an acceptable LOS during the a.m. peak hour under the Offset Central Parkway scenario.

Additional improvements to reduce the impacts at the Tassajara Road/Dublin Boulevard intersection to an acceptable LOS would require adding a fourth northbound or westbound left turn lane. Allowing four lanes of traffic to perform a left turn movement simultaneously would raise major concerns regarding the safety of such an operation. Moreover, additional improvements to reduce traffic impacts at this intersection are not feasible given the physical constraints at the intersection

so this Alternative impact would remain *significant and unavoidable*. It is recommended that the City monitor the intersection for peak hour volumes on a periodic basis and continue to obtain updated volume forecasts for future years under the Offset Central Parkway scenario.

Alternative 4 would also result in one Project-level impact that would not occur under the proposed Project or any of the other alternatives. This impact would be overloading the capacity of Upper Loop Road under Buildout and Project conditions. The average daily traffic (ADT) on Upper Loop Road just east of Fallon Road is expected to reach approximately 11,200 vpd under Buildout plus Project conditions, which would require two lanes of travel (one lane in each direction). If Central Parkway were offset east of Fallon Road, the ADT on Upper Loop Road between Fallon Road and Offset Central Parkway would increase to 16,700 vpd. This ADT increase would require four lanes of travel (two lanes in each direction) on this segment of Upper Loop Road. Therefore, this ADT increase under the Offset Central Parkway scenario represents a *significant supplemental impact*.

Supplemental Impact ALT 4-2 (impacts to Upper Loop Road). In the year 2025, Buildout plus Project with Offset Central Parkway scenario, the Upper Loop Road segment between Fallon Road and Offset Central Parkway would be overloaded at planned lane configurations (*significant supplemental cumulative impact and mitigation required*).

Adherence to the following measure would reduce this impact to a level of less-than-significance by providing additional roadway capacity on Upper Loop Road.

Supplemental Mitigation SM-ALT-2. The Project developers shall be responsible for constructing four lanes of travel (two lanes in each direction) on the Upper Loop Road segment between Fallon Road and Offset Central Parkway.

- *Community Services and Facilities:* Since the same type, amount and location of development would occur under this Alternative as the proposed Project and Alternatives 5 and 6, there would be no changes from the proposed Project or Alternatives 5 and 6 with regard to community services and facilities. Alternative 4 would have somewhat greater impacts than Alternatives 2 and 3 on community services and facilities than Alternative 3, since Alternatives 2 and 3 proposes less development. The same mitigation measures contained in the Eastern Dublin EIR and this Supplemental EIR would apply to this Alternative to reduce community service impacts to a less-than-significant level.
- *Sewer, Water & Storm Drainage:* Since the same type, amount and location of development would occur under this Alternative as the proposed Project and Alternatives 5 and 6, there would be no changes from the proposed Project with regard to sewer, water and storm drainage. Alternatives 2 and 3 would result in fewer impacts to utility systems than Alternative 4, since they propose less development than Alternative 4. The same mitigation measures contained in the

Eastern Dublin EIR and this Supplemental EIR would apply to this Alternative to reduce sewer, water and drainage impacts to a less-than-significant level.

- *Soils, Geology and Seismicity:* This Alternative would result in the same impacts as the proposed Project and Alternatives 5 and 6, since the same general land use pattern would be implemented. Alternatives 2 and 3 would result in fewer impacts to soils and geology than Alternative 4, since Alternative 3 proposes less development than Alternative 4. Mitigation measures included in the Eastern Dublin EIR would apply to this Alternative to reduce soil, geologic and seismic impacts to a less-than-significant level.
- *Biological Resources:* Impacts to sensitive biological resources within the Open Space Corridor with a relocated road would be less than the proposed Project since a portion of the roadway extension within the Open Space Corridor would be shorter than the proposed Project and Alternatives 2, 3, 5 and 6, and would be located further from ponds on the Jordan property. This Alternative would not avoid the proposed Project's significant and unavoidable impact regarding cumulative loss of botanically sensitive habitat. All other biological resource impacts associated with the Proposed project would still result and could be mitigated to a less-than-significant level through adherence to mitigation measures contained in the Eastern Dublin EIR, the 2002 SEIR and as recommended for the proposed Project.
- *Visual Resources:* There would be no change to visual resources between this Alternative and the proposed Project and development-oriented Alternatives, except for Alternatives 2 and 3, since the same hillsides and ridgetops would be graded to accommodate proposed development. Alternatives 2 and 3 proposes less development than Alternative 4 and would likely have fewer visual impacts than Alternative 4. Mitigation measures contained in the Eastern Dublin EIR and for the proposed Project contained in this Supplement to protect visual resources would apply to this Alternative.
- *Cultural Resources:* With one exception, impacts to cultural resources would be the same under the proposed Project and Alternatives 2, 3, 5 and 6, as this Alternative would avoid a significant but mitigatable impact to historic and prehistoric resources that may exist on the Jordan property. Relocation of Central Parkway would provide for road construction away from areas on the property where documented underground resources have been identified. Adherence to mitigation measures recommended for the proposed Project and as contained in the Eastern Dublin EIR would protect any cultural resources that may be impacted by this Alternative to a less-than-significant level.
- *Noise:* With one exception, the same type, amount and location of development would occur under this Alternative as the proposed Project and Alternatives 5 and 6, there would be no changes from the proposed Project with regard to noise impacts. The one exception would be a somewhat lower noise exposure to residents on the Jordan property since Central Parkway would be located further away from these residences than under the proposed Project and Alternatives 2, 3, 5 and 6. Mitigation measures contained in the Eastern Dublin EIR and the 2002 SEIR would continue to apply to this Alternative.

- *Air Quality:* Air quality emissions associated with this Alternative would be the same as the proposed Project and Alternatives 5 and 6, since the same amount of development would occur as under the proposed Project and development-oriented Alternatives with the exception of Alternatives 2 and 3, which propose less development. Less-than-significant construction and carbon monoxide impacts would be generated by this Alternative. Significant and unavoidable impacts would result regarding Project and cumulative air emissions that would exceed regional thresholds, even with adherence to mitigation measures contained in the Eastern Dublin EIR and 2002 SEIR.
- *Hazards and Hazardous Materials:* Since the same type, amount and location of development would occur under this Alternative as the proposed Project and Alternatives 5 and 6, there would be no changes from the proposed Project with regard to hazards and hazardous materials, including APA safety issues within the Project area. Mitigation measures set forth in the Hazards and Hazardous Materials section of this Supplement would also apply to this Alternative to reduce this impact to a less-than-significant level.
- *Recreation:* Impacts to the City of Dublin parks system would be the same under this Alternative as the proposed Project and Alternatives 5 and 6, since the same type and amount of development would occur in the same locations. Alternative 2 and 3 would require provision of less acreage for park purposes than the proposed Project and the other development Alternatives, since less development is proposed under this Alternative.

5.3.5 Alternative 5-Industrial Alternative

This Alternative analyzes replacement of approximately 77.1 acres of land between the I-580 freeway and the extension of Dublin Boulevard of "General Commercial/Campus Office/Industrial" land use with an "Industrial" land use designation. The amount of floor space within this Alternative would not change however.

The Industrial land use designation would permit a range of service commercial, light industrial and similar uses that would not be permitted in the General Commercial/Campus Office designation. Such uses include but are not limited to automobile sales and service, light assembly, warehousing and similar uses.

The Industrial Alternative is shown on **Exhibit 5.2**.

No other changes to the type, density or location of land uses or roads within the Project area other than those described above would occur the same maximum number of dwelling units (3,108) and the maximum amount of non-residential development (2,503,175 square feet) as the proposed Project would be developed.

An analysis of the impacts of the Industrial Alternative is as follows:

- *Land Use and Planning:* There would be no major change between the Industrial Alternative, the proposed Project and Alternatives 3, 4 and 6. Overall land use patterns and road layouts would be the same. However, under the Industrial

Alternative, future specific land uses would not be permitted under the proposed Project as identified above.

- *Transportation and Traffic:* Traffic and transportation impacts would generally be the same under Alternative 5 as the proposed Project and Alternatives 4 and 6, since industrial uses generally generate less traffic than commercial or office uses, however the number of delivery trucks could be greater under this Alternative than other Alternatives that would not have this amount of industrially designated land. This Alternative, even with mitigation, would not avoid significant and unavoidable traffic and circulation impacts as the proposed Project.
- *Community Services and Facilities:* The change of General Commercial/Campus Office to Industrial land use for approximately 77.1 acres of the Project could result in small increases in calls for service to the Alameda County Fire Department than the proposed Project and Alternatives 3, 4 and 6, in that certain industrial uses could result in higher fire hazards due to industrial operations as well as use, storage and transport of hazardous materials. No difference to impacts to the Dublin Fire Department or the Dublin Unified School District is anticipated under this Alternative than the proposed Project or Alternatives 4 and 6. This Alternative would have greater impacts than Alternative 3, which proposes less development. Industrial land uses are not anticipated to result in significant increases in calls for Police Department services than would occur under the proposed Project and Alternatives 4 and 6. Neither the proposed General Commercial/Campus Office land use designations nor the Industrial designation proposed in this Alternative would generate school-aged children that would need to be served by the Dublin Unified School District. Mitigation measures set forth in the Eastern Dublin EIR would reduce community service and facility impacts for this Alternative to a less-than-significant level.
- *Sewer, Water & Storm Drainage:* The proposed Industrial Alternative would generate approximately the same stormwater runoff as the proposed Project and Alternatives 4 and 6, since approximately the same amount of surface area within the Project area would be constructed. The same water quality improvements would be constructed as part of this Alternative as the proposed Project and Alternatives 4 and 6, so that drainage impacts would be less-than-significant. Demand for potable water and generation of wastewater would be approximately the same under the Industrial Alternative as the proposed Project. Sewer, water and storm drain impacts would be reduced to a less-than-significant level under this Alternative through adherence to mitigation measures contained in the Eastern Dublin EIR and this Supplement.
- *Soils, Geology and Seismicity:* This Alternative would result in the same impacts regarding soils, geotechnical and seismic issues as the proposed Project and Alternatives 4 and 6, since the same general land use pattern would be implemented. Mitigation measures contained in the Eastern Dublin EIR would reduce impacts to soils, geotechnical and seismic impacts related to this Alternative to a less-than-significant impact.

- *Biological Resources:* The Industrial Alternative would have the same impacts to biological resources as the proposed Project and Alternative 6, since the Open Space Corridor would be created in the approximate center of both Alternative 6 and the Project to protect botanical sensitive species. Impacts to biological resources would be less under Alternatives 3 and 4, since Alternative 3 proposes less development and Alternative 4 proposes a rerouting of Central Parkway further away from biologically sensitive areas. Impacts to biological resources would be greater under Alternative 2 than the proposed Project, this Alternative, or other Alternatives (except for Alternative 1) since the Central Open Space Corridor would not be reserved under Alternative 2. This Alternative would not avoid the Project's significant and unavoidable cumulative impact on loss or degradation of botanically sensitive habitats. All other mitigation measures contained in the Eastern Dublin EIR and 2002 SEIR would be implemented to ensure impacts biological resources would be less-than-significant.
- *Visual Resources:* There would be no change to visual resources between the Industrial Alternative, the proposed Project and Alternatives 4 and 6, since the same hillsides and ridgetops would be graded to accommodate proposed development. Mitigation measures contained in the Eastern Dublin EIR and this Supplement would reduce most visual impacts to a less-than-significant level. Conversion of rural and open space land would remain a significant and unavoidable impact as set forth in the Eastern Dublin EIR.
- *Cultural Resources:* Impacts to cultural resources would be the same under the Industrial Alternative as the proposed Project and Alternative 6, since the same extent of the Project area would be disturbed to accommodate development. Impacts to cultural resources would be less under Alternatives 3 and 4 than Alternative 5 since Alternative 3 would include less development than Alternative 5 and Alternative 4 proposes to reroute Central Parkway away from areas of the Project where significant cultural resources have been identified. Mitigation measures included in the Eastern Dublin EIR and this Supplement would ensure cultural resource impacts associated with Alternative would be less-than-significant.
- *Noise:* The Industrial Alternative would have the same noise impacts as the proposed Project and Alternatives 4 and 6; since there would be a lower number of employees in industrial buildings, but this would be off-set by a potentially larger number of trucks serving the industrial area. In any event, future development in this portion of the Project area would be required to comply with City exterior noise standards. The location of vehicle traffic serving industrial land uses would not be locate near residential areas, so this would not be a significant impact. All other noise impacts could be reduced to a less-than-significant impact through adherence to mitigation measures set forth in the Eastern Dublin EIR, the 2002 SEIR and this Supplement.
- *Air Quality:* Air quality emissions associated with this Alternative would be approximately the same as the proposed Project and Alternatives 4 and 6 since the same amount of development would occur. Air pollutants would be less under Alternative 3 than Alternative 5 since less development would occur under Alternative 5. Air emissions and odors from industrial operations would be

regulated by permits required by the Bay Area Air Quality Management District. Significant and unavoidable impacts would result regarding Project and cumulative air emissions that would exceed regional thresholds, even with adherence to mitigation measures recommended for the proposed Project. Construction related air quality emissions associated with this Alternative would be mitigated to a less-than-significant level by measures contained in the Eastern Dublin EIR, the 2002 SEIR and this Supplement.

- *Hazards and Hazardous Materials:* Land uses that would be allowed under the Industrial Alternative could likely use, store and transport a greater quantity and a wider variety of hazardous and potentially hazardous materials than under the proposed Project and other development-oriented Alternatives. The Industrial portion of the Project area lies outside of the Livermore Airport Safety Zone. The use, storage and transport of hazardous materials would be controlled by the Alameda County Fire Department, Alameda County Environmental Health Department, Caltrans, the California Highway Patrol and other local and state agencies to ensure there would be no significant impacts related to hazardous materials.
- *Recreation:* Impacts to the City of Dublin parks system would be the same under this Alternative as the proposed Project and other development-oriented Alternatives, with the exception of Alternative 3 that proposed reduced densities and intensities of use) since the same type and amount of development would occur in the same locations.

5.3.6 Alternative 6-Changed Development Pattern on Jordan Property (Jordan Alternative)

The last Alternative analyzes relocation of land uses on the Jordan property, which is located in the central portion of the Project area on the west side. The proposed Stage 1 Development Plan (see Exhibit 2.9) depicts a mix of Low Density Residential, Medium Density Residential, Medium High Density Residential, An Elementary School, a Neighborhood Park and Open Space on this property. The Stage 1 Development Plan also notes that a portion of the Jordan property is within the Fallon Village Precise Plan Area. A supplemental General Plan amendment and Specific Plan amendment would be required before proceeding with changing the large Open Space area, since this arrangement of land uses would not be consistent with currently proposed Amendment. Also, approval from biological regulatory agencies, including but not limited to the California Department of Fish and Game and U.S. Fish and Wildlife Service, would be required.

Under this Alternative, the amount of development currently depicted on the Stage 1 Development Plan would still be allowed, however, the large Open Space designation proposed for the southwest corner of the property would be replaced by non-open space, urban uses. The total amount of development as shown in the proposed Stage 1 Development Plan would not be increased, but the location of urban development on the property would be redistributed.

The Changed Development Pattern on Jordan Alternative is shown on **Exhibit 5.3**.

No other changes to the type, density or location of land uses or roads within the Project area other than those described above would occur the same maximum number of dwelling units (3,108) and the maximum amount of non-residential development (2,503,175 square feet) as the proposed Project would be developed.

An analysis of the impacts of the this Alternative is as follows:

- *Land Use and Planning:* There would be no major change between the Changed Jordan Alternative, the proposed Project and Alternatives 3, 4 and 5, since there would be no change to the amount, type or general density of development. Road layouts would also be approximately the same.
- *Transportation and Traffic:* No changes to traffic and circulation impacts would result under this Alternative than the proposed Project or Alternatives 4 and 5, since the same amount and type of development would result with the same road network to accommodate traffic. Traffic under this Alternative would be greater than under Alternative 3 that proposes less development in the Project area. This Alternative would result in the same significant and unavoidable impacts to certain local intersections, freeway links and consistency with the Alameda County Congestion Management Plan as would the proposed Project.
- *Community Services and Facilities:* No differences to impacts to the Dublin Fire Department, Dublin Police Department or the Dublin Unified School District is anticipated under this Alternative than the proposed Project or Alternatives 4 and 5, since the same type and intensity of land uses would result. Impacts to community services and facilities would be greater under Alternative 6 than Alternative 3 that proposes less development in the Project area.
- *Sewer, Water & Storm Drainage:* The proposed Jordan Alternative could generate slightly more stormwater runoff as the proposed Project and Alternatives 4 and 5, since a greater amount of land area of the Project area would be developed, resulting in a greater quantity of stormwater runoff. Additional water quality improvements would need to be constructed as part of this Alternative as the proposed Project and Alternatives 4 and 5, so that water quality impacts would also be less-than-significant. Demand for potable water and generation of wastewater would be approximately the same under the Jordan Alternative as the proposed Project since the same land uses would be allowed. Sewer, water and storm drain impacts would be reduced to a less-than-significant level under this Alternative through adherence to mitigation measures contained in the Eastern Dublin EIR and this Supplement.
- *Soils, Geology and Seismicity:* This Alternative would result in somewhat greater impacts regarding soil erosion as the proposed Project and Alternatives 4 and 5, since previously designated Open Space lands would be converted to urban uses with a greater risk of erosion into nearby creeks. Alternative 3 would have fewer impacts than Alternative 6, since less development is proposed. This potential impact would be reduced to a less-than-significant level through adherence to mitigation measures contained in the Eastern Dublin EIR. The same population of residents and visitors would be subject to seismic hazards, since the same population would result.

There would be no changes to grading within the Project area as under the proposed Project or Alternatives 4 and 5, since the same portions of the Project area would be graded. Mitigation measures contained in the Eastern Dublin EIR would reduce impacts to soils, geotechnical and seismic impacts related to this Alternative to a less-than-significant impact.

- *Biological Resources*: The Jordan Alternative would have greater impacts to biological resources than the proposed Project and Alternatives 3, 4 or 5, since portions of the biologically sensitive the Open Space Corridor would be converted to urban uses. This would represent a *significant supplemental impact* from the previous EIRs since the Open Space Corridor area contains a number of sensitive animal species and habitats, including red-legged frog, California tiger salamander and other species and their respective breeding and upland estivation habitats. This portion of the Open Space Corridor contains a number of ponds, seeps, wetlands and waters of the United States. The environmental setting of the Jordan property is described in Section 4.3 of this DSEIR, Biological Resources.

Supplemental Impact ALT 6-1 (impacts to wetlands, special-status species and habitat). Development of the designated Open Space portions of the Jordan property would result in a significant impact to wetlands and special status species and their respective habitats (significant supplemental impact and mitigation required).

This impact would be reduced by adherence to the following measure.

Supplemental Mitigation SM-ALT 6-1 (impacts to wetlands, special-status species and habitat). Prior to approval of a new General Plan and Specific Plan amendment and (Eddie and Jeff) a Stage 2 Development Plan on the Jordan Property, the developer(s) shall prepare a Biological Mitigation Plan for the Jordan Property, including a detailed characterization of special-status plants and animal species and specific methods to protect or mitigate for potential loss of these sensitive biological features. The Biological Mitigation Plan shall be approved by the Dublin Community Development Director and all other state and federal biological resource agencies with jurisdiction over on-site resources. No development on the site shall occur until all biological permits have been secured.

Development on a portion of the Jordan property would also be inconsistent with the Resource Management Plan for the Project area which proposes permanent open space on portions of the Jordan property..

- *Visual Resources*: Development of a portion of the Jordan property would represent a somewhat greater impact to visual resources than the proposed Project and Alternatives 4 and 5, since a portion of the Project area that would be Open Space under the proposed Project and the other Alternatives would be developed. Alternative 6 would likely have greater impacts to visual resources than Alternative 3 since Alternative 3 proposes less development in the Project area. Mitigation measures contained in the Eastern Dublin EIR and this Supplement would reduce

most visual impacts to a less-than-significant level. Conversion of rural and open space land would remain a significant and unavoidable impact as set forth in the Eastern Dublin EIR.

- *Cultural Resources*: Impacts to cultural resources would be the greater under the Jordan Alternative as the proposed Project and Alternatives 3, 4 and 5, since a documented underground cultural deposit has been identified on the Jordan property. Development of a portion of the Jordan property would have a *significant supplemental impact* to cultural resources on the property.

Supplemental Impact ALT 6-2 (impacts to cultural resources). Development of the designated Open Space portions of the Jordan property would significantly impact identified underground cultural resources (significant supplemental impact and mitigation required).

This impact would be reduced by adherence to the following measure.

Supplemental Mitigation SM-ALT 6-2 (impacts to cultural resources). Prior to approval of a Stage 2 Development Plan on the Jordan Property, the developer(s) shall retain the services of a qualified archeologist to prepare a detailed Cultural Resources Mitigation Plan. The Plan should include a detailed study as to the precise location(s) of resources, and a plan document and protect these resource in place. If in-place protection is not feasible, a plan to remove these resources to an off-site place shall be provided. The Cultural Resources Mitigation Plan shall be approved by the Dublin Community Development Director.

Other mitigation measures included in the Eastern Dublin EIR and this Supplement would ensure impacts to cultural resource not on the Jordan Property would be less-than-significant.

- *Noise*: The Jordan Alternative would have approximately the same noise impacts as the proposed Project and Alternatives 4 and 5, since the same amount and type of development would be allowed under Alternative 6 as the Project and these two Alternatives. Noise impacts would be less under Alternative 3 than Alternative 6 since less development and traffic generation would result with less noise created. All noise impacts associated with this Alternative could be reduced to a less-than-significant impact through adherence to mitigation measures set forth in the Eastern Dublin EIR, the 2002 SEIR and this Supplement.
- *Air Quality*: Air quality emissions associated with this Alternative would be the same as the proposed Project and Alternatives 4 and 5, since the same amount of development would occur as proposed in Alternative 6. It is anticipated that less intensive air quality impacts would result under Alternative 3 that proposes less development with fewer vehicles and less air emissions. Significant and unavoidable impacts would result regarding Project and cumulative air emissions would exceed regional thresholds, even with adherence to mitigation measures recommended for the proposed Project. Construction related air quality emissions associated with this

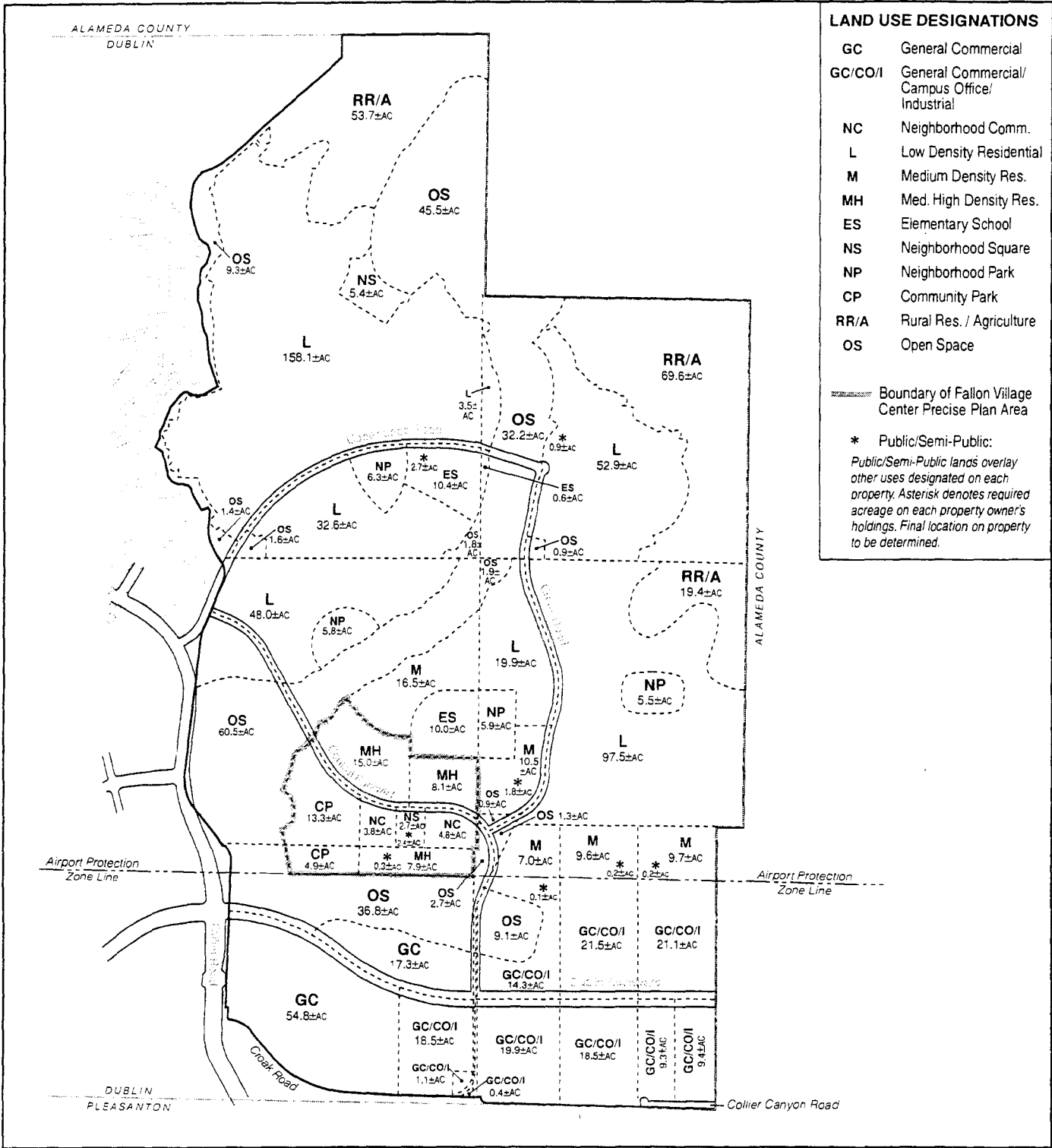
Alternative would be mitigated to a less-than-significant level by measures contained in the Eastern Dublin EIR, the 2002 SEIR and this Supplement.

- *Hazards and Hazardous Materials*: The same impacts related to hazards and hazardous materials would result under Alternative 6 as under the proposed Project and Alternatives 4 and 5, since the same type and amount of development would be allowed. Mitigation Measures included in the DSEIR for the proposed Project would apply to Alternative, so hazards and hazardous material impacts would be less-than-significant.
- *Recreation*: Impacts to the City of Dublin parks system would be the same under this Alternative as the proposed Project and Alternatives 4 and 5, since the same type and amount of development would occur in the same locations. Alternative 6 would generate a need for more parkland than Alternative 3 since less residential development would occur under Alternative 3 than Alternative 6. Alternative 6 may have greater impacts to proposed open space and trail locations, since the proposed Stage 1 Development Plan includes trails through that portion of the Jordan property that would be developed under this Alternative.

5.4 Environmentally Superior Alternative

Section 15126 (d) (4) of the State of California CEQA Guidelines states that if the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Alternative 1, the No Development alternative, would result in fewer and less intensive environmental impacts than the proposed Project and all other alternatives that propose development, since the Project area would remain vacant and no development impacts would occur. Therefore, Alternative 1 would be the Environmentally Superior Alternative.

As between the remaining alternatives, Alternative 2 would result in less traffic, air quality and noise impacts, since less development would be permitted under this Alternative where land use would be controlled by existing land use regulations. Alternative 2 would not, however, provide protection for sensitive biological resource areas in the approximate center of the Project area, since existing land use regulations permit urban development in these sensitive areas. Alternatives 3, 4 and 5 would generally have environmental impacts similar to the proposed Project. Alternative 6 would result in additional potentially significant biological and cultural resource impacts that would not occur under Alternatives 3, 4 or 5. Therefore, either the proposed Project or Alternatives 3, 4 or 5 would all be the next most Environmentally Superior Alternatives.



Blue Ox Associates, Berkeley, California 8-18-2005

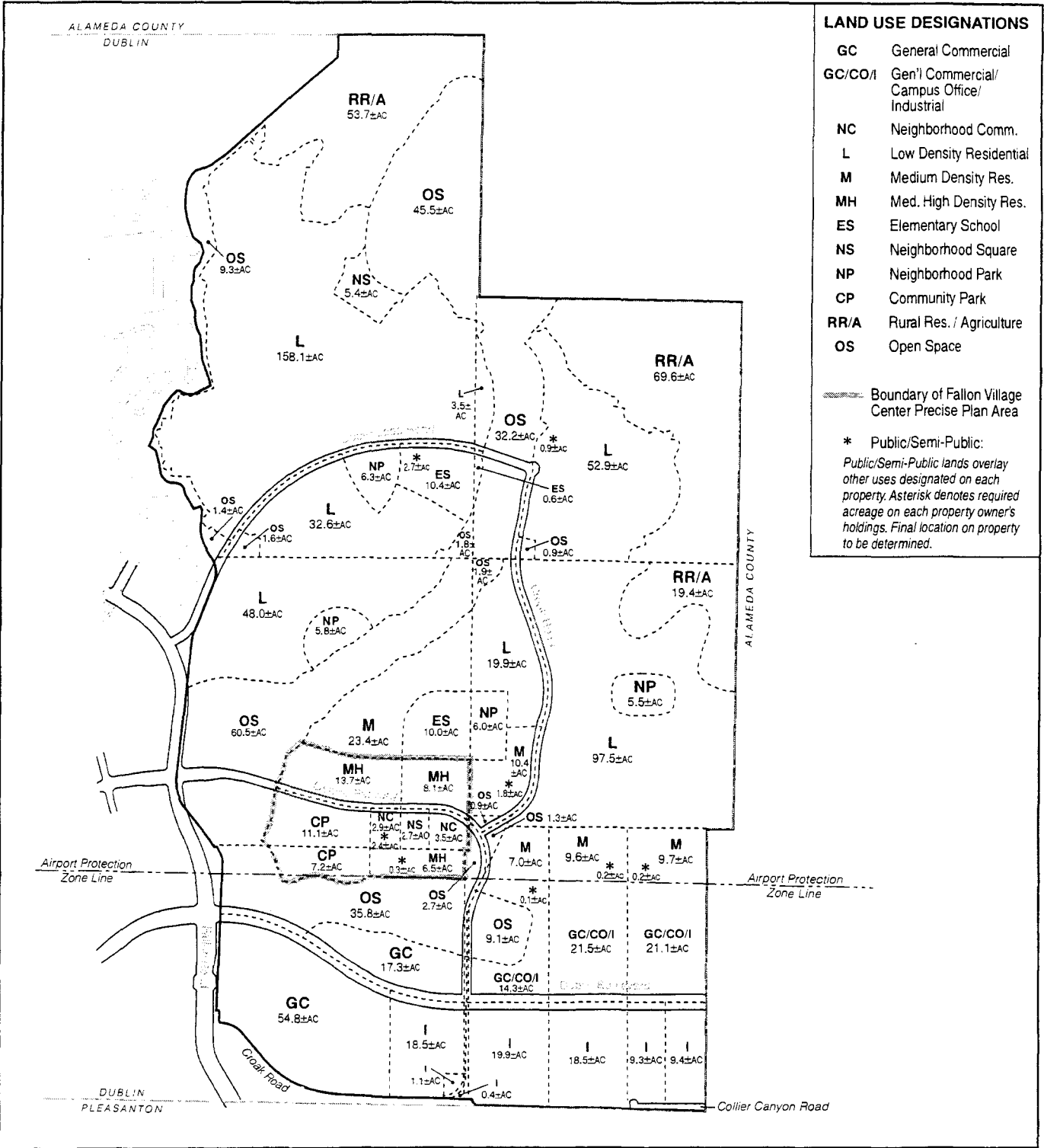
SOURCE: MacKay & Soms, 8-9-2005.

**CITY OF DUBLIN
FALLON VILLAGE
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT**

Exhibit 5.1

**ALTERNATIVE PLAN:
OFFSET CENTRAL PARKWAY**

0 400 800 1600 2400 feet



LAND USE DESIGNATIONS

- GC General Commercial
- GC/CO/I Gen'l Commercial/ Campus Office/ Industrial
- NC Neighborhood Comm.
- L Low Density Residential
- M Medium Density Res.
- MH Med. High Density Res.
- ES Elementary School
- NS Neighborhood Square
- NP Neighborhood Park
- CP Community Park
- RR/A Rural Res. / Agriculture
- OS Open Space

----- Boundary of Fallon Village Center Precise Plan Area

* Public/Semi-Public:
Public/Semi-Public lands overlay other uses designated on each property. Asterisk denotes required acreage on each property owner's holdings. Final location on property to be determined.

Blute UX Associates, Berkeley, California 8-10-2005

SOURCE: MacKay & Somp, 8-9-2005.

**Exhibit 5.2
 INDUSTRIAL ALTERNATIVE**

0 400 800 1600 2400 feet



6.0 Required CEQA Discussion

This section of the DEIR addresses the potential cumulative impacts of implementing the proposed Project, as required by CEQA.

6.1 Cumulative Impacts

Cumulative impacts are defined by CEQA Guidelines (Section 15126.2) as those which taken individually may be minor but, when combined with similar impacts associated with existing development, proposed development projects and planned but not built projects, have the potential to generate more substantial impacts. CEQA requires that cumulative impacts be evaluated when they are significant and that the discussion describe the severity of the impacts and the estimated likelihood of their occurrence. CEQA also states that the discussion of cumulative impacts contained in an EIR need not be as detailed as that provided for the Project alone.

A number of cumulative impacts were identified in the Eastern Dublin EIR. Those related to this Project include:

- Cumulative loss of agricultural and open space lands (Impact 3.1/F)
- Cumulative degradation of I-580 freeway operations between Tassajara Road and Fallon Road (Impact 3.3/A)
- Cumulative degradation of I-580 freeway operations between I-680 freeway and Dougherty Road (Impact 3.3/B)
- Cumulative degradation of I-580 freeway operations between Tassajara Road and Airway Boulevard Impact 3.3/C)
- Cumulative degradation of I-680 freeway operations north of I-580 (Impact 3.3/D)
- Cumulative degradation of I-580 east of Airway Boulevard and between Dougherty Road and Hacienda Boulevard (Impact 3.3/D)
- Cumulative degradation of Dublin Boulevard intersections with Hacienda Drive and Tassajara Road (Impact 3.3/M)
- Cumulative degradation of Tassajara Road intersections with Gleason Road, Fallon Road and Transit Spine (renamed to Central Boulevard) (Impact 3.3/N)
- Increased solid waste production and impact on solid waste facilities (Impact 3.4 O and P)
- Future lack of wastewater treatment plant capacity (Impact 3.5/E)
- Increase in demand for water (Impact 3.5/Q)
- Direct habitat loss (Impact 3.7/A)
- Loss or degradation of botanically sensitive habitat (Impact 3.7/C)
- Construction equipment/ vehicle emissions (Impact 3.11/B)
- Mobile source emissions of reactive organic gasses and oxides of nitrogen (Impact 3.11/C)
- Stationary source emissions (Impact 3.11/E)

A number of cumulative impacts were identified in the 2002 SEIR, as follows:

- Cumulative mobile air quality source emissions (Impact AQ 1)
- Cumulative degradation of botanically sensitive habitats (Impact BIO 3)
- Exposure of proposed and existing housing to noise in excess of City standards (NOISE 1)
- Cumulative (Year 2025) impacts to Dougherty Road/Dublin Boulevard LOS in the AM and PM peak hours (Impact TRAFFIC 6)
- Cumulative (Year 2025) impacts to LOS at Hacienda Drive/Dublin Boulevard intersection in the PM peak hour (Impact TRAFFIC 7)
- Cumulative (Year 2025) impacts to LOS at the Fallon Road/Dublin Boulevard intersection in the PM peak hour (Impact TRAFFIC 8)
- Cumulative (Year 2025) impacts to segments along the I-580 and I-680 freeways during the AM and PM peak hours (Impact TRAFFIC 11).

This DSEIR identifies additional cumulative impacts:

- Year 2025 Project contribution to significant cumulative impact at the Dublin/Dougherty intersection (TRA-1).
- Year 2025 Project contribution to significant cumulative impacts at the Santa Rita Road/I-580 eastbound ramps (TRA-2).
- Year 25 Project contribution to significant cumulative impacts at Central Parkway and Hacienda Drive (TRA-3).
- Year 2030 Significant cumulative impacts to local freeways (TRA-4).
- Project contribution to regional, cumulative air quality (AQ-3).

6.2 Significant and Unavoidable Environmental Impacts

Unavoidable significant adverse impacts are those impacts that cannot be mitigated to a less-than-significant level. CEQA requires decision-makers to balance the benefits of a proposed Project against its unavoidable impacts in considering whether to approve the Project. If the benefits of the proposed Project outweigh the anticipated unavoidable impacts, the adverse environmental impacts may be considered acceptable by the Lead Agency. To approve the Project without significantly reducing or eliminating an adverse impact, the Lead Agency must make a Statement of Overriding Consideration supported by the information in the record.

Upon approval of the Eastern Dublin Project, the City Council adopted a Statement of Overriding Considerations for the significant unavoidable impacts identified in the Eastern Dublin EIR. (Resolution 53-93, May 10, 1993.)

The 2002 Eastern Dublin Properties Stage 1 Development Plan and Annexation EIR also identified a number of supplemental impacts not included in the Eastern Dublin EIR. These are identified in Section 6.2, above. In approving the 2002 Stage 2 Development Plan in 2002, the Dublin City Council also adopted a Statement of Overriding Considerations (Resolution No. 40-02, April 2, 2002).

Any approval of the current Project would likewise require adoption of a Statement of Overriding Considerations for the significant unavoidable supplemental impacts identified in this DSEIR, i.e., Supplemental Impacts AQ-3 (regional ozone air quality emission), AQ-3

(cumulatively considerable regional air emissions), Supplemental Impact TRA 1 (Year 2025 Project contribution to significant impacts at the Dougherty Road/Dublin Boulevard intersection), TRA-2 (Year 2025 Project contribution to significant impacts at the Santa Rita Road/I-580 eastbound ramps), TRA-3 (Year 2025 Project contribution to significant impacts at the Central Parkway/Hacienda Drive intersection) and TRA-4 (Year 2030 Project contribution to significant impacts on the I-580 and I-680 freeways). Pursuant to the recent Citizens for a Better Environment case, the Statement of Overriding Considerations would also be required to address the significant unavoidable impacts from the Eastern Dublin EIR and 2002 SEIR that are related to the Project.

7.0 Organizations and Persons Consulted

7.1 Persons and Organizations

EIR Preparers

The following individuals participated in the preparation of this document.

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Other Agencies and Organizations Contacted

Dublin Unified School District-Kim McNeeley
Dublin San Ramon Services District-Rhodora Biagtan
Livermore-Amador Valley Water Management Agency-Vivian Housen
Zone 7-Jim Horen PE

7.2 References

The following documents, in addition to those included in the Appendix, were used in the preparation of this DEIR.

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8.0 Appendices

Appendix 8.1 Initial Study

Fallon Village Project

Initial Study

**Lead Agency:
City of Dublin**

June 2005

**INITIAL STUDY – SECOND SUPPLEMENTAL EIR
East Dublin Properties/Fallon Village**

City of Dublin

**Environmental Checklist/
Initial Study**

Introduction

This Initial Study has been prepared in accordance with the provisions of the California Environmental Quality Act ("CEQA", Pub. Res. Code §§ 21000 et seq.,) and the CEQA Guidelines, (Cal. Code Regs. tit. 14, §§ 15000-15387). This Initial Study updates the assessment of the potential environmental impacts of the East Dublin "Program" (i.e., the applicable goals, policies, programs, diagrams and action items of the Dublin General Plan, East Dublin Specific Plan, and Stage 1 Planned Development Zoning), relating to a 1,132 acre Project Area. This Initial Study also assesses development-level activities to implement that Program through Stage 2 Planned Development Zoning, subdivision maps, and related development permits, all of which are described below in the Project Description. These programmatic update and development-level entitlements are referred to herein as the "Project."

Prior EIRs

This Initial Study consists of a completed environmental checklist and a brief explanation of the environmental topics addressed in the checklist. A considerable amount of CEQA work has been done already for future development in East Dublin. A Program Environmental Impact Report was certified by the City of Dublin in 1993 for the Eastern Dublin General Plan Amendment and Specific Plan (Eastern Dublin General Plan Amendment and Specific Plan Environmental Impact Report, State Clearinghouse No. 91103064; ("Eastern Dublin EIR" or "EDEIR"), That EIR evaluated the following impacts: Land Use; Population, Employment and Housing; Traffic and Circulation; Community Services and Facilities; Sewer, Water and Storm Drainage; Soils, Geology and Seismicity; Biological Resources; Visual Resources; Cultural Resources; Noise; Air Quality; and Fiscal Considerations. As part of the City's approval of the Eastern Dublin General Plan Amendment and Specific Plan, the City Council adopted a Statement of Overriding Considerations for the following impacts: cumulative loss of agriculture and open space land, cumulative traffic, extension of certain community facilities (natural gas, electric and telephone service), consumption of non-renewable natural resources, increases in energy uses through increased water treatment and disposal and through operation of the water distribution system, inducement of substantial growth and concentration of population, earthquake ground shaking, loss of degradation of botanically sensitive habitat, regional air quality, noise and visual. The Eastern Dublin EIR was challenged in court and was found to be legally adequate.

In 2001, the Eastern Dublin Property Owners (EDPO) requested annexation, pre-zoning and related approvals for a 1,120 acre Project Area. The Project Area was within the development area previously approved by the City in 1993; and was within the scope of

the project/program analyzed in the Eastern Dublin EIR. In response to EDPO and consistent with the City's practice for projects in Eastern Dublin, in 2001 the City prepared an Initial Study to determine if the annexation and pre-zoning requests would require additional environmental review beyond that set forth in the Eastern Dublin EIR. That 2001 Initial Study disclosed that many of the anticipated impacts of the proposed annexation and pre-zoning were adequately addressed in the Eastern Dublin EIR. This was predictable given the comprehensive planning for the development area; the Eastern Dublin EIR's analysis of buildout under the Dublin General Plan and East Dublin Specific Plan land use designations and policies; the long term 20-30 year focus of the Dublin General Plan, East Dublin Specific Plan and Eastern Dublin EIR analyses; the fact that annexation and pre-zoning actions were specifically contemplated in the Eastern Dublin EIR; and the fact that the annexation request proposed the same land uses analyzed for the Project Area in the Eastern Dublin EIR. Although the 2001 Initial Study concluded that the Eastern Dublin EIR adequately analyzed most of the potential environmental impacts of the proposed annexation and rezoning, it also identified the potential for some new significant impacts or substantially intensified impacts beyond those analyzed in the Eastern Dublin EIR. The City determined that the potential new and/or substantially intensified impacts required review at an EIR level and concluded that a Supplemental EIR should be prepared. So, in 2001 and 2002, the Eastern Dublin EIR was updated and supplemented by the Programmatic East Dublin Properties Stage 1 Development Plan and Annexation Supplemental EIR (State Clearinghouse No. 20010052114). That Supplemental EIR, referred to in this Initial Study as the "2002 SEIR", provided updated analyses of agricultural resources, biology, air quality, noise, traffic and circulation, schools, and utilities. In certifying the 2002 SEIR and rezoning, the City Council adopted a Statement of Considerations for cumulative air quality and cumulative traffic impacts. The 2002 SEIR was challenged in court and was found to be legally adequate.

2005 Supplemental EIR

Once an EIR is certified for a project, CEQA prohibits lead agencies from requiring a supplemental or subsequent EIR except in specified circumstances. Additionally, Government Code section 65457 provides that residential projects undertaken consistent with and to implement a specific plan are exempt from further CEQA review unless an event as specified in CEQA section 21166 occurs. According to CEQA section 21166 and CEQA Guidelines section 15162, additional EIR level review may be required only when substantial changes to the project would cause new or substantially increased significant effects, or when substantial changes in circumstances would cause new or substantially increased significant effects, or when substantial new information shows the project would cause new or substantially increased significant effects, or shows that previously infeasible mitigation measures would now be feasible but the project proponent declines to adopt them. Now, in 2005, EDPO, under the project name of "Fallon Village," proposes amendments to the General Plan, Eastern Dublin Specific Plan, and the existing Stage 1 Development Plan for the entire Project area. The Project also proposes development level entitlements, such as Stage 2 Development Plans, subdivision maps, and site design review, for an approximately 486 acre portion of the Project area. This portion of the Project area shall be referred to as the Development Area.

Based on CEQA section 21166 and this Initial Study, the City has determined that a Supplemental EIR will be prepared for the Project. The Supplement will address the proposed changes to the project analyzed in prior EIRs, will address new and detailed information for the proposed development areas, and will address several changes in circumstances since the prior EIRs which could affect the impacts and/or mitigations previously identified for the Project. Such changes in the previously analyzed project and circumstances include, but are not limited to: 1) continued development in the Tri-Valley area and beyond with potential changes in commute patterns and traffic intensities, which also may affect air quality and noise within or on the Project area; 2) changes in the provision and distribution of some public services (schools) and public utilities (water, wastewater, and storm drainage), 3) changes in circulation patterns on the site; 4) completion of a Resource Management Plan (RMP) for biological and cultural resources on the site and additional site-specific biological and cultural resources studies which did not previously exist; 5) changes in the development density and intensity in the Project area that may increase impacts over those previously reviewed; and 6) submittal of Stage 2 Development Plans, subdivision maps and other permit applications containing detailed development plans not previously reviewed. Like the Eastern Dublin EIR and the 2002 SEIR, the 2005 Supplemental EIR will be a Program-level document that focuses on the new or substantially increased significant impacts of potential future development pursuant to the proposed General Plan, Eastern Dublin Specific Plan, and Stage 1 Development Plan amendments. Additionally, the 2005 Supplemental EIR will review proposed individual development projects, the environmental impacts they will generate, and the avoidance and mitigation measures they will employ at a Project-level. Unless otherwise noted, all previously adopted mitigation measures applicable to the Project area continue to apply to the proposed Project.

CEQA also requires that an EIR identify a reasonable range of alternatives. The Eastern Dublin EIR provided and analyzed such a reasonable range of alternatives, one of which was adopted in modified form in the 1993 approvals. To address the potential for new and/or substantially intensified significant impacts, the 2002 SEIR identified additional alternatives for the Project Area that could avoid or substantially lessen those impacts. Similarly, the 2005 Supplement will identify additional alternatives that could avoid or substantially lessen identified supplemental impacts and will update each of the previously identified alternatives.

Applicant/Contact Person

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Fallon Village Project Description

Project Location and Context

The Project area is approximately 1,132 acres in area and is located on the east side of the City of Dublin, California, in an area bounded by Interstate 580 (I-580) to the south and Fallon Road to the west. **Exhibit 1** shows the Project location in relation to the overall Bay Area; **Exhibit 2** shows its location in Dublin. The Project area consists of thirteen (13) different parcels of land under eleven (11) separate ownerships. **Exhibit 3** shows property ownerships.

The topography of the Project area ranges from relatively flat at the southern portion near the freeway, to gently rolling hills at the center, to relatively steep slopes, some exceeding 30% in some places. A series of low knolls trending from northwest to southeast bisect the southern portion of the Project Area and provide a backdrop to the flatter portions of the Project area near the freeway. A few drainages flow north to south through the Project area. A small number of trees exist beyond those planted around existing homesteads and scattered in the drainages.

The properties that comprise the Project area currently are used primarily for dry land farming and cattle grazing with rural residences, a horse ranch and associated outbuildings scattered throughout the site. Improvements to the agricultural lands generally consist of paved and unpaved roads, fences, barns, corrals, wells, water tanks, ponds, single-family homes and various outbuildings.

Project Background and Prior Planning Approvals

The entire 1,132 acre Project area is located in the City's general plan planning area. Approximately 494 acres is also located in the Eastern Dublin Specific Plan (EDSP) area (see **Exhibit 4**). Consistent with the 2002 annexation approval, the Project proposes to add the approximately 638-acre remainder of the Project area to the Eastern Dublin Specific Plan area.

Previous City of Dublin land use approvals regarding the proposed Project area include:

1993 Eastern Dublin General Plan Amendment and Specific Plan.

In 1993, the City Council approved the Eastern Dublin General Plan Amendment (EGPA) and the Eastern Dublin Specific Plan (EDSP). The approved project was a modified version of the original EDGPA for the 6,920-acre Eastern Dublin planning area. The original EDGPA proposed to change commercial land use designations on County property in the southwest portion of the GPA area and agriculture/open space designations elsewhere in the planning area to a range of urban uses. At the same time, a new EDSP addressed 3,328 acres within the larger 6,920-acre EDGPA. The EDSP supplements the EDGPA with more detailed land use designations, policies, programs

and regulations.

The original EDGPA land use plan proposed to replace the undeveloped planning area with a mixed-use urban community. At buildout, the EDGPA planning area was projected to provide 17,970 new residences on 4,993 acres, including 2,672 acres designated for Rural Residential with a 100-acre minimum parcel size. Approximately 10.6 million square feet of new commercial space, 25 parks on 287 acres, 571 acres of designated open space, and 12 new schools were also planned. Buildout was expected to occur over a 20–30 year period from the start of construction.

The EDSP encompassed 3,328 acres in the western portion of the EDGPA planning area. Seventy percent of the EDGPA residential development and 94% of the new commercial space were planned for the Specific Plan area. The land use plan called for compact villages with residential and neighborhood serving uses. Employment-generating commercial uses are generally provided along arterials with transit access.

The Eastern Dublin EIR was based on the original 6,920 acre planning area and land use designations, and 3,328 acre Specific Plan area, both as described above. As required by CEQA, the EIR also identified project alternatives, including a Reduced Planning Area (RPA) alternative, which the City Council adopted in a modified form in 1993.

The adopted modified RPA alternative reduced the GPA area by 2,744 acres, provided for buildout of the Specific Plan area and buildout of the EDGPA area only within the Dublin Sphere of Influence..

2002 Prezoning and Annexation. In 2002, an application was filed with the City by a number of owners in the Eastern Dublin area to annex the area to the City and the Dublin San Ramon Services Area (DSRSD). Applications were also filed for a prezoning to the PD-Planned Development Zoning District and a related Stage 1 Development Plan to guide future development of the Project area. The annexation and prezoning were approved.

As required by the Dublin Zoning Ordinance, the 2002 prezoning included a Stage 1 Development Plan, which currently governs land uses within the Project area. The 2002 Stage 1 Development Plan covers the entire Project area and reflects the general land use types, densities and locations established in the 1993 Eastern Dublin project approvals. At the time of annexation, the residential land use intensity was established by using the mid-point of the allowable density ranges. Retail, industrial and office land use intensity was established by defined floor area ratio. In approving the 2002 Stage 1 Development Plan, the City further established maximum development intensities by property. The Stage 1 Development Plan also included a master landscape plan and development phasing plan.

Table 1 shows the existing Stage 1 Development Plan land use designations and number of dwelling units for the Project area.

Table 1. 2002 Stage 1 Development Plan Land Use Summary

LAND USE DESIGNATIONS	Acres	Units	Sq. Ft.
Low Density Residential	433.5	1,734	
Medium Density Residential	9.4	94	
Medium High Residential	34.8	696	
Rural Residential/Agriculture	269.1	2	
General Commercial	41.0		446,490
Neighborhood Commercial	10.3		134,600
Industrial Park	68.9		840,360
Future Study Areas (RRA, I & GC)	92.6		
Junior High School	14.6		
Elementary Schools	17.3		
Community Park	14.1		
Neighborhood Parks	24.0		
Neighborhood Squares	2.7		
Open Space	76.9		
TOTAL	1,109.2	2,526	1,421,450

Note: In addition to the tabulation above the annexation included approximately 10 acres of road right-of-way for Fallon Road, Croak Road and Central Parkway. The total area annexed, including road rights-of-way, is approximately 1,119 acres.

Of the 2,526 residential units included in the 2002 annexation and Stage 1 Development Plan, 1,240 homes are located within the EDSP; the remaining 1,286 homes are outside the EDSP. All of the commercial and industrial uses above are located within the existing EDSP area.

A portion of the annexation area was designated as a Future Study Area as these properties are located within the boundary of the Livermore Airport Protection Area and precluded from residential development. These Future Study Area properties are also within the boundary of the existing EDSP. The ultimate land uses appropriate for these properties were to be defined in subsequent documents. These lands were annexed with Rural Residential, Industrial or General Commercial land use designations but given only Rural Residential zoning in the existing Stage 1 Development Plan.

Resource Management Plan. In 2003, the City retained a team of consultants to prepare a Resource Management Plan (RMP) for the Project area. The RMP implements mitigation measure SM-BIO-1 adopted with the 2002 annexation and rezoning

approvals. The purpose of the RMP is to address impacts to biological resources in a coordinated manner across the entire Project area. The effort included conducting necessary biological analyses and developing necessary protection and/or management methods. The RMP was accepted by the Dublin City Council in September 2004 and has been used as one of the key documents in formulating the amended Stage 1 Development Plan proposed in this Project.

Project Description

All of the Project Area is located within the City of Dublin. The Project includes both programmatic and program level elements as further described below.

Program Level Elements

The City of Dublin uses a Stage 1 PD zoning designation to zone property in accordance with the City's General Plan and, in this case, Eastern Dublin Specific Plan land use designations. Under the City's zoning ordinance a Stage 1 PD development plan must, among other things, establish: a plan of proposed land use by type and density of use; the maximum number of dwelling units and commercial/office/industrial areas; a master landscape plan; and a preliminary development phasing plan. The Project proposes to amend the General Plan, Eastern Dublin Specific Plan, and PD-Stage 1 Development Plan zoning to increase residential over that evaluated in the 2002 SEIR and commercial development potential over that evaluated in the EDEIR or the 2002 SEIR, and to modify land use boundaries based on the RMP.

Land use and development concept. **Exhibit 5** shows the proposed land use designations and amended Stage 1 Development Plan zoning for the Project area. The Project includes 3,108 dwelling units and 2,503,175 gross square feet of commercial and office use. This is 582 dwellings and 1,081,725 gross square feet greater than the current Stage 1 Development Plan. The additional approximately one million square feet of commercial and office is proposed in the Livermore Airport Protection Area and would change the General Plan/Specific Plan designation of Future Study Area (see discussion above) and the Stage 1 Development Plan zoning of Rural Residential to Campus Office and General Commercial designations. The 582 additional residential units are included within a total of approximately 600 dwelling units which were, at the time of the 1993 EDSP and EDEIR, planned for the property in the Livermore Airport Protection Area. In the adopted 1993 plans these properties were given a General Plan/Specific Plan designation of "Future Study Area" with the proviso that residential units could not be constructed unless subsequently found acceptable within the APA. The Project proposes to transfer 582 of these approximately 600 dwelling units to a portion of the site not encumbered by the Airport Protection Area restrictions. Table 2 contains the land use summary for the proposed Project.

Table 2. Project Land Use Summary

Land Use	Acres	Dwelling Units	Non-Residential Sq. Ft.
Low Density Residential	441.3	1,737	--
Medium Density Residential	60.1	601	--
Medium High Residential	33.6	672	--
Village Commercial/ Residential	6.4	96	83,635
Rural Residential/ Agricultural	130.5	2	--
General Commercial	72.1	--	785,169
General Commercial/ Campus Office	134.0	--	1,634,371
Elementary School(s)	20.0	--	--
Community Park	18.3	--	--
Neighborhood Parks	25.8	--	--
Neighborhood Squares	2.7	--	--
Open Space	187.2	--	--
Total	1132.0	3,108	2,503,175

Note: This table includes both the additional 13.0± acres on the west side of the Project Area which have been added since annexation and the additional 10.0 acres of road rights-of-way which were not tabulated at the time of annexation.

Source: MacKay & Soms, 2004

As shown in Table 2, above, the applicant proposes to add approximately 13 acres of land to the Project from Dublin Ranch, immediately to the west of the 2002 Project area. This land is presently designated as Rural Residential/Agriculture, Open Space or a partial elementary school site; however, a school is no longer planned at this location. Development of the additional acreage is integrated into the Project general plan, specific plan and zoning amendments, as well as development permit applications. A related lot line adjustment would revise the property boundary between the Project and Dublin Ranch.

The Fallon Village Project area is one of several “villages” described in the EDSP. Fallon Village includes a “village center” that would serve as a social and commercial core to residential neighborhoods in the hills surrounding the village center. The village center would be located along either side of Central Parkway generally west of Croak Road. It would include a mix of Village Commercial, Medium-High Density Residential, Neighborhood Square, and Community Park uses, and an Elementary School.

Residential density ranges for each of the properties within the Project area would be established by the general plan and specific plan land use designations. Low Density Residential (0.9 to 6.0 dwellings/acre) would allow lots with lot sizes ranging from approximately 3,200 square feet to approximately one acre in size. Medium Density residential (6.1 to 14.0 dwellings/acre) would permit small lot housing types including “z-lot,” and similar cluster type housing. Medium-High densities (14.1-25.0 dwellings/acre) would accommodate rental apartments, condominium and similar

housing styles. Finally, the Rural Residential/Agriculture designation would permit one dwelling per 100 acres of land. The maximum number of homes per existing parcel would be established in the proposed Stage 1 Development Plan.

The Stage 1 Development Plan proposes 2,503,175 square feet of commercial and office land uses. The proposed Floor Area Ratios for commercial and office uses would be based on the intensities similar to those allowed in the EDSP and evaluated in the Eastern Dublin EIR, which would be 0.25 (General Commercial), 0.30 (Village Commercial) and 0.28 (General Commercial/Campus Office). The maximum commercial and office development per existing parcel would be established in the proposed Stage 1 Development Plan.

The Project would also include approximately 18 acres of community parkland, approximately 27 acres of Neighborhood Parks and Neighborhood Squares and would reserve approximately 20 acres for future school use. Interconnected multi-purpose trails would be provided within the Project area.

A major feature of the Project is the central Open Space Corridor. The corridor includes approximately 86 acres running generally northeast-southwest through the Project area. Proposed along an existing drainage, the corridor is approximately 400 feet wide, connecting to open space lands to the north, and widening to a broader open space area near Fallon Road, which includes an existing arroyo willow riparian woodland near Fallon Road. The Project includes use limitations and improvement standards intended to protect and preserve sensitive biological resources. For example, trails linking residential areas could extend along the Open Space Corridor if such trails do not disturb biological resources.

Table 3 indicates the proposed Project land uses and development intensities as would be designated for individual properties in the proposed Stage 1 Development Plan.

**Table 3 Proposed Stage 1 Development Plan
Project Land Use Distribution by Property**

Parcel No. Land Use	1		2		3		4		5		6		7		8		9		10		11		Totals	
	Acres	du - sf	Acres	du - sf	Acres	du - sf	Acres	du - sf	Acres	du - sf	Acres	du - sf	Acres	du - sf	Acres	du - sf	Acres	du - sf	Acres	du - sf	Acres	du - sf	du - sf	Acres
Low Density Residential	70.5	282	117.4	469	48	192													205.4	794			1,737	441.3
Medium Density Residential			10.4	104	23.4	234			7	70	9.6	96	9.7	97									601	60.1
Medium High Density Residential					27.1	542	6.5	130															672	33.6
Rural Residential / Agriculture	60.8	1	19.4	0															50.3	1			2	130.5
Village Commercial, Residential					6.4	98																	96	6.4
Village Commercial, Commercial					(6.4)	0.084																	0.084	
General Commercial							72.1	0.785															0.785	72.1
General Commercial / Campus Office							18.5	0.228	34.2	0.417	40	0.488	30.5	0.372	1.1	0.013	9.3	0.113			0.4	0.005	1.634	134.0
Elementary School	0.4				10														9.6					20.0
Community Park					11.1		7.2																	18.3
Neighborhood Park			11.5		5.8														8.5					25.8
Neighborhood Square					2.7																			2.7
Open Space	28.0		6.8		55.2		35.6		9.1										52.3					187.2
Totals: Acres - du's	159.7	283	165.5	573	189.7	1,064	140.1	130	50.3	70	49.6	96	40.2	97	1.1	0	9.3	0	326.1	795	0.4	0	3,108	1,132.0
Totals: -- sf		0.000		0.000		0.084		1.011		0.417		0.488		0.372		0.013		0.113		0.000		0.005		2,503

Parcel No.	Property Owner
1	Braddock & Logan
2	Croak
3	First American Title
4	Chen
5	Anderson Second Family Ltd Ptrsp

Parcel No.	Property Owner
6	Righelli Partners
7	Branaugh
8	EBJ Partners
9	Monte Vista
10	Fallon Enterprises
11	Pleasanton Ranch Investments

Note: commercial / office data expressed in million square feet.

Project access and circulation. Primary access to and through the Project area would be provided from Fallon Road and the extensions of Dublin Boulevard and Central Parkway. Regional access is currently provided to the Project site and would continue to be provided by the I-580 Freeway. Collector streets located throughout the Project would provide access to residential neighborhoods and non-residential areas; these streets would be specifically identified at the Stage 2 Development Plan and subdivision map level.

Fallon Road would be widened to between four and eight lanes, and improved generally along its current alignment. Central Parkway is proposed to extend in an easterly direction from Fallon Road until it would turn in a southerly direction, following the existing alignment of Croak Road and terminating at Dublin Boulevard. A loop road (the "Upper Loop Road") of two to four lanes in width that would provide access to northern residential neighborhoods. All roads would be constructed to existing City standards.

Multi-use trails would also be constructed in accordance with the policies and programs of the General Plan, EDSP and the City's Park and Recreation Master Plan. Such trails would accommodate bicycle, jogging and pedestrian uses.

Utility Services. The Project area is located within the service area of the Dublin San Ramon Services District (DSRSD). The District would provide potable water, recycled water and wastewater services to serve the proposed Project. Major facilities to serve Project demand would be constructed and/or financed by Project developers. Such services would be provided in accordance with DSRSD's Facilities Master Plan (as may be amended) that includes the Project area.

Stormwater drainage to serve the Project area would include a major backbone drainage system, which would consist of larger pipes that would connect to open channels and/or box culverts toward the existing G-3 box culvert located within Dublin Ranch Area H just west of Fallon Road. Local drainage facilities would be maintained by the City of Dublin with larger regional drainage facilities maintained by Zone 7.

The Project would also include features addressing the water quality and hydromodification standards of the federal Clean Water Act-National Pollution Discharge Elimination System (NPDES) requirements. The Project proposes that runoff from small, frequent "water quality" events, such as rain storms, enter the infiltration/water quality facilities, with higher flows by-passing the facilities. The use of these water quality bioretention filters and of the natural Open Space Corridor flow channel would slow runoff and minimize hydromodification impacts on downstream facilities while providing necessary water quality treatment.

Site Grading. Grading activities would occur within the Project area to accommodate planned land uses, roads and utilities. The amount of grading for the overall Stage 1 Development Plan area would not be established until detailed site and grading plans are developed and all of the Stage 2 Planned Development applications are submitted.

Inclusionary Housing Requirements. The City of Dublin's inclusionary zoning ordinance requires that 12.5 percent of a project's dwelling units must be affordable to very low, low and moderate income households. Compliance could consist of constructing the required number of inclusionary units; up to five percent out of the total of 12.5 percent requirement may be paid as an in-lieu fee to the City. The Project proponents will be required to comply with the ordinance; the specific methods of compliance with this ordinance will be required for the lands proposed for Stage 2 Development Plans.

Phasing. The Project is anticipated to be constructed in at least two phases. The first phase would include approximately 473 acres located in the northerly one-third of the Project area. At least one park would be included in this phase. One Elementary School may also be constructed in the first phase, although this could be built in the second phase depending on need.

The second and possibly later phases would include the remainder of the Project area.

Project Level Elements

In addition to programmatic level analysis, the 2005 Supplemental EIR will analyze specific development-level actions (e.g., Stage 2 Development Plan, site design review, tentative tract maps, etc.) for a portion of the overall Project area. The applicant is Braddock & Logan Services, Inc. For the purposes of this Initial Study, the development applications are referred to as the Development Project or the Stage 2 PD. Consistent with the Dublin zoning and subdivision regulations, the development permit applications contain more detail than the programmatic applications described above.

Development Project Area. The Project-level entitlements would permit development of approximately 486 acres encompassing the two northern-most parcels in the Stage 1 Development Plan area as indicated on **Exhibit 6**. This area is comprised of the Fallon Enterprises parcel on the west and the Braddock & Logan parcel on the east. The proposed Stage 2 PD area is located within the City of Dublin and is bordered by Dublin Ranch and a golf course to the west, the City's Sphere of Influence/City Limits boundary to the east and north, and the Jordan and Croak properties to the south. Project-level entitlements include an approximately thirteen-acre lot line adjustment between the Fallon Enterprises parcel and property owned by the Lin family on the eastern portion of the Dublin Ranch golf course to allow more sensitive and efficient grading in that area between the two projects.

Non-native grasses or dry farmed croplands cover the majority of the area; there are very limited areas of tree cover. A stock pond is located at the north of the Fallon Enterprises property and other smaller ponds are found throughout the site. The proposed development site is characterized by undulating hills, ranging from approximately 470 feet above sea level to approximately 910 feet.

Land Use and Development Concept. Five residential neighborhoods are proposed in the Stage 2 PD application, with lot sizes ranging between 3,200 and 6,000 square feet. The neighborhoods are arranged around a centrally located elementary school, located along the Upper Loop Road and adjacent to the Stream Corridor. The applicant proposes to construct a day care facility as part of the elementary school in satisfaction of the City's Public/Semi-public sites requirements. The proposed Stage 2 PD would provide an approximately five acre neighborhood park located adjacent to the elementary school and an approximately four-acre neighborhood square located at the terminus of a two-lane central residential collector street with widened sidewalks and parkways. The neighborhood square would be designed to meet the City's desired program and to provide recreation opportunities in the upper elevations of the development area.

Approximately 34 acres of the Open Space Corridor would be located within the proposed Stage 2 PD area. Multi-use trails with a width of approximately 12 feet, would be located in the outer 30' of each side of the Corridor. The Corridor would preserve, create an enhance habitat for native species and disturbed areas would be revegetated with native landscaping appropriate to the area. Approximately 45 acres of additional land around an existing stock pond northwest of the Corridor is proposed to be designated Open Space and would be placed in a conservation easement to protect sensitive habitat and species as designed in the RMP.

Table 4, below, summarizes the proposed Stage 2 Development Plan land use data and compares this Project level proposal with the Program level proposed in the amended Stage 1 Development Plan. The residential land uses of the Stage 2 development proposal are consistent with the amended Stage 1 document. The Stage 2 park proposal provides 2.7 acres more parkland than required in the amended Stage 1 document.

Table 4. Proposed Stage 2 Development Plan and Amended General Plan Land Use

Land Use Designation	Stage 1 PD Plan		Stage 2 PD Plan	
	Ac.	Du	Ac.	Du
Low Density Residential	277.2	1,076	252.1	1,078
Rural Residential /Agriculture	111.1	2	120.0	0
Elementary School	10.0	0	11.0	
Community Park	0.0	0		
Neighborhood Park	8.5	0	6.3	
Neighborhood Square	0.0	0	4.9	
Open Space	<u>79.0</u>	<u>0</u>	<u>92.0</u>	<u>0</u>
Totals:	486.3	1,078	486.3	1,078

Source: Braddock & Logan, 2005

The design of the Project proposes to take advantage of the existing topography of the site and neighboring properties to create views for future residents. Views from the

neighborhoods to the adjacent Dublin Ranch Golf Course are proposed to be integrated into the site plan through the inclusion of open-ended cul-de-sacs that open onto the golf course property and a small green that would provide a view beyond homes through to the golf course.

Access and Circulation. Primary access to and through the Stage 2 Development area would be from Croak Road from the south and via “the Upper Loop Road” from the west. The Upper Loop Road would connect to the existing City road network near the northwest corner of the Project area. Interim improvements to existing Croak Road will be used as a secondary access for the first phases of the development. Trails are proposed along the Open Space Corridor and along major streets. Croak Road and various other streets are proposed to be single-loaded along portions of the open space to provide views of the stream corridor to pedestrians and motorists. Open-ended cul-de-sacs have also been planned along the Open Space and Rural Residential / Agricultural areas for recreation/trail access and maintenance/fire access purposes.

Utility Services: Utility services for the Project area would require connection to DSRSD’s existing system and sewer treatment would occur at DSRSD’s existing wastewater treatment plant. Gravity sewer mains would serve all the proposed development area west of the Open Space corridor, conveying sewage to proposed sewer main facilities in Fallon Road and Dublin Boulevard. The portion of the development west of the Open Space corridor would be sewer, in an interim condition, by a combination of pumped sewer from the southern areas and then by gravity sewer from the northern areas, both flowing to a gravity connection westward across the Open Space corridor would be sewer by a gravity sewer main along the ultimate Croak Road alignment, flowing south to the Dublin Boulevard sewer main.

Water would be supplied to the proposed Stage 2 development area by extension of DSRSD’s Zone 2 and Zone 3 mains in Dublin Ranch. Water supply mains would be looped through the development area and connected to an existing main in Fallon Road.

The storm drain system for the Stage 2 development area proposes a combination of underground piped conveyance of developed runoff and use of the Open Space drainage corridor to convey collected undeveloped runoff from adjacent open space and rural residential/agriculture designated land uses. The major underground systems would be located in the Upper Loop Road and Croak Road extension with minor facilities running through the local subdivision streets. Stormwater collection facilities would be sized to City standards. The strategy for maintaining the quality of post-development storm water runoff from the project is in accordance with the guidelines proposed at a Program level. The “Stage 1 Plan Development Level Stormwater Quality/Drainage Concept” report will be the basis for this strategy. A number of Best Management Practice (BMP) methods would be employed in the PD 2 development (i.e.: bioretention filters, bio-treatment swales, inlet stenciling, etc.). The primary focus for the Stage 2 project water quality treatment would be to collect and direct “first flush” runoff (or approximately the second

year plus storm events) into biofilter type treatment facilities. Some portion of runoff would be directed by surface conveyance into linear biofilter strips located in the wider parkway strips between curb and sidewalk on major, non-home fronting streets. The majority of water quality treatment will be accomplished by using diversion structures to direct a portion of runoff (the “first flush” runoff) out of the storm drain system in the Upper Loop Road and Croak Road into bioretention filter beds located in the lowest portions of the development, adjacent to these major roads. Where feasible, cleaned water from the bioretention filters would be discharged back to the Open Space drainage corridor to replenish natural runoff. All runoff treatment would occur prior to entering the Zone 7, G-3 drainage facility at Fallon Road.

Site Grading. Slopes within developed areas are proposed to be graded at a 2:1 ratio with most slopes in Open Space and Rural Residential/Agriculture areas proposed at 3:1. At the north of the urban development area it will be necessary to grade at a 2.5:1 or 3:1 slope to remove and repair existing landslides which exist above proposed homes. New slope contours would tie smoothly to existing contours and disturbed areas would be hydroseeded so as to retain a natural look for the graded hills. Where needed for maintenance and fire safety access purposes, a 30-foot wide access bench and easement are proposed along the rear of lots which would abut open space.

Inclusionary Housing Requirements. The Project proposes to meet the City inclusionary zoning ordinance by constructing the required number of inclusionary units or, as an alternative, paying for up to five percent out of the total of 12.5 percent requirement as an in-lieu fee to the City.

Phasing. Phasing of the neighborhoods is proposed to proceed generally from west to east and from south to north. Park and school phasing are to be subject to the requirements of the City of Dublin and the Dublin Unified School District respectively.

Development Agreements. The Eastern Dublin Specific Plan requires that the Project proponents and property owners enter into development agreements with the City. Development agreements vest development approvals for a specified period of time so that developers of large, time-intensive projects have the ability to construct such projects in a time frame and under mutual obligations beneficial to the City and the Project proponent. Issues typically addressed in development agreements include, but are not limited to: density and intensity of land use; timing of development; financing methods and timing of infrastructure; determination of traffic, noise, public facility and other impact fees; and obligations for construction of streets and roads. Development agreements will accompany City approval of the proposed Stage 2 Development Plans, Site Design Review and subdivision maps.

Requested land use entitlements

The following land use entitlements have been requested to allow implementation of the proposed Project:

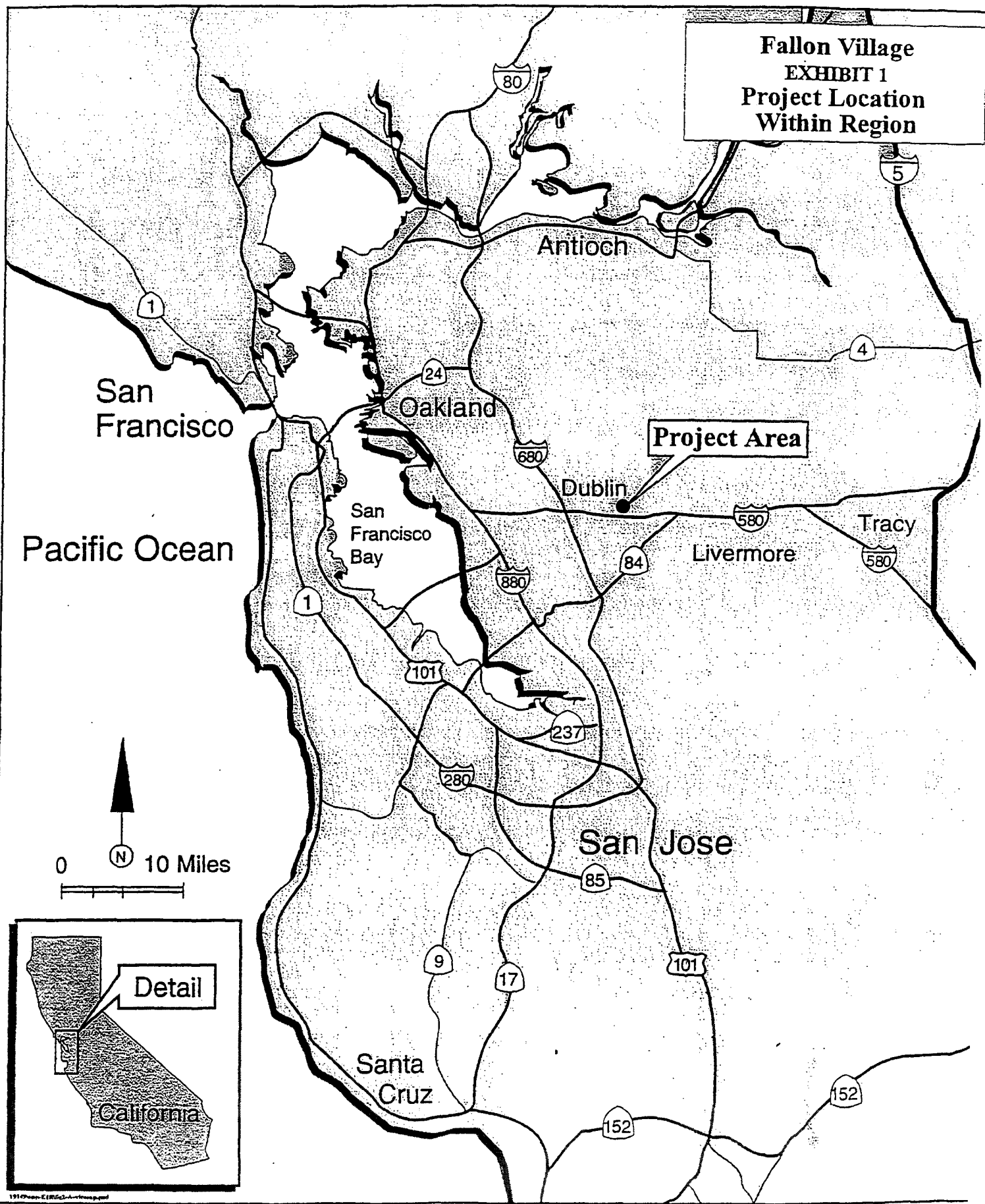
All Properties/Project Area:

- 1) General Plan Amendment
- 2) Amendment to EDSP
- 3) PD Rezoning/Amendment to Stage 1 Development Plan including Design Guidelines

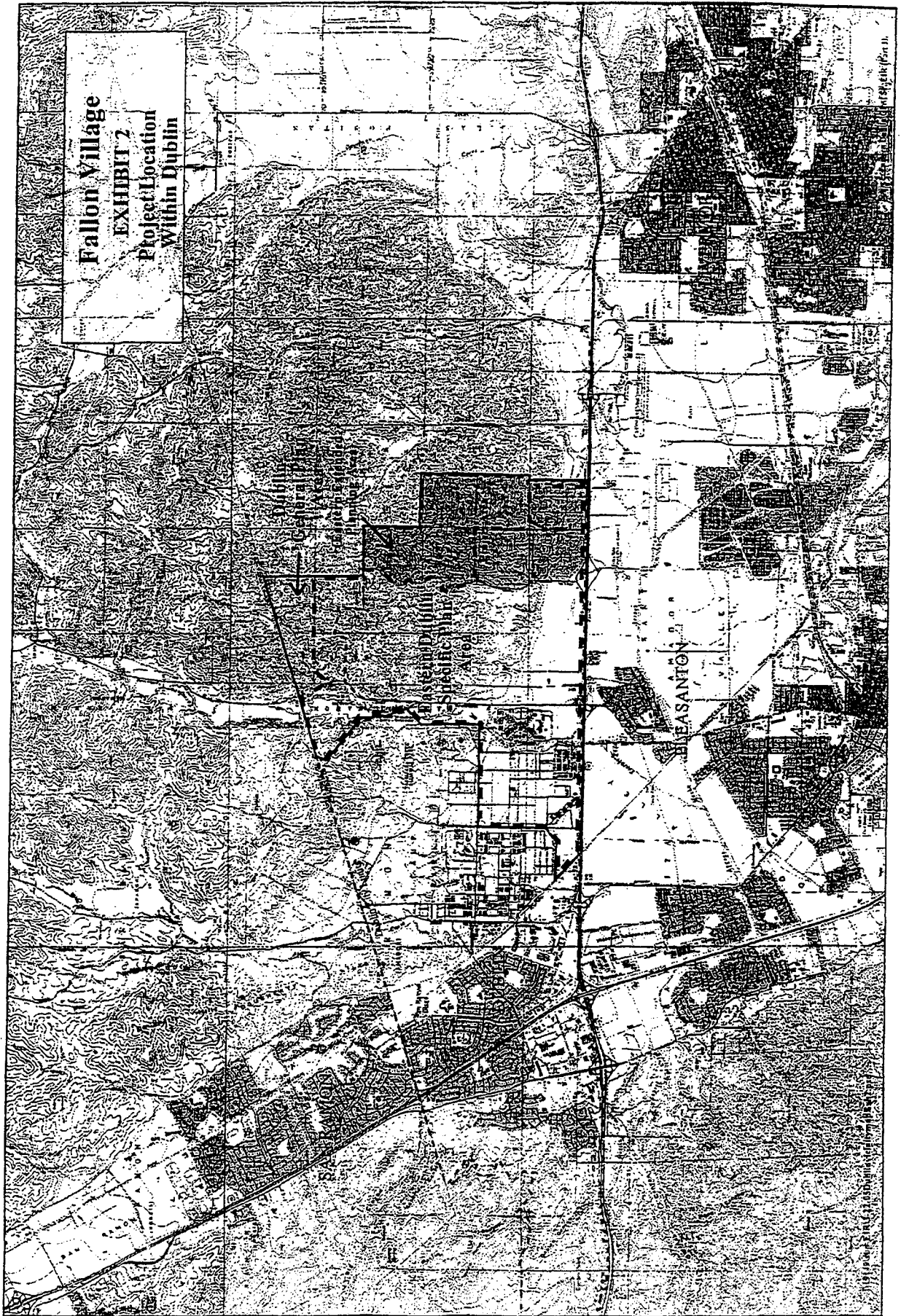
Braddock & Logan properties/Development Project Area

- 1) PD Rezoning/Stage 2 Development Plan
- 2) Site Design Review
- 3) Vesting Tentative Tract Map
- 4) Lot Line Adjustment
- 5) Development Agreement

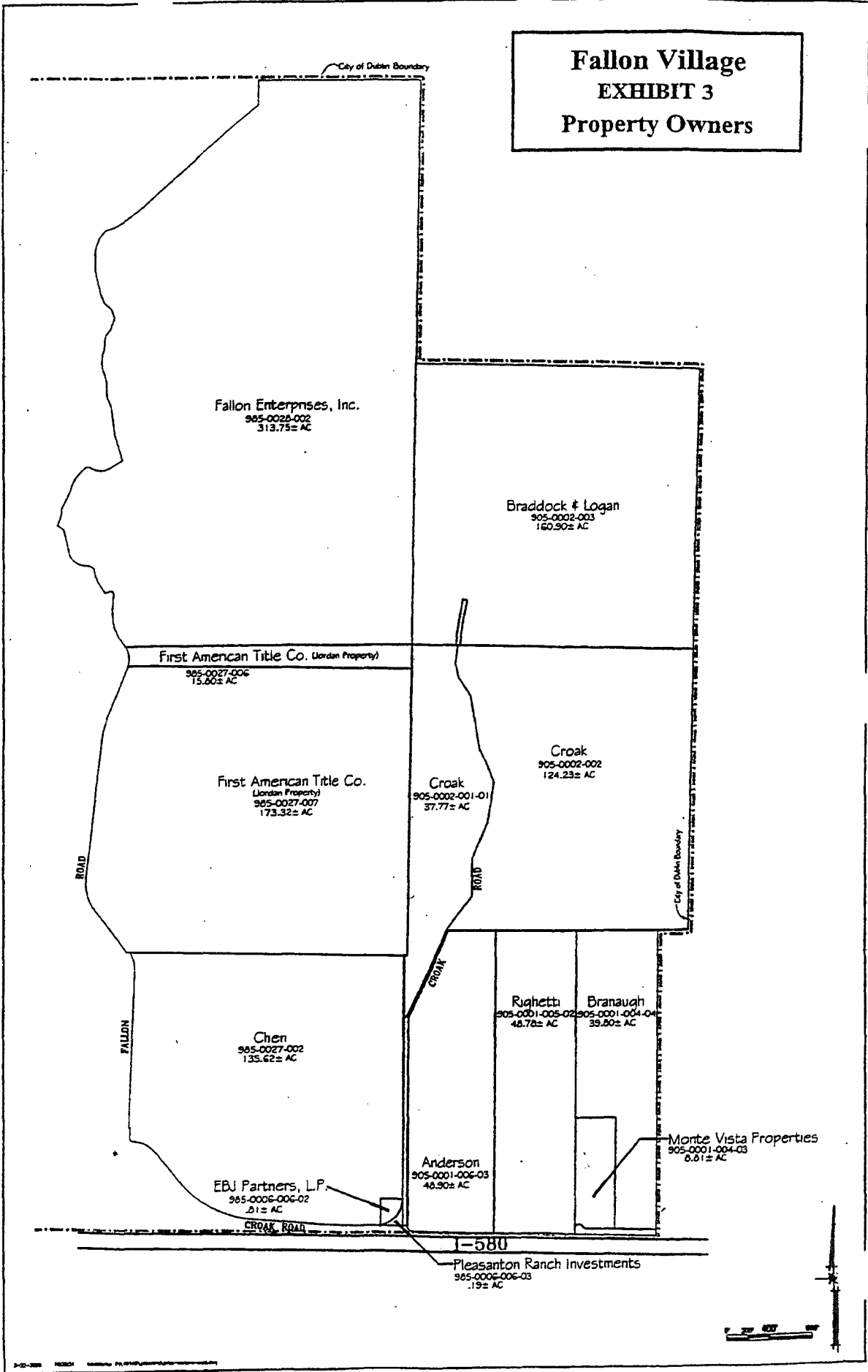
**Fallon Village
EXHIBIT 1
Project Location
Within Region**



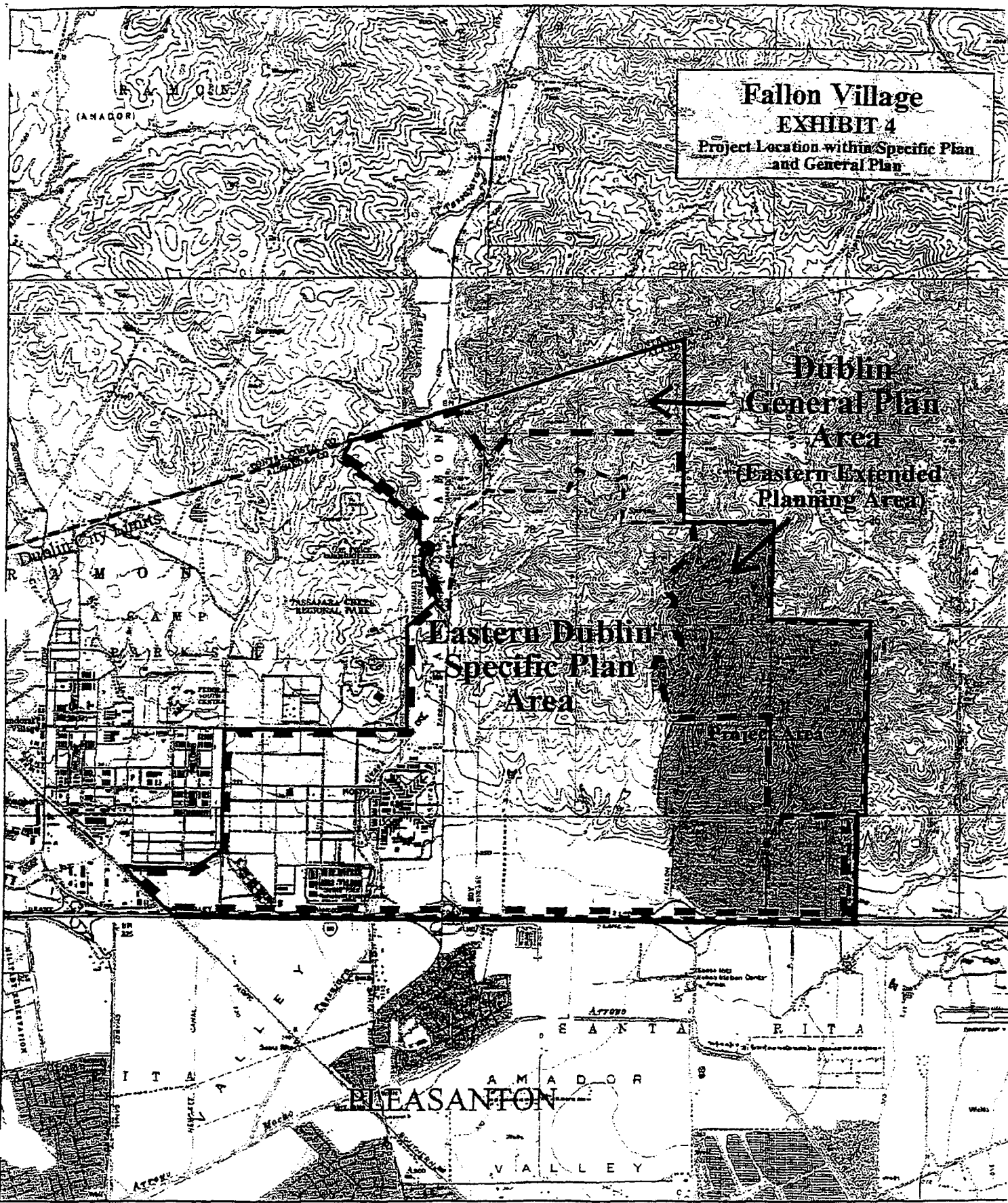
Fallon Village
EXHIBIT 2
Project Location
Within Dublin



**Fallon Village
EXHIBIT 3
Property Owners**



Fallon Village
EXHIBIT 4
Project Location within Specific Plan
and General Plan



Dublin
General Plan
Area
(Eastern Extended
Planning Area)

Eastern Dublin
Specific Plan
Area

PLEASANTON

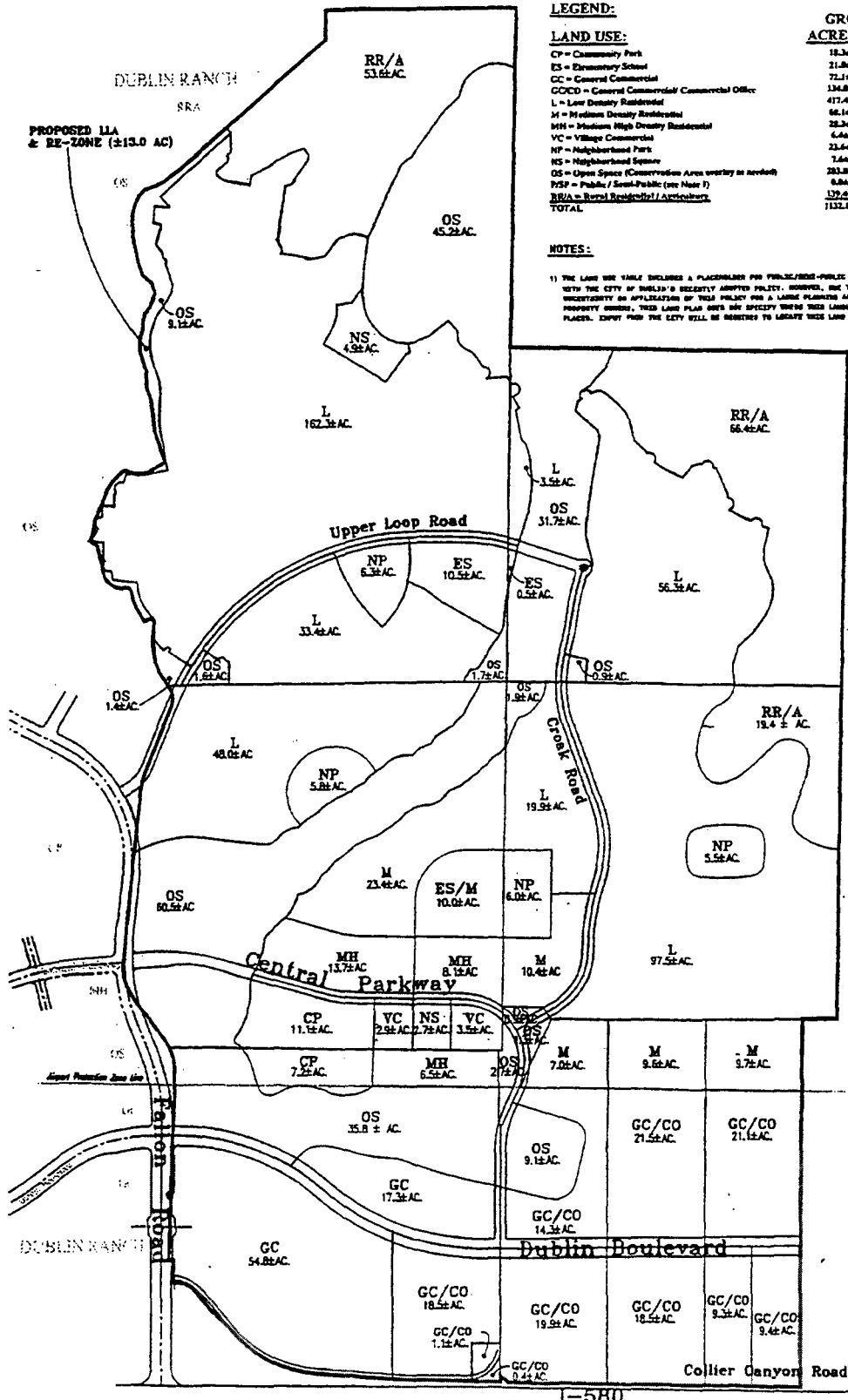
AMADOR
VALLEY

SANTA RITA

Dublin City Avenue

PASSADENA CENTER
HIGHWAY (RTE. 101)

Fallon Village EXHIBIT 5 Proposed Stage 1 Development Plan



LEGEND:

LAND USE:

- CP = Community Park
- ES = Elementary School
- CC = General Commercial
- GC/CO = General Commercial/ Commercial Office
- L = Low Density Residential
- M = Medium Density Residential
- MH = Medium High Density Residential
- VC = Village Commercial
- NP = Neighborhood Park
- NS = Neighborhood Square
- OS = Open Space (Conservation Area unless as noted)
- PSP = Public / Semi-Public (see Note 1)
- RR/A = Rural Residential / Agriculture
- TOTAL

GROSS ACREAGES:

- 18.3ac
- 21.8ac
- 72.9ac
- 134.8ac
- 47.8ac
- 66.1ac
- 28.3ac
- 4.8ac
- 23.6ac
- 7.6ac
- 28.8ac
- 8.8ac
- 137.8ac
- 1132.8ac

DUSQ. FT.:

- 785,169 SF
- 1,643,771
- 1,379 DU
- 681 DU
- 672 DU
- 94 DU, 83,635 SF
- 5,108 DU
- 2,563,175 SF

NOTES:

1) THE LAND USE TABLE ENCLOSED A PLACEHOLDER FOR PUBLIC/SEMI-PUBLIC USE IN ACCORDANCE WITH THE CITY OF DUBLIN'S RECENTLY ADOPTED POLICY. HOWEVER, DUE TO THE CITY'S UNCERTAINTY ON APPLICATION OF THIS POLICY FOR A LARGE PLANNED AREA WITH MULTIPLE PROPERTY OWNERS, THIS LAND PLAN DOES NOT SPECIFY WHERE THIS LANDUSE WILL BE PLACED. INPUT FROM THE CITY WILL BE NEEDED TO LOCATE THIS LAND USE.



1-580

Initial Study Preparers

City of Dublin

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Jerry Haag, City environmental consultant, City of Dublin

Applicant Team

William Clarke, applicant consultant

Richard Grassetto, applicant consultant

Connie Goldade, MacKay & Somps

References

Eastern Dublin General Plan Amendment and Specific Plan Environmental Impact Report, Wallace Roberts and Todd, 1994.

East Dublin Properties Stage 1 Development Plan and Annexation Revised Supplemental Environmental Impact Report. City of Dublin, March 2002.

Eastern Dublin Specific Plan, revised June 6, 1998

City of Dublin General Plan, revised July 7, 1998

Dublin Ranch West Supplemental EIR, November 2004

Projections 2005, Association of Bay Area Governments, 2005

Persons/Agencies Contacted in Preparation of this Document

City of Dublin, Public Works Department

City of Dublin, Planning Department

Dublin San Ramon Services District

Alameda County Flood Control District Zone 7

- 1. Project description** All properties: General Plan amendments, Eastern Dublin Specific Plan amendments, rezoning/amend existing Stage 1 PD zoning. Select properties: approval of Stage 2 PD zoning, Site Development Review, vesting tentative tract map, development agreement and related development-level entitlements.
- 2. Lead agency:** City of Dublin
100 Civic Plaza
Dublin, CA 94583
- 3. Contact person:** Charity Wagner, Dublin Planning Department
(925) 556-4515
- 4. Project location:** North of I-580 and east of Fallon Road
- 5. Project contact person:** East Dublin Property Owners
c/o Braddock and Logan Services, Inc,
(Attn: Mr. Jeff Lawrence)
P.O. Box 5300
Danville, CA 94506
(925) 736-4000
- 6. Existing General Plan Land Use Designations** Low Density Residential (0.9-6.0 du/ac), Medium Density Residential (6.1-14.0 du/ac), Medium High Density Residential (14.1-25.0 du/ac), Neighborhood Commercial (.25-.60 FAR), Rural Residential/Agriculture (0.01 du/ac), General Commercial (.20-.60 FAR), Industrial Park (.35 FAR) Junior High School, Elementary School, Neighborhood Park and Open Space
- 7. Proposed General Plan Land Use Designations** Low Density Residential (0.9-6.0 du/ac), Medium Density Residential (6.1-14.0 du/ac), Medium High Density Residential (14.1-25.0 du/ac), Village Commercial/Residential (10 - 20 du/ac/ .30 FAR), Rural Residential/Agriculture (0.01 du/ac), General Commercial (.20-.60 FAR), General Commercial / Campus Office (.28 FAR maximum), Elementary

School, Neighborhood Park, Community Park,
Neighborhood Square, and Open Space

8. Proposed Rezoning:

PD-Single Family Residential, PD-Medium Density Residential, PD-Medium High Density Residential, PD-Village Commercial, PD-General Commercial, PD-General Commercial / Campus Office, PD-Elementary School, PD-Neighborhood Park, PD-Neighborhood Square, PD-Community Park, PD-Rural Residential / Agriculture, and PD-Open Space

9. Other public agency necessary and/or desired approvals:

- Referral to Alameda County Airport Land Use Commission (ALUC)
- Grading Plans, Improvement Plans, and building permits (Dublin)
- Sewer and water connections (DSRSD)
- Encroachment permits (Dublin)
- Notice of Intent (Water Resources Control Board)
- 404 Permits (US Army Corps of Engineers)
- Streambed Alteration Permit (California Department of Fish and Game)
- Permits from San Francisco Bay Regional Water Quality Control Board
- Permits from U.S. Fish and Wildlife Service
- Encroachment or other permits from CalTrans
- Cancellation of Williamson Act contracts

This environmental document provides the environmental information and evaluation necessary for the continuing Eastern Dublin Program as well as the development-level entitlements relating to the planning, acquisition, development, construction, operation and maintenance of the individual development proposals for specific properties. The new SEIR will provide the CEQA compliance documentation upon which the City's consideration of and action on all necessary and/or desirous land use permits and other approvals (collectively, "approvals") shall be based. This includes without limitation all those approvals set forth above, as well as any additional approvals necessary or desirous to such planning, acquisition, development, construction, operation and maintenance (e.g., General Plan amendments, planning and zoning approvals, development plans, subdivision maps, use permits, grading permits, building permits, architectural/design review, certificates of occupancy and other development-related approvals). Likewise, the new SEIR will provide the environmental information and evaluation needed by responsible and trustee agencies acting on permits relative to the Program, and the individual development proposals within the Project Area.

Environmental Factors Potentially Affected

The environmental factors checked below may be potentially affected by this Project, involving at least one impact that is a "potentially significant impact" as indicated by the checklist on the following pages.

X	Aesthetics		Agricultural Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources	X	Geology/Soils
X	Hazards and Hazardous Materials	X	Hydrology/Water Quality	X	Land Use/Planning
	Mineral Resources	X	Noise		Population/Housing
X	Public Services	X	Recreation	X	Transportation/Circulation
X	Utilities/Service Systems	X	Mandatory Findings of Significance		

Determination

On the basis of this initial evaluation:

I find that the proposed Project **could not** have a significant effect on the environment and a **Negative Declaration** will be prepared.

I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the Project. A **Negative Declaration** will be prepared.

I find that although the proposed Project **may** have a potentially significant effect, or a potentially significant effect unless mitigated, on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by mitigation measures based on the earlier analysis as described on the attached sheets. A **focused Supplemental Environmental Impact Report** is required, but it must only analyze the effects that remain to be addressed.

I find that although the proposed Project could have a significant effect on the environment, there **will not** be a significant effect in this case because all potentially significant effects: a) have been analyzed adequately in an earlier EIR pursuant to applicable standards; and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed on the proposed Project.

Signature: Jeri Rauh by Jenny Hays Date: 6/3/05
Printed Name: Jeri Rauh by Jenny Hays For: City of Dublin

Evaluation of Environmental Impacts

- 1) A brief explanation is required for all answers. Certain "no impact" answers are supported by the information sources the lead agency cites in the parenthesis following each question. A "no impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone), or, in this case, **there is no impact of the proposed project beyond that which was considered previously in the 1993 EIR and/or the 2002 SEIR, and/or for which a Statement of Overriding Consideration was adopted by the City Council at the time the 1993 EIR and/or the 2002 SEIR was certified.** A "no impact" answer should be explained where it is based on project-specific factors as well as general factors (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "potentially significant impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" implies elsewhere the incorporation of mitigation measures has reduced an effect from "potentially significant effect" to a "less than significant impact". The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

Environmental Impact Checklist

I. AESTHETICS

- a) Would the Program as a whole:
- 1) Have a substantial adverse effect on a scenic vista?
 - 2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway?
 - 3) Substantially degrade the existing visual character or quality of the site and its surroundings?
 - 4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?
- b) Would development of the Braddock & Logan property:
- 1) Have a substantial adverse effect on a scenic vista?
 - 2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway?
 - 3) Substantially degrade the existing visual character or quality of the site and its surroundings?
 - 4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?
- II. AGRICULTURE RESOURCES:** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X			
		X	
			X
		X	
X			
		X	
			X
		X	

- a) Would the Program as a whole:
- 1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
 - 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
 - 3) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?
- b) Would development of the Braddock & Logan property:
- 1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
 - 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
 - 3) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

- a) Would the Program as a whole:
- 1) Conflict with or obstruct implementation of the applicable air quality plan?
 - 2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
		X	
		X	
		X	
		X	
		X	
		X	
X			
X			

- 3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- 4) Expose sensitive receptors to substantial pollutant concentrations?
- 5) Create objectionable odors affecting a substantial number of people?
- b) Would development of the Braddock & Logan property:
- 1) Conflict with or obstruct implementation of the applicable air quality plan?
- 2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- 3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- 4) Expose sensitive receptors to substantial pollutant concentrations?
- 5) Create objectionable odors affecting a substantial number of people?

IV. BIOLOGICAL RESOURCES --

- a) Would the Program as a whole:
- 1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X			
X			
		X	
X			
X			
X			
		X	
X			

- 2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?
- 3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- 4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- 5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- 6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?
- b) Would development of the Braddock & Logan property:
 - 1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
 - 2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?
 - 3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X			
X			
X			
X			
X			
X			
X			
X			

4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

V. CULTURAL RESOURCES --

a) Would the Program as a whole

1) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

4) Disturb any human remains, including those interred outside of formal cemeteries?

b) Would development of the Braddock & Logan property:

1) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

4) Disturb any human remains, including those interred outside of formal cemeteries?

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	X			
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X			
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	X			
a) Would the Program as a whole				
1) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	X			
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?			X	
3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
4) Disturb any human remains, including those interred outside of formal cemeteries?			X	
b) Would development of the Braddock & Logan property:				
1) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	X			
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?			X	
3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
4) Disturb any human remains, including those interred outside of formal cemeteries?			X	

VI. GEOLOGY AND SOILS

a) Would the Program as a whole:

1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

2) Result in substantial soil erosion or the loss of topsoil?

3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

5) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

b) Would development of the Braddock & Logan property:

1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
		X	
		X	
		X	
		X	
		X	
		X	
		X	
			X
		X	

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

2) Result in substantial soil erosion or the loss of topsoil?

3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

5) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

VII. HAZARDS AND HAZARDOUS MATERIALS--

a) Would the Program as a whole:

1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

2) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

3) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
		X	
		X	
		X	
		X	
		X	
		X	
			X
		X	
		X	
X			

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
4) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	X			
5) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
7) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	
b) Would development of the Braddock & Logan property:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
2) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
3) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
4) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
5) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	

7) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

VIII. HYDROLOGY AND WATER QUALITY --

a) Would the Program as a whole:

1) Violate any water quality standards or waste discharge requirements?

2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

5) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

6) Otherwise substantially degrade water quality?

7) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
		X	
X			
		X	
		X	
X			
X			
			X
			X

9) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

10) Inundation by seiche, tsunami, or mudflow?

b) Would development of the Braddock & Logan property:

1) Violate any water quality standards or waste discharge requirements?

2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

5) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

6) Otherwise substantially degrade water quality?

7) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

9) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
			X
		X	
X			
		X	
		X	
		X	
X			
X			
			X
			X
			X

b) Would development of the Braddock & Logan property:

1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

XI. NOISE

a) Would the Program as a whole:

1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

2) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

b) Would development of the Braddock & Logan property:

1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
			X
			X
X			
			X
X			
X			
			X
X			

2) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

XII. POPULATION AND HOUSING

a) Would the Program as a whole:

1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

b) Would development of the Braddock & Logan property:

1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
			X
X			
X			
X			
			X
			X
			X
			X
			X
			X
			X
			X

3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

XIII. PUBLIC SERVICES

a) Would the Program result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1) Fire protection?

2) Police protection?

3) Schools?

4) Maintenance of public facilities, including roads?

b) Would development of the Braddock & Logan property result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1) Fire protection?

2) Police protection?

3) Schools?

4) Maintenance of public facilities, including roads?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
			X
X			
X			
X			
		X	
X			
X			
X			
		X	

XIV. RECREATION --

a) Program.

1) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

b) Development of the Braddock & Logan property.

1) Would development of the Braddock & Logan property increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

2) Does development of the Braddock & Logan property include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

XV. TRANSPORTATION/TRAFFIC

a) Would the Program as a whole:

1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X			
X			
X			
X			
X			
X			
X			

4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

5) Result in inadequate emergency access?

6) Result in inadequate parking capacity?

7) Conflict with adopted policies, plans, or Programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

b) Would development of the Braddock & Logan property:

1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

5) Result in inadequate emergency access?

6) Result in inadequate parking capacity?

7) Conflict with adopted policies, plans, or Programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

XVI. UTILITIES AND SERVICE SYSTEMS

a) Would the Program as a whole:

1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X			
X			
			X
			X
X			
X			
X			
X			
			X
			X
X			

2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?

6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

7) Comply with federal, state, and local statutes and regulations related to solid waste?

8) Have sufficient gas and electricity supplies available to serve the project from existing entitlements and resources?

b) Would development of the Braddock & Logan property:

1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X			
X			
X			
X			
		X	
			X
		X	
X			
X			
X			
X			

5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?

6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

7) Comply with federal, state, and local statutes and regulations related to solid waste?

8) Have sufficient gas and electricity supplies available to serve the project from existing entitlements and resources?

XVII. MANDATORY FINDINGS OF SIGNIFICANCE --

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X			
		X	
			X
		X	
X			
X			
X			

Sources used to determine potential environmental impacts:

1. City of Dublin General Plan (Revised July 7, 1998)
2. Final Eastern Dublin Specific Plan, City of Dublin (Revised June 6, 1998)
3. Certified Environmental Impact Report (State Clearinghouse No. 91103064), Eastern Dublin General Plan Amendment and Specific Plan (including the Draft and Final EIRs, Addenda, etc.)

4. Certified Supplemental Environmental Impact Report (State Clearinghouse No. 2001052114), East Dublin Properties Stage 1 Development Plan and Annexation (including the Draft and Final EIRs, etc.)
5. Resource Management Plan, Eastern Dublin Properties (2004)
6. Projections 2005, ABAG
7. Site Visit by Dublin City staff and/or consultants
8. Discussion with appropriate service provider(s)

The documents identified above are available for review at:

City of Dublin Community Development Department
100 Civic Plaza
Dublin, CA 94568

Discussion of Conclusions in Checklist

The following sections provide further discussion of the conclusions reached in the preceding checklist. In each impact area, e.g., "Aesthetics", the "Environmental Setting" is first described and then the "Project Impacts and Mitigation Measures" are discussed. In the Project Impacts and Mitigation Measures subsection, each conclusion as to whether an impact exists is repeated from the checklist. A conclusion is provided concerning impacts at both the larger Program level and at the development level. Following each conclusion as to whether impacts exist, the evidence supporting that conclusion is provided.

I. Aesthetics

Aesthetic impacts of the Project were evaluated in the 1993 EIR but Initial Study for the 2002 SEIR determined that no further evaluation was required on this topic, since no changes to development patterns within the Project area were requested at that time.

Environmental Setting

Stage 1 Development Plan

The Project site is vacant except for nine residences and some scattered agricultural buildings. The 1993 EIR classifies the Project site mainly as "dry-farming rotational cropland" covering approximately the southern two-thirds of the site and "non-native grassland" covering the northern one third. Where agricultural activity, including grazing, historically has taken place, the visual image of the land is formed by patterns of the soil that have been furrowed by mechanical means or livestock.

The EDSP (pp. 71-72) identifies certain ridgelines and ridgelines within the Project area as "visually sensitive." The Specific Plan notes that lower spur ridge areas may be developed consistent with Specific Plan land use designations as long as they meet

certain requirements specified in the Specific Plan. These spur ridges include the lower, southern series of east-west trending foothills and three other ridgelines behind these at a general elevation of 500 feet. Development is prohibited on other ridgelines further to the east and north (refer to Figure 6.3 of the EDSP). The City's General Plan also identifies a 770-foot elevation "cap" above which certain development is prohibited and provides guidelines for sensitive development at certain elevations and slopes.

In 1996 the City, pursuant to Specific Plan Policy 6-5 and Action Program 6Q, prepared and adopted the "Eastern Dublin Scenic Corridor; Policies and Standards." This implementing tool establishes development review procedures and standards to preserve scenic vistas. The policies in this document supplement and clarify the standards of the Specific Plan. A series of scenic corridor zones and viewpoints along Interstate 580 and Fallon Road define how development projects should be evaluated as achieving the goals of this document and the Specific Plan.

Stage 2 Development Plan

The Stage 2 Project area is in the northerly portion of the Stage 1 plan. The terrain is rolling low ridges with two drainage corridors. The 770-foot elevation cap crosses the Project area and the major ridges are above and to the north of the Project area.

Project Impacts and Mitigation Measures

a1 & b1) *Have a substantial adverse impact on a scenic vista?*

Potentially significant impacts at both the Program level and the development level.

Approval and construction of the proposed Project would alter the character of existing scenic vistas and could obscure important sightlines if not mitigated.

This impact was addressed in the 1993 EIR (Impacts 3.8/C, 3.8/D, 3.8/E, 3.8/G and 3.8/I)) and with implementation of mitigation measures the identified impacts on scenic vistas deemed these impacts less-than-significant.

These mitigation measures include: 3.8/3.0, 3.8/4.0-4.5, 3.8/5.0-5.2, 3.8/6.0, 3.8/7.0 and 3.8/7.1 of the 1993 EIR). These mitigation measures encourage preservation of important visual resources, minimized grading for development; grading and building to preserve natural contours; prohibition of development along identified ridgelines; and preservation of views of designated open spaces. The mitigation measures apply to the entire Project area.

In addition, Policies 6-29 through 6-38 and text discussion within the Specific Plan provide direction for the type of development which may occur in areas defined in the Specific Plan as visually sensitive. These policies are directed towards preserving scenic vistas and view corridors and provide guidelines for grading and building design. With

the proposed addition of the property to the EDSP, these policies would apply to the entire Project area.

However, changes are proposed in the amount of development area near visually sensitive ridgelines that were not included in the 1993 EIR or EDSP which could be a *potentially significant* supplemental impacts and will be addressed in the Supplemental EIR.

The adopted General Plan level mitigation measures would continue to apply to the entire Project area and, with the Project modifying the Specific Plan so as to include all Fallon Village properties, the Specific Plan policies and mitigation measures would also apply to the entire Project area. Also development within the Project would be evaluated against the adopted Eastern Dublin Scenic Corridor Policies and Standards document. However, changes in the proposed development area could potentially affect views of the overall Project area and Stage 2 PD area to a greater degree than previously analyzed. This *potentially significant* supplemental impact will be evaluated in the Supplemental EIR.

a2 & b2) *Substantially damage scenic resources, including state scenic highways?*

Potentially significant impacts at both the Program level and the development level.

Development of the Project area would alter the visual experience of travelers on scenic routes in Eastern Dublin. Interstate 580 and Fallon Road, which borders the Project area to the west, have been designated as scenic corridors by the City.

This potential impact (Impact 3.8/J) was identified and addressed in the 1993 EIR and implementation of mitigation measures 3.8/8.0 and 3.8/8.1 reduce this impact to a *less-than-significant* level. These mitigation measures encouraged the City to adopt certain roads as scenic corridors (including Fallon Road), and further encouraged the City to require detailed visual analyses with development project applications (i.e., Stage 2 Planned Development applications). These mitigation measures apply to the entire Project area. Additionally, Policies 6-30 and 6-31 of the EDSP provide guidance regarding the location and high quality of design required for development in areas of the Project visible from a scenic corridor. These policies, in addition to the above-listed mitigation measures, apply to the entire Project area. Further, the Eastern Dublin Scenic Corridor Policies and Standards implement the General Plan and Specific Plan policies and mitigation measures and set requirements for subsequent Stage 2 PD applications.

The adopted General Plan-level mitigation measures would continue to apply to the entire Project and, with the Project modifying the Specific Plan so as to include all Fallon Village properties, the Specific Plan policies would apply to the entire Project area. However, the development proposed in the Stage 2 PD submittals could possibly conflict with these mitigation measures and policies. These impacts could be *potentially significant* and will be evaluated in the Supplemental EIR.

a3 & b3) *Substantially degrade existing visual character or the quality of the site?*

No impact beyond previous analysis. This impact was addressed in the 1993 EIR (Impact 3.8/B - Alteration of Rural/Open Space Visual Character and Impact 3.8/F - Alteration of Visual Character of Flatlands). Development of the Project area would alter the existing rural and open space qualities and alter the existing visual character of valley grasses and agricultural fields. The EIR concluded that no mitigation measures could be identified to either fully or partially reduce this impact to a less than significant level. Therefore, the EIR concluded this impact would be a potentially significant unavoidable impact and an irreversible change and, pursuant to CEQA, the City of Dublin adopted a Statement of Overriding Consideration for this impact. The proposed Project would not change the scale of development anticipated in the 1993 EIR for the Project area and would not change the level of intensity of impact, therefore, no additional discussion or analysis is necessary.

a4 & b4) *Create light or glare?*

Less than significant impacts at the Program level and the development level. Construction of the proposed Project (both Stage 1 and Stage 2 PD) would increase the amount of light and glare due to new street lighting and building security lighting. In some instances the additional lighting could result as perceived negative aesthetic , open spaces and other areas that are not intended to be lighted. The anticipated light and glare generated by the proposed Project would not be unique or sufficiently different from other development projects within the City or the Eastern Dublin planning area. In addition, development within a portion of the proposed Project area is subject to review by the Airport Land Use Commission (ALUC) for the Livermore Municipal Airport: all potential light sources must meet the criteria established by the ALUC prior to development. The City of Dublin has adopted regulations which limit the amount of “spill-over” lighting and conditions of approval also are routinely adopted with each project which address potential light and glare impacts. The City’s zoning ordinance, adopted site development review guidelines, and conditions of approval become part of the Project, if approved and the Project would have impacts that are *less-than-significant*.

Light and glare created by the proposed Project would be typical of development elsewhere in the City; and due to standard City regulations, light and glare impacts would be *less-than-significant*.

II. Agricultural Resources

Agricultural resources were evaluated in the 1993 EIR and further evaluated in the 2002 SEIR.

Environmental Setting

Stage 1 and Stage 2 Development Plans

Historically the Project area has been used for grazing, dry-land farming, a horse ranch, and other non-intensive agricultural endeavors. The 1993 EIR characterizes the majority of the area as farmland "of local importance" (Figure 3.1-B), which is defined as those farmlands which contribute to the local production of food, feed, fiber, forage and oilseed crops (p. 3.1-2). The 1993 EIR considered the discontinuation of agricultural uses as an insignificant impact due to the high percentage of Williamson Act contracts which were in a state of non-renewal and the limited value of the non-prime soils. Also, because the farmlands on the Project site were not considered "prime", their loss was judged to be insignificant.

However, since certification of the 1993 EIR, the evaluation of soils considered as "prime" for annexation purposes has been modified through adoption of criteria established by the Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code Section 56064, referred to as Assembly Bill 2838). Soils which previously would not have been considered as "prime agricultural soils" and land which was not considered significant or important for agricultural purposes may now be considered as such by the new law. The 2002 SEIR (p. 3.1-4) re-evaluated this issue in light of the revised regulations and determined that there are no additional prime agricultural lands in the Project area beyond those identified at the time the 1993 EIR was certified.

Project Impacts and Mitigation Measures

a1, a3 & b1, b3) *Convert prime farmland to a non-agricultural use or involve other changes which could result in conversion of farmland to a non-agricultural use?*

Less than significant impacts at both the Program level and the development level. The 2002 SEIR (p. 3.1-3) re-evaluated this issue in light of the revised regulations and determined that "No supplemental impacts are expected from the revised definition of prime agricultural lands, or from cancellation of Project area Williamson Act contracts." Neither the revised Stage 1 PD nor the Stage 2 PD development would alter this finding. Therefore, no supplemental impact would result from the proposed Project and this impact will not be further evaluated in the SEIR.

a2 & b2) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

Less than significant impacts at both the Program level and the development level. Three of the fourteen parcels, approximately 478 acres, are under Williamson Act contracts (please refer to Table 5). Under the Williamson Act, the landowner agrees to

limit the use of land to agriculture and compatible uses for a minimum period of ten years. In turn, the county in which the land is located agrees to tax the land at a lower rate based upon its agricultural use rather than its real estate market value. To withdraw from a contract, the landowner must notify the county with a Notice of Non-Renewal. Withdrawal involves a ten-year period of tax adjustments based upon full market value after which the contract expires. Notices of Non-Renewal have been filed on the three parcels noted above, with contracts expiring in 2006 and 2010. It is anticipated that the owners of these three parcels will request cancellation of these contracts. The 2002 SEIR analyzed the potential for cancellation of Williamson Act contracts within the Project area (DSEIR pp 3.1-4 & -5). The analysis concluded that no supplemental impacts would result; therefore, no further discussion is required. As noted in the 2002 SEIR, strict findings are required to support the cancellation.

Table 5. Status of Williamson Act Contracts

Parcel No.	Owner	Acres	Williamson Act Status	Expiration
1	Braddock & Logan	159.5	None	
2,3	Croak	164.0	Notice of Non-Renewal	1/10
4	First American Title	189.1	None	
5	Chen	135.6	None	
6	Anderson, Second Family Ltd. Partnership	48.9	None	
7	Righetti Partners	48.7	None	
8	Branough	39.8	None	
9	EBJ Partners, Ltd.	0.8	None	
10	Monte Vista	8.8	None	
11	Fallon Enterprises	313.8	Notice of Non-Renewal	2/06
12	Pleasanton Ranch Investments	0.2	None	
13	Braddock & Logan/Dublin Ranch	8.0	None	

Source: Braddock & Logan

III. Air Quality

This issue was evaluated in the 1993 EIR and further evaluated in the 2002 SEIR.

Environmental Setting (Stage 1 and Stage 2 Development Plans)

Dublin is located in the Tri-Valley Air Basin. Within the Basin, state and federal standards for nitrogen dioxide, sulfur dioxide and lead are met. Standards for other airborne pollutants, including ozone, carbon monoxide and suspended particulate matter

(PM-10) are not met in at least a portion of the Basin. The 2002 SEIR concluded that, because regional traffic had increased substantially over previously assumed levels, and because the basin is no longer in attainment status for ozone, both project-specific and cumulative mobile source emissions impacts were significant.

Project Impacts and Mitigation Measures

a1 & b1) *Would the project conflict or obstruct implementation of an air quality plan?*

Potentially significant impacts at both the Program level and the development level. Because of the increased commercial/office land uses compared with those assumed in the 1993 EIR and 2002 SEIR, more pollutants could be generated by the Project than was anticipated by those documents. In addition, rapid urbanization in the Tri-Valley area, an increase in traffic through the Tri-Valley from other areas, and changing commute patterns, the environment in which the Project would occur may have changed enough such that the Project could continue to contribute to emissions exceeding Bay Area Air Quality Management District (BAAQMD) significance thresholds. This may be a *potentially significant* supplemental impact and will be addressed in the Supplemental EIR.

a2 & b2) *Would the project violate any air quality standards?*

Potentially significant impacts at both the Program level and the development level. The 2002 SEIR concluded that the Project would contribute to emissions exceeding BAAQMD significance thresholds. Upon approval of the 2002 Project, the City adopted a Statement of Overriding Considerations for this impact. However, this exceedance could be further exacerbated by the proposed increased and intensified Project land uses. This may be a *potentially significant* supplemental impact and will be evaluated in the SEIR. In addition, construction dust from development of the Stage 2 PD properties could exceed BAAQMD significance thresholds and will be evaluated in the Supplemental EIR.

a3 & b3) *Would the project result in cumulatively considerable air pollutants?*

Potentially significant impacts at both the Program level and the development level. With the changed development intensity of the Project compared to 2002 Project), and with increased development related construction impacts, the Project could contribute to emissions exceeding BAAQMD significance thresholds for cumulative air quality impacts. This may be a *potentially significant* supplemental impact and will be addressed in the Supplemental EIR.

a4 & b4) *Expose sensitive receptors to significant pollutant concentrations?*

Potentially significant impact at both the Program level and the development level. Stationary source emissions were analyzed as a significant and unavoidable impact (IM 3.11/e) of the eastern Dublin EIR. The 2002 SEIR concluded that the Project would have no impact beyond that previously identified. The proposed Project's would increase residential and non-residential development that could include the impact beyond that previously certified. This may be a *potentially significant* supplemental impact and will be addressed in the Supplemental EIR.

a5 & b5) *Create objectionable odors?*

Less-than-significant impact at both the Program level and the development level. Although the emission of significant odors from the Project area was not addressed in either the 1993 EIR or the 2002 Supplemental EIR, the types of land uses included within the planning area do not contain heavy industrial or similar land uses, so less-than-significant odor impacts are anticipated.

IV. BIOLOGICAL RESOURCES

Biological resources were evaluated in the 1993 EIR and further evaluated in the 2002 SEIR.

Environmental Setting

Stage 1 and Stage 2 Development Plans

Figure 3.7-A of the 1993 EIR indicates that the Project area is dominated by dry-farming rotational cropland and non-native grasslands. A small area of arroyo willow riparian woodland is located just to the east of Fallon Road. Several intermittent drainages and stock ponds also are indicated in this figure. Fields utilized for dry-farming typically are cropped through various seasonal and annual rotations followed by fallow years. Crops and croplands are not irrigated. The site is traversed generally north to south by several drainages which may contain special-status plant and/or animal species.

The 1993 EIR identified twelve special status plant species, seventeen special status amphibian, reptile, bird and mammal species, and ten special status invertebrate species which could potentially occur within the entire Eastern Dublin planning area (Tables 3.7-1 and 3.7-2), based upon the U.S. Fish and Wildlife Service and the California Fish and Game Commission listings at that time. Since certification of the 1993 EIR, the regulatory status of some of these species may have changed.

The Eastern Dublin Specific Plan includes policies to protect special status species (Policies 6-17 and 6-20). Although the proposed Project would adhere to the previously adopted mitigation measures and Specific Plan policies, changes in regulatory circumstances such as the adoption of the California red-legged frog (*Rana aurora draytonii*) Critical Habitat area and its recommendations for habitat preservation and creation, and the listing of the California tiger salamander as a Threatened species, could create a *potentially significant* environmental impact if not re-addressed.

The 2002 SEIR included a comprehensive reevaluation of Project site biological resources, including more recent surveys of some of the Project parcels; examination of special status species habitat types that were not previously identified to occur in the Project area; and regulatory changes since certification of the 1993 EIR. The 2002 SEIR found substantial habitat for special status species not previously identified in the Eastern Dublin EIR. It also found that habitat for up to 13 species of rare plants not previously identified could be affected by the Project. Numerous new mitigation measures (Supplemental Mitigation Measures SM-BIO-1 through SM-BIO-45) were identified in that SEIR, and adopted upon approval of the annexation and Stage 1 PD pre-zoning Project in 2002.

In response to mitigation measure SM-BIO-1 of the 2002 SEIR, the City prepared a Resource Management Plan (RMP) to further investigate biological and cultural resources in the plan area and to make recommendations regarding the protection and management of natural resources. That plan was completed in 2004, and includes additional biological and cultural studies and establishes a program of resource management and land use recommendations to guide further planning and to reduce impacts to less than significant levels. Major features of the RMP that have been included in the Project are the proposed 86-acre Open Space Corridor and proposed reconfigured land uses in the Project site to accommodate the Corridor.

Project Impacts and Mitigation Measures

a1 & b1) *Have a substantial adverse impact on a candidate, sensitive, or special-status species?*

Potentially significant impacts at both the Program level and the development level.

As described above, the Stage 1 and Stage 2 Development Plan sites contain numerous special status species and habitat for those species. The 1993 EIR and 2002 SEIR included numerous mitigations for Project impacts to these species, but concluded that potentially significant impacts may still occur. The 2002 SEIR approvals included adoption of these measures, one of which (SM-BIO-1) required the subsequent preparation of the RMP. Were the Project to not follow the recommendations of the RMP this could result in *potentially significant* supplemental impacts on sensitive and special status biological resources. The manner in which the Stage 1 and Stage 2 PD adhere to

the recommendations of the RMP resource management and land use recommendations will be evaluated in the Supplemental EIR.

a2, a3 & b2, b3) *Have a substantial adverse impact on riparian habitat or federally protected wetlands?*

Potentially significant impacts at both the Program level and the development level. Figure 3.7-B of the 1993 EIR identifies areas within the Project area which potentially contain riparian habitat and springs based upon the location of intermittent streams, stock ponds, seeps, etc. Utilizing Figure 3.7-B, it was estimated that at least 14,000 linear feet of potential riparian habitat could exist within the Project area. This estimate was updated to approximately 31,000 linear feet in the 2002 SEIR (Figure 3.3-A). The RMP identifies approximately the same number of linear feet as the 2002 SEIR and clarifies which portions of these features would be considered jurisdictional under US Army Corps of Engineers and Regional Water Quality Control Board criteria.

The Eastern Dublin EIR and 2002 SEIR identify mitigation measures and the Eastern Dublin Specific Plan contains policies to address stream corridors and riparian and wetland areas (Policies 6-9 through 6-13 and 6-15). Additional recommendations were included in the RMP. Although the proposed Project would adhere to the adopted mitigation measures and Specific Plan policies, if the Project does not follow the recommendations of the RMP, it could have a *potentially significant* supplemental environmental impact. This issue will be evaluated in the SEIR.

a4 & b4) *Interfere with movement of native fish or wildlife species?*

Potentially significant impacts at both the Program level and the development level. As noted above, the Eastern Dublin EIR and 2002 SEIR identified a number of special status wildlife species. Mitigation measures were adopted per the 1993 EIR, and 2002 SEIR, and policies within the EDSP (Policies 6-18 through 6-20) address potential impacts to the movement of wildlife species. Additional mitigation measures and land use policies to mitigate Project effects on species movement are included in the RMP. Although the proposed Project would adhere to the adopted mitigation measures and Specific Plan policies, if the Project does not follow the recommendations of the RMP, it could have a *potentially significant* supplemental environmental impact. This issue will be evaluated in the SEIR.

a5, a6 & b5, b6) *Conflict with local policies or ordinances protecting biological resources or any adopted Habitat Conservation Plans or Natural Community Conservation Plans?*

Potentially significant impacts at both the Program level and the development level. The Project would be required to comply with all local policies and ordinances imposed by the City of Dublin. The Eastern Dublin Specific Plan contains policies and Programs

intended to protect biological resources and habitat areas and restore and revegetate habitat where necessary and appropriate (Policies 6-15 through 6-23; Programs 6K-6O). However, as described above, the RMP identifies additional recommendations designed to protect natural resources. If the Project (Stage 1 or Stage 2 PD) does not follow the recommendations of the RMP this could possibly result in a *potentially significant* supplemental environmental impact. This issue will be evaluated in the SEIR.

V. CULTURAL RESOURCES

Cultural resources were evaluated in the 1993 EIR; the Initial Study for the 2002 SEIR determined that no further evaluation was required.

Environmental Setting

Stage 1 Development Plan

Eastern Dublin project area archaeological and historic resources are described on pp. 3.9-3 through 3.9-6 of the 1993 Eastern Dublin EIR. A field inspection of the entire Eastern Dublin project area was conducted in July 1988. That survey identified six prehistoric sites that contain cultural materials, some of which were associated with midden deposits, and an additional four locations where isolated probable ground stone implements were found previously. Twelve historic sites also were identified in the 1988 survey, including a school site, two dairy farm complexes, several Victorian-era houses, two homestead/ranch complexes, and several barns.

Three additional cultural resources reports were prepared by Basin Research Associates, Inc. for portions of the currently proposed Project area in 2004. These include the *Cultural Resources report in Support of Eastern Dublin Properties Resource Management Plan* (RMP) (Finalized June 30, 2004), the *Cultural Resources Report – Archaeology and Built Environment, Fallon Villages* (Bankhead and Mandeville Properties) (October 22, 2004, and *1881 Collier Canyon Road Supplemental Cultural Resources Review* (November 8, 2004).

The RMP study updated the literature review for the Project area, and addressed changes in CEQA Statutes and case law since certification of the prior EIRs. That report concluded that:

- No listed, determined, or pending archaeological sites, significant local, state, or federal historic properties, landmarks, etc. have been identified in or adjacent to the Project area.
- No known prehistoric, ethnographic, or contemporary native American resources, including villages, known trails, sacred places, or traditional or contemporary use areas, have been identified in or adjacent to the Project area.

- Several archaeological sites and potential archaeological and historic architectural sites have been identified in the Project area. These include a combined historic/prehistoric site at the 4J Ranch site (CA-Ala-508/H; potentially eligible for the California Register of Historical Resources) and one of the potentially significant historic structures previously identified in the 1993 EIR (Croak Ranch); potentially eligible for the California Register), as well as two new potentially historic sites, the Collier Canyon Ranch (potentially eligible for the California Register), and the Fallon House (appears eligible for the California Register) that were not addressed in the Eastern Dublin EIR. A subsequent investigation for the Collier Canyon Ranch found that it did not include any structures eligible for the California Register (Basin Research Associates, November 8, 2004)
- The potential of buried prehistoric sites with undisturbed or partially disturbed cultural deposits appears high adjacent to or in the near vicinity of fresh water sources such as Tassajara Creek, Arroyo Mocho, and the Arroyo de la Laguna/Willow Marsh, and Cottonwood creek, south of the Project area.
- Areas that have not been previously inventoried for prehistoric and historic resources (e.g., Bankhead, Mandeville, and Croak properties) should be inventoried, and formal evaluations should be conducted for CA-Ala-508/H, the Croak Ranch/Homestead Complex, the Collier Canyon Ranch (completed – no potentially historic structures), and the Fallon House Complex, as well as additional field checks of potential resources shown on historic maps but not previously observed.
- Mitigation measures 3.9/1.0-12.0 in the Eastern Dublin EIR were considered to be applicable to the Project area area, and if carefully implemented, would reduce impacts to on-site cultural resources to a less than significant level.

Stage 2 Development Plan

The Fallon Villages study was prepared to satisfy management recommendations in the RMP, as noted above. It included site-specific evaluations of the 314-acre Bankhead Property and the 161-acre Mandeville Property, and made the following findings:

- This report included a complete field survey of the Fallon Ranch Complex and concluded that it does not appear to retain sufficient historic integrity as a 19th century ranch to be eligible for the California register of Historic Places. However, the circa 1870 Fallon Ranch house does appear to retain its historic integrity, is unusual in its construction, and therefore appears to be a significant historic structure eligible for the California Register of Historical Resources. The potential for finding subsurface archaeological resources at the Fallon Ranch Complex also exists.

- A survey of the Mandeville Ranch property concluded that the ranch was relatively modern and not a historic property.
- There appears to be a low potential for as yet unknown prehistoric cultural resources in the general Project area, and a moderate potential for such resources at water sources and bedrock outcrops.
- Additional site-specific mitigation measures have been developed for archaeological resources and the Fallon House (see Impacts and Mitigation Measures, below). Depending on which mitigation measures are selected, impacts to the Fallon House could be significant.

Project Impacts and Mitigation Measures

a1 & b1) *Cause substantial adverse change to significant historic resources?*

Potentially significant impacts at both the Program level and the development level. Due to the expected level of development within the Project area, the 1993 EIR assumed that all historic sites would be disturbed or altered in some manner, even those located in areas designated for Open Space. This potential impact was identified and addressed in the 1993 EIR (Impact 3.9/C) and Mitigation Measures 3.9/7.0 through 3.9/12.0 (page 3.9-8). Additionally, Policies 6-26 and 6-27 of the EDSP require in-depth archival research to determine the significance of any resource prior to alteration and encourage the adaptive re-use or restoration of historic structures whenever feasible. These mitigation measures and plan policies require detailed archival research for each structure to assess the structure's significance, encourage adaptive re-use where feasible, and encourage the City to develop a preservation program for historic sites are discussed in the under CEQA guidelines.

The 1993 EIR considered this mitigation sufficient to reduce potential to less than significant, consistent with CEQA Guidelines and prevailing case law at that time. However, since the certification of the 1993 EIR, the CEQA guidelines have been revised regarding definitions of important historic resources. Further, the guidelines now require that any substantial adverse change in the significance of a historic resource listed or eligible to be listed in the California Register of Historic Resources be identified as a significant effect on the environment.

1993 EIR Mitigation Measures 3.9/5.0 and 3.9/6.0 also would apply to the Project. These mitigations require cessation of all construction activities upon discovery of any previously-unidentified historic sites.

The adopted mitigation measures and Specific Plan policies would continue to apply to the entire Project area. Due to the likely loss of potentially historic structures and the lack

of surveys of the entire development site, supplemental impacts to historic resources could be considered *potentially significant*. This topic will be analyzed in the Supplemental EIR.

a2 & b2) *Cause a substantial adverse impact or destruction to archeological or paleontological resources?*

No supplemental impacts at either the Program level or the development level. There is a remote but potentially significant possibility that construction activities, including site grading, trenching and excavation, may uncover significant archeological and/or paleontological resources on the site. The 1993 EIR categorized these resources as pre-historic cultural resources. Three potential pre-historic sites were identified by the 1993 EIR within the proposed Project area. The 1993 EIR assumed that all pre-historic sites would be disturbed or altered in some manner. This potential impact was identified and addressed in the 1993 EIR (Impact 3.9/A) and implementation of mitigation measures 3.9/1.0 through 3.9/4.0) would reduce this impact to a *less-than-significant* level. These mitigation measures require subsurface testing for archeological resources, recordation and mapping of such resources, and development of a protection Program for resources which qualify as “significant” under former Appendix K of the CEQA guidelines.

Mitigation Measures 3.9/5.0 and 3.9/6.0, described above, also were adopted to address the potential disruption of any previously unidentified pre-historic resources and these mitigation measures reduce the potential impact to a *less-than-significant* level.

The EDSP also contains policies (Policies 6-24 and 6-25) requiring research of archaeological resources prior to construction and determination of the significance and extent of any resources uncovered during grading and construction.

The adopted Specific Plan policies and 1993 EIR mitigation measures continue to apply to the entire Project area, and will reduce previously identified potential impacts to a less-than-significant level. There are no impacts beyond those analyzed in the 1993 EIR and no additional review or analysis is necessary.

a4 & b4) *Disturb any human remains?*

No supplemental impacts at either the Program level or the development level. A remote possibility exists that historic or pre-historic human resources could be uncovered within the Project area during construction activities. Implicit in the mitigation measures of the 1993 EIR and EDSP policies is the potential for discovery of human remains near or within the identified pre-historic and historic sites. With implementation of the above-mentioned mitigation measures adopted with the 1993 approvals (mitigation measures 3.9/1.0 – 12) and adherence to the EDSP policies relating to cultural resources (Policies 6-24 and 6-25), this impact is *less-than-significant*.

The adopted mitigation measures would continue to apply to the entire Project area. Because the 1993 EIR assumed the possibility of encountering human remains over the entire project site, and included mitigations for that possibility, there are no impacts beyond those analyzed in the 1993 EIR and therefore no additional review or analysis is necessary

VI. GEOLOGY AND SOILS

Geologic and soil impacts were evaluated in the 1993 EIR; the Initial Study for the 2002 SEIR determined that no further evaluation was required.

Environmental Setting

Stage 1 Development Plan

This section of the Initial Study addresses seismic safety issues, topography and landforms, drainage and erosion, and the potential impacts of soil-related hazards.

Seismic hazards

The Project area is a part of the San Francisco Bay area, one of the most seismically active regions in the nation. The 1993 EIR notes the presence of several nearby significant faults, including the Calaveras Fault, Greenville Fault, Hayward Fault and San Andreas Fault (Figures 3.6-A and 3.6-B). The likelihood of a major seismic event on one or more of these faults within the near future is believed to be high. However, no active faults are known to traverse the Project site and the site is not identified as located within an Alquist-Priolo Special Studies Zone as determined by the California Division of Mines and Geology.

A second thrust fault system has been inferred in the Coast Ranges of the Bay Area that may be seismically active. A belt of faults and folds has been mapped in sedimentary rocks south of Mount Diablo, including one identified as the "leading edge-blind thrust, Mount Diablo Domain." Further investigation of this inferred fault has concluded that the risk of ground rupture from this inferred fault is low within the Project area.

Site Geology and Soils

The site is underlain by the Tassajara geologic formation on the south and extensive landslide deposits to the north. The Tassajara Formation consists of undifferentiated claystone and siltstone, locally undifferentiated into sandstone, conglomerate and siltstone-claystone members.

Landforms and Topography

The Project area is part of a broad north-south trending plain known as the Livermore-Amador Valley. Elevations of the Project area range from approximately 350 feet to 910

feet above sea level. Much of the property is gently rolling to almost flat but the extreme northern and northeastern portions are steeply sloping terrain.

Geotechnical reports cited in the 1993 EIR indicate a history of landslides on the site. The more steeply sloping northern and northeastern portions of the area contain landslides. Many of these slides are relatively shallow and it is estimated that all can be repaired or mitigated in the areas slated for urban development.

Drainage and Soil Erosion

Existing drainage patterns on the site includes a series of small, unnamed intermittent streams. These streams are shown in Figures 3.7-A and -B in the 1993 EIR. These intermittent streams generally follow a north-to-south direction, consistent with the overall topography of the Eastern Dublin area. These streams are not delineated drainages and do not terminate in other local creeks (such as Tassajara Creek) or modified natural drainages (such as the Arroyo Mocho).

Site Geology and Soils

The site is underlain by the Tassajara geologic formation on the south and extensive landslide deposits to the north. The Tassajara Formation consists of undifferentiated claystone and siltstone, locally undifferentiated into sandstone, conglomerate and siltstone-claystone members.

Stage 2 Development Plan

The Stage 2 Development Plan area includes much of the hilly northern portion of the overall Project area, including several small drainages. Elevations of areas proposed to be graded generally extend from about 480 feet to 870-feet. Several landslides have been mapped in this area.

Project Impacts and Mitigation Measures

al &b1) *Expose people or structures to potential substantial adverse impacts, including loss, injury or death related to ground rupture, seismic ground shaking, ground failure or landslides?*

No supplemental impacts either at the Program level or the development level. The site could be subject to ground shaking caused by the regional faults identified above. Under moderate to severe seismic events which are probable in the Bay Area over the next 30 years, buildings, utilities and other improvements constructed in the Project area would be subject to damage caused by ground shaking. However, since the Project area is not located within an Alquist-Priolo Special Studies Zone, the potential for ground rupture is minimal.

The 1993 EIR identified that the primary and secondary effects of ground-shaking (Impacts 3.6/B and 3.6/C) could be potentially significant impacts. With implementation

of mitigation measure 3.6/1.0 the primary effects of ground-shaking (Impact 3.6/B - damage to structures and infrastructure, potential loss of life) are reduced to a *less-than-significant* level by using modern seismic design for resistance to lateral forces in construction, which would reduce the potential for structure failure, major structural damage and loss of life.

Mitigation Measures 3.6/2.0 through 3.6/8.0 will be implemented to reduce the secondary effects of groundshaking (Impact 3.6/C - seismically induced landslides, differential compaction/settlement, etc.) to a *less-than-significant* level. These mitigation measures require: stabilization of unstable landforms where possible or restriction of improvements from unstable landforms; appropriate grading in hillside areas; utilization of properly engineered retention structures and fill; design of roads and infrastructure to accommodate potential settlement; and completion of design-level geotechnical investigations. These measures are reflected in the design of the proposed Project.

Adherence to Mitigation Measures MM 3.6/1.0 through 8.0 will ensure that new structures and infrastructure built within the Project area will comply with generally recognized seismic safety standards so that effects due to ground shaking will be *less-than-significant*.

The majority of the Project area contains gently to steeply sloping hillsides. The northern and northeastern portions have a history of landslides. As part of the development of the area the site is proposed to be graded and re-contoured to accommodate building pads, roads, infrastructure, parks, schools, parking areas and other development features. The 1993 EIR noted that development of the Project site could result in permanent changes in existing landforms, particularly if substantial grading occurs. Two mitigation measures reduce this impact to *less-than-significant*.

The proposed Stage 2 Development Plan indicates that nearly all of the Project area lies within urban designated portions of the EDSP. In addition, some grading would be necessary in adjacent open space areas which would be designated for a Rural Residential/Agriculture land use. Cut and fill slopes within the urban development area would not exceed a 2:1 ratio and those within the RRA area, although 2.5:1 slopes would be allowed in limited areas, typical cut slopes would not exceed a 3:1 ratio.

Mitigation Measure 3.6/9.0 states that grading plans which adapt improvements to natural landforms, use retaining structures and steeper cut and fill slopes where appropriate, and construct roads on ridges reduce impacts to landforms. Mitigation measure 3.6/10.0 states that specific Project lot and infrastructure alignment should be based on the identification of geotechnically feasible building areas, clustering structures, and avoiding adverse conditions by utilizing lower density development in the hillside areas.

The EDSP also contains policies aimed at reducing impacts related to landform changes and reducing potential impacts related to landslides. Policies 6-40 through 6-42 restrict

structures on slopes of 10-30% and generally preclude structures on slopes of greater than 30%.

The proposed Stage 2 Development Plan indicates that nearly all of the Project area lies within urban designated portions of the EDSP. In addition, some grading would be necessary in adjacent open space areas which would be designated for a Rural Residential/Agriculture land use. Cut and fill slopes within the urban development area would not exceed a 2:1 ratio and those within the RRA area, although 2.5:1 slopes would be allowed in limited areas, typical cut slopes would not exceed a 3:1 ratio.

The adopted mitigation measures continue to apply to the entire Project and the Specific Plan policies continue to apply to the entire Project area. Because the areas to be developed and the general types of development proposed have not substantially changed from those assessed in the 1993 EIR, and the 1993 EIR mitigation measures are still applicable to the current Project, there are no impacts beyond those analyzed in the 1993 EIR and therefore no additional review or analysis is necessary.

Stage 2 Development Plan

A site-specific geotechnical investigation of the proposed Stage 2 Planned Development portion of the Project area was completed by ENGEO Inc in February 2003 and updated in December 2004.

The report identified the following:

- Site soil: Site surface soils includes 3 to 4 feet of dark gray-brown silty clay material. There is evidence of undocumented fill on the site, primarily on and adjacent to existing roadways.
- Bedrock: Bedrock underlying surficial soils include Livermore Gravels which are characterized as weak clayey siltstone and claystone.
- Expansive Soils: Site soils are highly to critically expansive in nature. These soils shrink and swell depending on moisture and can cause heaving and cracking of building slabs, road pavement and other foundations.
- Landslides: A number of landslides exist on the Stage 2 Development Plan area.
- Seismic: No active faults are documented or have been observed on the site, so that the potential for ground rupture is considered low. The site is anticipated to be subject to moderate to severe groundshaking during seismic events.
- Liquefaction: Site soils are expected to be subject to both liquefaction and lateral spreading.

Overall, the report concludes that the site would support the type and density of development proposed with adherence to recommendations contained in the report. All mitigation measures contained in the 1993 EIR apply to the Stage 2 Development Plan portion of the proposed Project. No additional impacts not analyzed in the 1993 EIR were identified in the recent report.

a2 & b2) *Is the site subject to substantial erosion and/or the loss of topsoil?*

Less-than-significant impacts at either the Program level or the development level.

The 1993 EIR notes that development of the Project area will modify the existing ground surface and alter patterns of surface runoff and infiltration and could result in a short-term increase in erosion and sedimentation caused by grading activities (Impact 3.6/K). Long-term impacts could result from modification of the ground-surface and removal of existing vegetation (Impact 3.6/L). With implementation of Mitigation Measures 3.6/27.0 and 28.0 these impacts are *less-than-significant*.

These mitigation measures specify and require the preparation and implementation of erosion control measures to be utilized on a short-term and long-term basis. The EDSP also contains a policy (Policy 6-43) which requires that new development be designed to provide effective control of soil erosion as a result of construction activities. The adopted mitigation measures would continue to apply to the entire Project.

In addition to these measures, the Project would be subject to erosion control and water quality control measures implemented by the state Regional Water Quality Control Board (RWQCB). Alameda County's National Pollution Discharge Elimination System (NPDES) Stormwater Discharge Permit has specific numeric criteria for pollutant removal facility sizing and design that became effective February 15, 2005. A detailed draft plan for compliance with these requirements throughout the Project area has been prepared by ENGEO, Inc. (February 1, 2005). Compliance with these provisions and plans would reduce potential for erosion to a *less than significant* level. Water Quality impacts of this project are addressed in Section VIII of this Initial Study.

The adopted mitigation measures and applicable Specific Plan policies continue to apply to the entire Project area.

a3 & b3) *Is the site located on soil that is unstable or expansive or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or lateral spreading?*

Potentially significant impacts at both the Program level and the development level.

The 1993 EIR also notes that impacts of slope instability are considered to be potentially significant (Impacts 3.6/I and 3.6/J), but can be reduced to a *less-than-significant* level with implementation of Mitigation Measures 3.6/17.0 – 26.0. These mitigation measures require the preparation of site-specific soils and geotechnical studies minimizing grading on steep slopes and the formulation of appropriate design criteria; removal/reconstruction of unstable materials; construction of surface and subsurface drainage improvements; reduction of cut-and-fill; maintaining 3:1 cut slopes unless retained; maintaining minimum 2:1 fill slopes unless properly benched, keyed or treated with a geo-grid; utilizing engineered fill; and adherence to the Uniform Building Code and other City

requirements for grading. The ENGEO report notes that a number of landslides exist on the Stage 2 Development Plan portion of the Project area.

The adopted mitigation measures would continue to apply to the entire Project.

a4 & b4) *Is the site located on soil that is expansive?*

Less-than-significant impacts at both the Program level and the development level. Portions of the Project area are underlain by soil types with high shrink-swell potential which have the potential to cause damage to foundations, slabs, and pavement (Impact 3.6/H). With adherence to Mitigation Measures 3.6/14.0 through 16.0 and by requiring appropriate structural foundations and other techniques to overcome shrink-swell effects, potential shrink-swell impacts would be *less-than-significant*.

The 1993 EIR also notes that impacts of slope instability are considered to be potentially significant (Impacts 3.6/I and 3.6/J), but can be reduced to a *less-than-significant* level with implementation of Mitigation Measures 3.6/17.0 – 26.0. These mitigation measures require the preparation of site-specific soils and geotechnical studies minimizing grading on steep slopes and the formulation of appropriate design criteria; removal/reconstruction of unstable materials; construction of surface and subsurface drainage improvements; reduction of cut-and-fill; maintaining 3:1 cut slopes unless retained; maintaining minimum 2:1 fill slopes unless properly benched, keyed or treated with a geo-grid; utilizing engineered fill; and adherence to the Uniform Building Code and other City requirements for grading. The ENGEO report notes that a number of landslides exist on the Stage 2 Development Plan portion of the Project area.

a5 & b5) *Have soils incapable of supporting on-site septic tanks if sewers are not available?*

No impact at both the Program level and the development level. All new development within the Project area would be connected to a public sanitary sewer system installed by the Project developer and maintained by the Dublin San Ramon Services District which serves all of the City of Dublin. No septic systems are proposed. Therefore, *no impact* is anticipated with regard to septic tanks.

VII. HAZARDS AND HAZARDOUS MATERIALS

The Initial Study for the 2002 SEIR determined that no further analysis was required for the topic of hazards and hazardous materials.

Environmental Setting

Stage 1 Planned Development Area

Hazardous materials issues in the Project area were not analyzed in the 1993 EIR. They were reviewed in the Initial Study for the 2002 SEIR and determined not to present any potentially significant impacts and were therefore not assessed in detail in the 2002 SEIR. A number of Environmental Site Assessments (ESAs) for hazardous materials have been conducted for the various site parcels since preparation of the 1993 EIR, as described below.

Fallon Enterprises Site (Bankhead Property). A site reconnaissance and records search was conducted for this property in 2000. That study found that the property had been used primarily for ranching purposes, with some limited commercial use, since at least the 1950's. Commercial activities included the storage of metal scrap, cement processing activities, and storage of vehicle parts. Existing storage noted on the site was limited to less than 150 gallons of miscellaneous petroleum products, within the commercial storage area. According to the property owner, no underground storage tanks have existed on the property. The property is not listed on any of the state, county, or federal databases for hazardous wastes or materials. (ENGEO, Inc., May 23, 2000).

An additional assessment of the Bankhead site was conducted in 2005 (ENGEO, April 2005). That assessment identified a buried household waste dump on the property, and recommended that a Phase II ESA be conducted for the dump and underlying soils.

Braddock and Logan (Mandeville) Site. A site reconnaissance and records search was conducted for this property in 2000. That study found that the property had been used primarily for ranching purposes, with some limited commercial use, since at least 1957. Existing storage of chemicals including petroleum products, pesticides/herbicides, paint products, and batteries was noted in a barn and sheds on the site. A former gasoline underground storage tank was located adjacent to a barn on the site. Soil sampling was conducted for the underground storage tank site and the soils was found to be free of any contaminants associated with the former tank. The property is not listed on any of the state, county, or federal databases for hazardous wastes or materials (ENGEO, Inc., April 27, 2000).

Croak Property. A site reconnaissance, air photo review, and records search was conducted for this property in 2000. Those studies found that the property had been used primarily for residential and dry farming/ranching purposes since at least 1957. No evidence of past industrial or intensive agricultural uses was identified. Some small (five-gallon or less) empty chemical and storage containers, and two empty 55-gallon drums used for water transport and tree protection were noted on the property. The property is not listed on any of the state, county, or federal databases for hazardous wastes or materials (ENGEO Inc., November 2, 2000).

First American Title Company (Jordan) Property. A records search, site reconnaissance, air photo review, and database review was conducted for the property and vicinity in 2000. The site is, and was historically, primarily used for grazing, with a ranch complex

including two houses, several barns, and equipment sheds. Materials on the site included propane tanks, farm equipment/machinery, 1-, 5-, and 55-gallon drums (containing diesel fuel, weed killer, and other unknown liquids), metal water tanks, a removed underground storage tank (UST), and piles of scrap wood, asphalt, and metal. The property is not listed on any of the state, county, or federal databases for hazardous wastes or materials (Berlogar Geotechnical Consultants, September 14, 2000). Because of the existence of several areas of hazardous materials storage in the ranch complex, Berlogar recommended removal of the existing potentially hazardous wastes and preparation of a limited Phase II EA focusing sites of potential contamination. (Berlogar Geotechnical Consultants, September 14, 2000).

The limited Phase II ESA was completed in January 2001, and included soil sampling during the removal of potentially contaminated soils identified in the Phase I ESA. During the investigation of the removed UST site, gasoline odors were detected in the sampled soils, and follow-up testing of soils at both ends of the pit for various hydrocarbon and petrochemical-related contaminants was conducted. Relatively high levels of diesel and gasoline were found in the tested soil samples. Other areas on the ranch complex where spills of hydrocarbons were noted in the Phase I investigation, and where Phase II studies were recommended, have not yet been sampled. These areas are proposed for sampling after their suspected contaminant sources are removed. (Berlogar Geotechnical Consultants, January 25, 2001).

The ENGEO April 2005 study recommended that a limited Phase II ESA be conducted on this property, including soil and groundwater sampling and testing to evaluate the potential impact to underlying soils and groundwater within the area of the diesel storage drums, weed killer, and other storage containers in Barn No. 2, as well as in the vicinity of the stored fuel containers and beneath farm equipment in Barn No. 1.

Cheng Property. A records search, site reconnaissance, air photo review, database review, and agency consultation was conducted for the property and vicinity in 2000. The site is, and was historically, primarily grazing land with some evidence of former structures and some broken sheds on the west-central part of the site. Six 55-gallon drums were observed in the central portion of this site, five of which were empty and one of which appeared to be filled. Two empty 500-gallon above-ground tanks also were observed on the site (KCE Matrix, November 21, 2000).

The KCE study also found that a former gasoline service station facility was located adjacent to the site on the EBJ parcel. The gas station was operated from at least 1957 through 1969, and could possibly have had “a detrimental impact to the subject property”. Additional research was recommended in order to better assess the likelihood of this adjacent property having had such a detrimental effect (KCE Matrix, November 21, 2000).

Branagh, Righetti, Anderson, Monte Vista Properties (Campbell), and Pleasanton Ranch Investments Properties. A records search, site reconnaissance, air photo review, document and database review, and property-owner survey consultation, were conducted for the property and vicinity in 2001. The properties are used for a horse ranch, trucking facility, landscaping materials/supplies storage facilities, a residence/office, and a former

quarry. Chemical storage was identified on the landscaping, excavation, and trucking facility sites. Although a complete list of chemicals stored on the properties was not obtained, herbicides, fertilizers, gypsum, ammonium nitrate, petroleum oils, gasoline and diesel fuels, paint thinner, acetylene, carbon dioxide, and nitrogen (welding gasses), were observed. An 8,000 gallon underground storage tank containing domestic water exists on the Branaugh site, and a number of above-ground water storage tanks exist on other site properties. Above-ground diesel storage tanks formerly existed on the Branaugh property. Spills and leaks were not noted in the vicinity of the empty aboveground storage tanks. Some of the site buildings may contain asbestos-containing materials and lead-based paints (Eckland Consultants, Inc., February 9, 2001). ENGEO (May 2005) also lists the Anderson property as potentially contaminated.

This Eckland study also noted the former gasoline service station facility adjacent to the site on the EBJ parcel and considers it both a historic and current "recognized environmental condition" that could affect groundwater and soil conditions on the subject properties. Consistent with the KCE Matrix report discussed previously, limited subsurface investigation was recommended in order to better assess the likelihood of this adjacent property having a detrimental effect (Eckland Consultants, Inc., February 9, 2001). ENGEO (April 2005) recommended that a Phase II ESA, including soil and groundwater testing, be performed on portions of the Branaugh Properties site used by Branaugh Excavating, Branaugh Transportation, and the Golden State/Executive Landscaping Companies, and the Pleasanton Ranch Investments site.

EBJ Partners Site. The ENGEO May 2005 Phase I ESA generally addressed this 0.81-acre site. As noted above, the presence of a former gas station on this property could have resulted in contamination to both on-site and adjacent off-site properties, and therefore a Phase II ESA to evaluate potential soil and groundwater contamination from those past uses is recommended for this site (ENGEO, May 2005).

Stage 2 Development Plan Area

As described above for the Bankhead and Fallon Enterprises parcels, no significant contamination was found in the Phase 1 ESAs.

Project Impacts and Mitigation Measures

a1, a2 &, b1, b2) *Create a significant hazard through transport of hazardous materials or release or emission of hazardous materials?*

Less than significant impacts at both the Program level and the development level. Proposed uses within the Project area would include residential, general and retail commercial, campus-office, schools, and parks. Only minor *less-than-significant* quantities of potentially hazardous materials such as lawn chemicals, household solvents, etc., would be associated with the majority of the proposed uses. The 2002 SEIR Initial Study noted that some future industrial uses within the Project area may use, store and/or dispose of potentially hazardous materials; however impacts associated with such

activities would be controlled through a hazardous materials business plan by specific users filed with the Alameda County Fire Department.

With the expected minimal use of these hazardous materials, normally and customarily stored and used as part of urban-type land uses, this impact is *less-than-significant*.

a3 & b3) *Is the site listed as a hazardous materials site?*

Potentially significant impacts at the Program level; less than significant impacts at the development level. As noted above, Phase I Environmental Site Assessments have been completed for each individual parcel comprising the Project area. The storage and use of agricultural chemicals as well as underground fuel storage tanks on some of the site properties, and a former gas station on the EBJ Partners property at Croak Road could potentially have contributed to contamination of soil and groundwater with hazardous materials, as discussed below for each property. Site-specific studies have been performed for those sites, and impacts and mitigation measures identified. This topic will be addressed in the Supplemental EIR.

a4 & b4) *Is the site located within an airport land use plan of a public airport or private airstrip?*

Potentially significant impacts at the Program level; no impact at the development level. The Livermore Municipal Airport is located to the southeast of the Project area across I-580 and south of the Los Positas Golf Course. The Federal Aviation Administration classifies the airport as a “general transport” airport and the airport can accommodate turbojets under 60,000 pounds and general aviation aircraft of lesser weight.

The Alameda County Airport Land Use Commission (ALUC) adopted an Alameda County Airport Land Use Policy Plan (ALUP) in 1986 which defines “General Referral and Height Referral Areas” for the Livermore Municipal Airport. Portions of the Project area fall within these referral areas. The General Referral Area extends 4,000 feet north of I-580 and onto a portion of the Project area. Proposed land uses and activities subject to review under State ALUC law must be referred to the County ALUC. The Height Referral area encompasses an area 20,000 feet from the runways in all directions (approximately 15,000 feet north of I-580) and 200 feet above ground level in the Height Referral area.

The ALUC amended the Policy Plan in 1993 to create an Airport Protection Area (APA) around the Livermore Airport. Development or expansion of residential uses within the APA is only permitted when approved by a four-fifths vote of the city council. At the time the EDSP and 1993 EIR were adopted, this APA had not yet been established. However, the Specific Plan anticipated that some residentially designated land within the Eastern Dublin area would be located within the future APA. Consequently, the EDSP indicates that residentially designated lands which might be affected by adoption of the APA must

be designated "Future Study Area" (p.16). The APA affects approximately 22 percent of the southern portion of the Project area. Approximately 96 acres of the Project area were also designated as a 'Future Study Area' in the 2002 SEIR plan and annexed into the City with a "Future Study Area" land use designation. These properties are now proposed for designation in this Project as General Commercial/Campus Office. The land uses permitted within this new land use designation could represent a *potentially significant* supplemental impact and will be addressed in the Supplemental EIR. Given the distance of the Stage 2 Development Plan area from Livermore Airport, *no impact* is anticipated for this portion of the proposed Project.

In the spring of 2004 the City of Livermore issued a draft Airport Master Plan Update and Business Plan. As of this time the City has taken no action to approve this plan. The revised plan proposes no changes in the adopted Livermore Airport APA boundary. Other elements of this plan are discussed in the Land Use section of this Initial Study.

a5 & b5) *Represent a safety hazard to persons if located within two miles of a private airstrip?*

No impact at both the Program level and the development level. The Project is not located within two miles of any private airstrip and *no impact* is anticipated with regard to this topic.

a6 & b6) *Interference with an emergency evacuation plan?*

No supplemental impacts at either the Program level or the development level. The proposed Project would be developed in phases, as is feasible with the extension of services and utilities to the area. Adequate emergency access to all portions of the Project site under construction would be required to be provided per the City of Dublin's ordinances and policies. Emergency access requires that structures and occupants of structures can be accessed by emergency vehicles and personnel and also requires that residents are able to evacuate an area in case of some form of hazard or threat of hazard. Adequate water service for firefighting and installation of hydrants or other approved alternative water supply systems would be required per City requirements as the Project develops.

The 1993 EIR includes a Mitigation Measure (3.4/9.0) to address access, water pressure, fire safety and prevention to reduce this potential impact to a *less-than-significant* level. This mitigation measure requires that certain design standards are incorporated into Project approvals such as: available capacity of 1,000 GPM at 20 PSI fire flow from Project fire hydrants on public mains; installation of a buffer zone along the backs of homes contiguous with wildland open space areas; and compliance with minimum road widths, maximum street slopes, parking requirements, and secondary access road requirements. Policy 8-6 of the EDSP also requires provision of emergency vehicle

access from subdivisions to open space areas among other fire prevention methods to address concerns with emergency access and evacuation.

The adopted mitigation measures would continue to apply to the entire Project. There are no impacts beyond those analyzed in the 1993 EIR and therefore no additional review or analysis is necessary; the Project modifications do not affect the analysis in the 1993 EIR, and the mitigations adopted at that time are still applicable to the currently proposed Project.

a7 & b7) *Expose people and structures to a significant risk of loss, injury or death involving wildland fires or where residences are intermixed with wildlands?*

Less-than-significant impacts at either the Program level or the development level.

The proposed Project includes open space intermixed with proposed residential uses in accordance with the current land use designations of the General Plan and Eastern Dublin Specific Plan. However, the relationship of wildland open space to urbanized uses has the potential to increase the risk of wildland fires spreading to urban areas. The 1993 EIR identified the risk of constructing new communities in proximity to high fire hazard open space areas since it would pose an increasing wildfire hazard to people and property if open space areas were not maintained for fire safety (Impact 3.4/E). Mitigation Measures 3.4/6.0 – 13.0 will reduce this impact to a *less-than-significant* level. These mitigation measures require the following: construction of new facilities to coincide with new service demands; establishment of funding mechanisms for construction of such facilities; incorporation of Dougherty Regional Fire Authority (now the Alameda County Fire Department) requirements into the Project design; integration of fire trails and fire breaks into the open space trail system; and preparation and implementation of a site-specific wildfire management plan for the Project area. The wildfire management plan will be required to be consistent with the Eastern Dublin Wildlife Management Plan, which was required to be prepared as an Eastern Dublin EIR Mitigation Measure.

The Eastern Dublin Specific Plan also contains two policies (Policy 8-5 and 8-6, p. 125) which address the construction of new facilities and requirements to minimize the potential for impacts from wildland fires.

The Specific Plan policies and adopted mitigation measures would apply to the entire Project area. There are no impacts beyond those analyzed in the 1993 EIR.

VIII. HYDROLOGY AND WATER QUALITY

Hydrology and water quality issues were evaluated in the 1993 EIR; the Initial Study for the 2002 SEIR determined that no further evaluation was required.

Environmental Setting

Stage 1 Development Plan Area

The Project area is located within the Alameda Creek watershed which drains to the San Francisco Bay. The Project area is located within the jurisdiction of Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7). The northern portion of the site is hilly and transitions to relatively flat areas immediately adjacent to the I-580 freeway. Three intermittent streams flow in a north-south direction through the Project area. These drainages originate in the northern, hilly portions of the Project area but do not drain into any distinct creek or channel. In some locations these drainages have been impounded for use as stock ponds. These drainages do not carry water consistently year-round and are more apparent during the spring season.

Based on the Flood Insurance Rate Map (FIRM) published by the Federal Emergency Management Agency (FEMA) [Community Panel No. 115 of 325, 060001-0115-C, Alameda County, dated September 17, 1997], none of the Project area is located within a 500-year or 100-year flood plain.

For the past several years Zone 7 has been working on a plan to address salinity in the groundwater. Recently Zone 7 completed their basin-wide salt management plan and it has been submitted to the RWQCB for approval. Zone 7 anticipates Board approval of the management plan within the next few months and has programmed increased water rates to pay for its implementation.

Stage 2 Development Plan Area

The Stage 2 Development Plan is located at the north of the Project area and at the headwaters of two of the drainages of the intermittent streams discussed above.

Regulatory Framework

The City of Dublin participates in the Alameda County Clean Water Program, a consortium of communities that are co-permittees of a county-wide National Pollutant Discharge Elimination System (NPDES) permit. Under the terms of the Clean Water Program, individual development projects must adhere to construction and post-construction water quality Best Management Practices (BMPs) to minimize impacts to surface bodies of water. Development projects that disturb more than one (1) acre of ground are required to submit a Notice of Intent to the State Water Resources Control Board to ensure that water quality standards are in place.

Most recently, the San Francisco Bay Regional Water Quality Control Board has adopted revised and more stringent surface water quality standards for development projects.

Project Impacts and Mitigation Measures

a1 & b1) *Violate any water quality standards or waste discharge requirements?*

Potentially significant impacts at both the Program level and the development level. Site grading (cut and fill) will occur to construct roadways, building pads, utilities connections and similar improvements. Proposed grading could increase the potential of erosion and increase the amount of sediments carried by storm water run-off into creeks and other bodies of water, on and off the Project site. These impacts were identified in the 1993 EIR (Impacts 3.5/Y and 3.5/AA). Mitigation Measures 3.5/44.0 - 46.0, 49.0, 51.0 and 52.0 of the 1993 EIR would reduce these impacts, as identified, to a less-than-significant level.

These mitigation measures require: drainage facilities to minimize any increased potential for erosion; channel improvements consisting of natural creek bottoms and side slopes with natural vegetation where possible; preparation of a Master Drainage Plan for each development prior to development (Stage 2 PD) approval; facilities and management practices which protect and enhance water quality; specific water quality investigations which address water quantity and quality of run-off; and community-based Programs to educate local residents and business on methods to reduce non-point sources of pollutants. The EDSP also contains policies which reflect the mitigation measures of the 1993 EIR. Policies 9-7 through 9-9 and Programs 9T through 9X (pp. 133-134) of the EDSP address the potential for erosion and changes in water quality, storm water run-off and storm drainage due to development of the Project area. The above measures continue to apply to the entire Project

Additionally, as discussed in Item VI.b., above, the Project would be subject to erosion control and water quality control measures implemented by the state Regional Water Quality Control Board (RWQCB). Alameda County's National Pollution Discharge Elimination System (NPDES) Stormwater Discharge Permit has specific numeric criteria for pollutant removal facility sizing and design that became effective February 15, 2005. A detailed draft plan for compliance with these requirements throughout the Project area has been prepared by ENGEO, Inc. (February 1, 2005).

The extent of the increased Project grading near sensitive biological and open space areas and the new RWQCB rules may result in *potentially significant* supplemental impacts on water quality in both the Stage 1 and Stage 2 Development Plan areas. This topic will be addressed in the SEIR.

With the completion and approval of the Zone 7 Salt Management Plan, new development will be required to implement measures to reduce the impacts of increased salt levels through the payment of water supply charges. This will result in a *less-than-significant* salt loading impact to the groundwater aquifer.

a2 & b2) *Substantially deplete groundwater recharge areas or lower the local groundwater table?*

Less than significant impacts at both the Program level and the development level. Current uses of the property depend upon wells (for domestic use and agricultural uses. As development of the Project area occurs, public water systems would be extended to serve the area, reducing the need for individual wells to service each property. The 1993 EIR noted that development of the Project could have an impact on local ground water resources and groundwater recharge due to an increase in the amount of impervious surfaces within the Project site (Impact 3.5/Z). With implementation of Mitigation Measures 3.5/49.0 and 3.5/50.0, this impact is *less-than-significant*. The 1993 EIR also noted that the Project is located in an area of minimal groundwater recharge stating that groundwater reserves and the majority of the Tri-Valley's groundwater resources are in the Central Basin, south of the Project area. Mitigation Measure 3.5/50.0 notes that Zone 7 supports on-going groundwater recharge Programs for the Central Basin.

The proposed Project would expand some development areas compared to the 1993 and 2002 analyses, but other portions of the Project area would be designated for open space, so that there would be minimal net increase in the amount of impervious surfaces.

The adopted mitigation measures would continue to apply to the entire Project area. By supporting Zone 7's groundwater recharge and protection programs and planning facilities in a manner that protect the existing groundwater resource there will be no impacts beyond those analyzed in the 1993 EIR and therefore no additional review or analysis is necessary.

a3 & b3) *Substantially alter drainage patterns, including stream courses, such that substantial siltation or erosion would occur?*

Less-than-significant impacts at either the Program level or the development level. Development of the Project site would change existing natural drainage patterns in the area. Approval of the proposed Project and implementation of individual development projects within the Project area could increase stormwater runoff from the site due to construction and post-construction activities and thereby increase the potential for erosion. These impacts were identified in the 1993 EIR (Impacts 3.5/Y and 3.5/AA) in relation to item *a*) above. With implementation of Mitigation Measures 3.5/44.0 - 46.0, 49.0, 51.0 and 52.0 of the 1993 EIR, and compliance with Alameda County NPDES Stormwater Discharge Permit, as detailed in the ENGEIO, Inc. report (see discussion in Item VI.b., above) these impacts would be *less-than-significant*. The Eastern Dublin Specific Plan also contains policies and Programs (Policies 9-7 through 9-9 and Programs 9T through 9X, pp. 133-134) which reduce these impacts to a *less-than-significant* level.

With implementation of other mitigation measures enacted to reduce erosion due to grading activities (Mitigation Measures 3.6/27.0 and 28.0), and compliance with

Alameda County NPDES Stormwater Discharge Permit, as detailed in the ENGEO, Inc report these impacts would be *less-than-significant*.

The adopted mitigation measures would continue to apply to the entire Project area. There are no impacts beyond those analyzed in the 1993 EIR because site conditions and development proposals with respect to drainage are substantially similar to those envisioned in the previous analyses, and therefore no additional review or analysis is necessary.

a4 & b4) *Substantially alter existing drainage patterns or result in flooding, either on or off the project site?*

Less-than-significant impacts at both the Program level or the development level.

Approval of the proposed Project and construction of new housing units and other land uses envisioned in the proposed Project would change drainage patterns within the Project area. This impact was identified in the 1993 EIR (Impact 3.5Y) and with implementation of Mitigation Measures 3.5/44.0 – 3.5/48.0 it is *less-than-significant*. These mitigation measures require drainage facilities to minimize flooding, channel improvements consisting of natural creek bottoms and side slopes with natural vegetation where possible, a Master Drainage Plan for each development prior to development approval; facilities to alleviate potential downstream flooding due to Project development, and the construction of backbone storm drainage facilities.

The adopted mitigation measures would continue to apply to the entire Project. There are no impacts beyond those analyzed in the 1993 EIR and therefore no additional review or analysis is necessary.

a5 & b5) *Create stormwater runoff that would exceed the capacity of drainage systems or add substantial amounts of polluted runoff?*

Potentially significant impacts at both the Program level and the development level.

Development of the Project area and post-construction activities unrelated to Project construction could lead to greater quantities of stormwater runoff and could include pollutants in the runoff. These potential impacts were identified in the 1993 EIR (Impacts 3.5/Y and 3.5/AA). With implementation of Mitigation Measures 3.5/44.0-49.0 and 3.5/51.0 of the 1993 EIR and EDSP (Policies 9-7 through 9-9 and Programs 9T through 9X, pp. 133-134) this impact would likely remain *less-than-significant*. The adopted mitigation measures would continue to apply to the entire Project area. Please refer to item a) above for a discussion of these mitigation measures and policies.

However, as discussed in Item VI.b., above, the Project would be subject to erosion control and hydromodification standards recently implemented by the state Regional Water Quality Control Board (RWQCB). Alameda County's National Pollution Discharge Elimination System (NPDES) Stormwater Discharge Permit has specific

numeric criteria for stream hydrology and hydromodification that become effective in 2005. A detailed draft plan for compliance with these requirements throughout the Project area has been prepared by ENGE0, Inc. (February 1, 2005). The extent of the Project grading near sensitive biological resource areas and the new RWQCB rules could result in *potentially significant* supplemental impacts on water quality in both the Stage 1 and Stage 2 Development Plan areas. This topic will be addressed in the Supplemental EIR.

a6 & b6) *Substantially degrade water quality?*

Potentially significant impacts at both the Program level and the development level. Construction activities related to development of the Project area and post-construction activities could degrade water quality through improper construction practices and poor control of storm water runoff resulting in additional sedimentation and potential pollutants in on-site or down-stream waters. These impacts were identified in the 1993 EIR (Impacts 3.5/Y and 3.5/AA). Mitigation Measures 3.5/44.0-49.0 and 51.0 adopted in the 1993 EIR. These adopted mitigation measures would continue to apply to the entire Project area. Since adoption of both the 1993 Eastern Dublin EIR and 2002 Supplemental EIR, revised surface water quality standards enforced by the Regional Water Quality Control Board have become more stringent and Project impacts in light of such revised standards need to be addressed in the Supplemental EIR since there could be a *potentially significant* supplemental impact with regard to this topic.

a8,9 & b8,9) *Place housing within a 100-year flood hazard area as mapped by a Flood Insurance Rate Map or expose people or structures to a significant risk due to flooding or failure of a levee or dam or impede or redirect flood flows?*

No impact at both the Program level and the development level. No part of the Project area is located within a 100-year flood plain as mapped by FEMA and no new dwellings would be located in a flood hazard area. There are no upstream dams in the Project area which would place people or structures within the Project area in flood danger due to dam failure. There would be *no impact* in regard to flooding hazards.

a10 & b10) *Result in inundation by seiche, tsunami or mudflows?*

No supplemental impacts at either the Program level or the development level. The site is not located near a major body of water that could result in a seiche or tsunami. The risk of potential mudflow is considered low. With Mitigation Measures adopted in the 1993 EIR (measures 3.6/17.0 – 28.0), potential impacts of natural and engineered slope stability, and erosion and sedimentation impacts which could create mudflows would be *less-than significant*. These mitigation measures require the following: the preparation of site-specific soils and geotechnical studies minimizing grading on steep slopes and the formulation of appropriate design criteria; removal/reconstruction of unstable materials; construction of surface and subsurface drainage improvements; reduction of cut-and-fill;

maintaining 3:1 cut slopes unless retained; maintaining minimum 2:1 fill slopes unless properly benched, keyed or treated with a geo-grid; utilizing engineered fill; and adherence to the Uniform Building Code and other City requirements for grading.

The adopted mitigation measures would continue to apply to the entire Project. Because there is no evidence that the geophysical conditions on the site have changed substantially since 1993, there are no impacts beyond those analyzed in the 1993 EIR and therefore no additional review or analysis is necessary.

IX. LAND USE AND PLANNING

Land use and planning impacts were evaluated in the 1993 EIR; the Initial Study for the 2002 SEIR determined that no further analysis was required.

Environmental Setting (Stage 1 and Stage 2 Development Plan Areas)

The Project area contains approximately 1,132 acres in area and is located on the eastern side of the City of Dublin (please refer to Exhibit 2). The entire Project area is in the City of Dublin and within its General Plan Planning Area. All but approximately 480 acres of the Project area were included within the City's EDSP area at the time of annexation. The Project includes extending the EDSP boundary to include these approximately 480 acres. Further, the Project will change the land use designations for the properties located in the Livermore APA from "Future Study Area/Rural Residential/Agriculture" to "General Commercial / Campus Office" and modify some of the open space and residential land use designations throughout the area of the present Stage 1 Development Plan, generally consistent with the Resource Management Plan discussed in Section IV of this Initial Study.

The Project area consists of thirteen (13) different parcels under eleven (11) separate ownerships (please refer to **Exhibit 3**). The 2002 Stage 1 Development Plan established land use intensities by using residential densities at the mid-point of the allowable density ranges. Retail, industrial and office land use intensity was established by defined floor area ratio. In approving the 2002 Stage 1 PD, the City further established maximum development intensities by property.

The proposed land uses associated with each of the proposed land use designations are consistent with the City zoning districts which would implement those land uses and they are consistent with the types of uses approved and/or developed within other areas of the EDSP and EDGPA. The Project would revise the 2002 Stage 1 Development Plan and would assign specific land use development intensities to each existing parcel in the Project area. The total of this distribution would match the land use data identified in the Project Description above (see Table 2). The proposed land use changes associated with the Project are addressed in the Project Description section of this Initial Study.

Project Impacts and Mitigation Measures

a1 & b1) *Physically divide an established community?*

No supplemental impact at both the Program level and the development level. All parcels which comprise the Project area are contiguous and are not separated by freeways, arterial roadways, or natural barriers. The Project area is within the City of and a part of its identified current urban development area; land to the east of the Project area is presently undeveloped. Development of the Project area will be a continuation of Dublin as a community. Development of the Project area would not divide any established communities or neighborhoods and hence, there would be *no impact*.

a2 & b2) *Conflict with any applicable land use plan, policy or regulation?*

Potentially significant impacts at both the Program level and the development level. The 1993 EIR evaluated the potential land use impacts of the Project based upon the assumption that residential development would occur at the mid-point of the residential development densities, and commercial, office and industrial development would occur at the mid-range of the floor area ratios designated for each of those land uses. The 1993 EIR analyzed the potential for residential development in the APA, however, residential uses were not approved in the APA. The 2002 SEIR evaluated intensities in a similar manner and the PD zoning and Stage 1 Development Plan established fixed land use intensities for each existing parcel in the plan.

The Project's residential development is consistent with the amount of residential analyzed in the Eastern Dublin EIR, but exceeds the amount of residential approved in the 2002 SEIR. The proposed commercial development potential exceeds that assumed in the 1993 EIR. The total number of residential units has increased from 2,526 as evaluated in the 2002 SEIR to 3,108; an addition of 582 units. Commercial land use square footages exceed the totals evaluated in the 1993 EIR and 2002 SEIR by 1,081,725 square feet; the current Industrial Park designated land would be converted to General Commercial/Campus Office. A General Plan Amendment, a Specific Plan Amendment and a revised Stage 1 Development Plan are proposed to permit the proposed land uses.

Environmental effects of this proposed change in land use designation / commercial development intensity are assessed in this Initial Study under related topic areas and any *potentially significant* effects will be evaluated in the SEIR. The Project is required to adhere to all policies and Programs of the General Plan and the EDSP. The Project is also required to adhere to all City ordinances and regulations in effect at the time of Project development. However Project compliance with the Alameda County Airport Land Use Commission implementation of the Livermore Airport Land Use Plan has not been evaluated, and should be evaluated in the SEIR. Non-compliance with this plan could result in a *potentially significant* supplemental impact.

a3 & b3) *Conflict with a habitat conservation plan or natural community conservation plan?*

No impact at both the Program level and the development level. No habitat conservation plan or natural community conservation plan has been adopted by the City or other agency. The Project area has, however, been included as proposed critical habitat for the red-legged frog. Although this may not be a potentially significant land use impact, land uses within the Project area could be affected by this designation and, as such, the location and intensity of land uses indicated in the City's General Plan and EDSP could be impacted by this changed circumstance. Additionally, the City has prepared a Resource Management Plan (RMP) for the Project area. This is described in Section IV, Biological Resources, above. There would be *no impact* to a habitat conservation plan or natural community conservation plan, but changed circumstances due to other agencies' potential regulatory action and compliance with the RMP could create an impact. This impact, however, is related to biologic resources and has been identified as a potentially significant impact under the Biological Resources section of this Initial Study.

X. MINERAL RESOURCES

Mineral resource impacts were evaluated in the 1993 EIR; the Initial Study for the 2002 SEIR determined that no further evaluation was required.

Environmental Setting (Stage 1 PD and Stage 2 PD Areas)

No significant mineral resources or impacts were identified in the Eastern Dublin EIR (IM 3.6/E).

The subject area currently contains no known mineral resources although a closed gravel pit is located within the Project area on the Fallon Enterprises property just to the east of Fallon Road. The gravel pit has not been in operation for a number of years and is not currently extracting, producing, or processing any resources.

Project Impacts and Mitigation Measures

a1 & b1) *Result in the loss of availability of regionally or locally significant mineral resources?*

No impact at both the Program level and the development level. The former quarry is not currently extracting resources and there is no indication that the current property-owners wish to renew quarry operations. In any case, the EDSP and General Plan land uses designations for the area do not specifically permit such use. There are no other

known significant mineral resources located within the Project. Development of the Project as proposed would have *no impact* on mineral resources.

XI. NOISE

This issue was evaluated in the 1993 EIR and further evaluated in the 2002 SEIR.

Environmental Setting

The 1993 Eastern Dublin EIR identified major noise sources in the Eastern Dublin area as being traffic using the I-580 freeway, aircraft flyovers from Livermore Airport and noise from vehicles along Tassajara Road.

Project Impacts and Mitigation Measures

- a1, b1 & a4, b4) *Would the project expose persons to generation of noise levels in excess of standards established by the General Plan or other applicable standard or to substantial temporary or periodic increases in ambient noise levels?*

Potentially significant impacts at both the Program level and the development level. Vehicle noise from I-580 would be most apparent to new land uses immediately adjacent to the freeway. Development of the Project as proposed would include the construction of new arterial roadways and streets. Traffic would be introduced into new residential neighborhoods and urban noise associated with commercial, campus-office, and other uses would be introduced to the Project area. Although the 1993 EIR addresses impacts due to this type of noise (Impacts 3.10/A and 3.10/F) and adopted mitigation measures to reduce those impacts to a less-than-significant level (Mitigation Measures 3.10/1.0, 3.10/6.0), changed environmental circumstances related to urbanization in the Tri-valley and beyond with potential changes in commute patterns and increased traffic along I-580, along with possibly changed internal circulation and proposed increased commercial development on patterns in the Project area, may create a *potentially significant* supplemental impact.

- a2 & b2) *Exposure of people to excessive groundborne vibration or groundborne noise levels?*

No supplemental impacts at either the Program level or the development level. The 2002 SEIR identified exposure of people to excessive groundborne vibration as a significant supplemental impact from the Eastern Dublin EIR (Supplemental Impact Noise-2). Mitigation Measure MS-Noise-2 was included in the SEIR to reduce this impact to a less-than-significant level. This measure requires heavy trucks to be restricted to local arterial roadways with the hours of local deliveries to be limited to daytime

hours. This supplemental measure will apply to future development proposed as part of this project and no additional supplemental impacts have been identified with regard to vibration.

a3 & b3) *Substantial permanent increases in ambient noise levels?*

Potentially significant impact at both the Program level and the development level. Development of the Project area with urban uses will introduce noise to the Project area. Based on the discussion contained in item "a," above, changed environmental circumstances related to urbanization in the Tri-Valley and beyond, with potential changes to commute patterns and increased traffic along I-580, along with potentially changed internal circulation and proposed increased commercial development in the Project area could result in a *potentially significant* supplemental impact that will be assessed in the SEIR.

a5,6 & b 5,6) *Expose people residing or working within two miles of a public airport or in the vicinity of a private airstrip to excessive noise levels?*

Potentially significant impacts at both the Program level and the development level. There is no private airstrip in the vicinity of the proposed Project, therefore, *no impact* would result. The Project area is located near the Livermore Airport and new residents and workers within the Project area could be exposed to aircraft noise from aircraft traveling to and from the airport. The 1993 EIR determined that aircraft noise was a *less-than-significant* impact (Impact 3.10/C, p. 3.10-4) and no mitigation measure was proposed. However, Livermore is currently considering expansion plans for that airport. Noise from an expanded airport could affect portions of the Project site. This issue will be assessed in the SEIR as a *potentially significant* supplemental impact.

XII. POPULATION AND HOUSING

Population and Housing issues were evaluated in the 1993 EIR; the Initial Study for the 2002 SEIR determined that no further evaluation was required.

Environmental Setting (Stage I and Stage 2 Development Plan Areas)

Data from Projections 2005, published by the Association of Bay Area Governments (ABAG), expects the nine-county San Francisco Bay Region to add approximately 1,310,200 new residents by the year 2020. This represents an increase of about 19 percent over the 20-year forecast period from 2000 – 2020. ABAG expects approximately 474,600 new households in the region by year 2020. ABAG estimates that Dublin's population (including its Sphere of Influence) was 31,500 in the year 2000 and is projected to grow to 63,800 by 2020.

The 1993 EIR anticipated that the Eastern Dublin area would create 12,458 new dwelling units (Table 3.2-5), generating a new resident population of 27,794.

Project Impacts and Mitigation Measures

a1 & b1) *Induce substantial population growth in an area, either directly or indirectly?*

No impact at both the Program level and the development level. Urban development of the Project area was planned through approval of the 1993 General Plan Amendment and the Eastern Dublin Specific Plan. Substantial population growth has been planned in the Project area and evaluated the 1993 EIR. The City's General Plan contains Guiding and Implementing policies (6.3.A, 2.1.2.C, 2.1.3.A, 2.1.4.A, 6.4B, and 6.4E) to provide a range of housing types. The Eastern Dublin Specific Plan contains policies to provide a diversity of housing opportunities that meets the social, economic and physical needs of future residents (policies 4-2 through 4-6). Therefore, there would be no new impacts associated with the proposed Project.

a2,3 & b2,3) *Would the project displace substantial numbers of existing housing units or people?*

No impact at both the Program level and the development level. The Project area contains nine existing residences and various agricultural out-buildings and land uses. Current residents and uses could remain in place until such time as development of those particular parcels occurs over time. Due to the limited number of current residents, the Project would not displace substantial numbers of existing housing units or people and therefore *no impact* is expected.

XIII. PUBLIC SERVICES

This issue was evaluated in the 1993 EIR and potential effects on schools were further evaluated in the 2002 SEIR.

Environmental Setting (Stage 1 and Stage 2 Development Plan Areas)

Fire Protection. Fire protection services for the Project area are provided by the Alameda County Fire Department (ACFD) under contract to the City of Dublin.

Police Protection. Dublin Police Services provides services to the area including enforcement of traffic laws which the CHP currently provides and enforcement of City ordinances and state law. Dublin Police Services is under contract with the Alameda County Sheriff's office; the City of Dublin owns the Department's facilities and equipment but the personnel are employed by the Sheriff's Office. Police and security

protection includes 24-hour security patrols throughout the community in addition to crime prevention, crime suppression and traffic safety.

Schools. The Livermore Valley Joint Unified School District (LVJUSD) provides educational services to the Project area. The City of Dublin and the Dublin Unified School District (DUSD) prefer that all areas within the City of Dublin be served by DUSD schools. Both the 1993 EIR and the 2002 SEIR anticipated detachment from the LVJUSD and attachment to the service area of the Dublin Unified School District (DUSD). On April 26, 2005 the boards of both the LVJUSD and the DUSD voted to detach the Project area from the LVJUSD and attach it to the service area of the DUSD.. The only remaining action necessary is formal approval of this action by the Alameda County Superintendent of Schools.

Maintenance. Maintenance of streets, roads and other public facilities within the Project area would be the responsibility of the City of Dublin Public Works Department.

Other services. Library services and other government services provided to City of Dublin residents would be provided to the Project by the City.

Project Impacts and Mitigation Measures

The 1993 EIR addressed the impacts of development of the Project area on services and mitigation measures were adopted to reduce the identified impacts to a less than significant level. The 2002 SEIR further analyzed schools and general maintenance services and found no potentially significant impacts. However, some of these impacts still may be *potentially significant* for the Project area due to changed circumstances.

a1 & b1) *Fire protection?*

Potentially significant impacts at both the Program level and the development level. The Project proposes approximately 582 homes and 1,081,725 square feet of commercial / office development more than anticipated in the 2002 Stage 1 Development Plan. The Project also includes approximately one million square feet more commercial / office development potential than what was evaluated by the 1993 EIR. The requested increase in residential and non-residential development would increase the calls for service received by the Alameda County Fire Department.

Demand for fire services and fire response to outlying areas were considered significant impacts (IM 3.4/D and 3.4/E) and with implementation of mitigation measures (MM 3.4/6.0 – MM3.4/11), these impacts are less-than-significant. However, these impacts and mitigation measures did not account for additional non-residential development that could have a *potentially significant* supplemental impact on the Alameda County Fire Department and this topic should be addressed in the Supplemental EIR.

a2 & b2) *Police protection?*

Potentially significant impacts at both the Program level and the development level. Development of the additional 1,081,725 square feet of commercial, as proposed by the Project would result in more calls for police services than was analyzed in the 1993 EIR. Demand for police services and police services accessibility were considered significant impacts (IM 3.4/A and 3.4/B) and with implementation of mitigation measures (MM 3.4/6.0 – MM3.4/11), these impacts are less-than-significant. These mitigation measures include provision of additional personnel and facilities, coordination of development timing to services can be expanded, incorporation of police department recommendations into project design, and preparation of budget strategies for personnel and facilities as annexing areas become served by Dublin's Police Department.

However, since more non-residential development is proposed for this Project over and above that analyzed in previous EIRs, there could be a *potentially significant* supplemental impact with regard to police services that will be evaluated in the Supplemental EIR.

a3 & b3) *Schools?*

Potentially significant impacts at both the Program level and the development level. Over 1,500 new K-12 students could be generated by the Project. Schools were evaluated in the 1993 EIR and re-evaluated in the 2002 SEIR, which found no new potentially significant impacts. The Project does however include 582 more units than were evaluated in the 2002 SEIR. This increase in housing units and possible changes in student generation rates due to changed regional economic circumstances may have a different impact on the number and age distribution of students originally anticipated and evaluated by the 1993 EIR and the 2002 SEIR. In addition, the type of schools originally expected to have been constructed according to the 1993 EIR and 2002 SEIR may have changed. This could be a *potentially significant* impact that will be reviewed in the SEIR.

a4 & b4) *Maintenance of public facilities, including roads?*

Less than significant impacts at both the Program level and the development level. Numerous arterial, collector and local streets and roads will be constructed in the Project area. All such streets and public facilities would be constructed by the Project developers. Maintenance of these facilities was anticipated by the 1993 EIR and considered a significant impact (IM 3.12/A and 3.12/B). Implementation of mitigation measures (MM 3.12/1.0 – 8.0) reduces this impact to a level of *less-than-significance*. These mitigation measures encourage development agreements, adoption by the City of an area of benefit ordinance, creation of Special Assessment or Community Facilities Districts, and consideration of City-wide developer and builder impact fees.

The adopted mitigation measures would continue to apply to the entire Project. There are no changes in the Project or conditions that would result in impacts beyond those analyzed in the 1993 EIR and therefore no additional review or analysis is necessary.

XIV. RECREATION

This issue was evaluated in the 1993 EIR but was focused out from further evaluation in the Initial Study for the 2002 SEIR.

Environmental Setting (Stage 1 PD and Stage 2 PD Areas)

Since the Project area is not currently developed with urban uses the area contains no parks or other recreational facilities. Nearby community and regional parks include Emerald Glen Park, a 50-acre City park immediately west of Tassajara Road, a planned community sports park to be located just west of the Project area and an additional community park slated for development elsewhere in the Eastern Dublin area. The combined area of the two proposed community parks is 126 acres. Each of these parks would allow for organized sports activities and individual sports as well as for passive recreation. Numerous neighborhood parks and neighborhood squares have been included in the EDSP and EDGPA planning areas.

The Project proposes adding approximately 18 acres of community parks and approximately 29-acres of neighborhood parks and squares to serve the new residents and employees generated by project development.

Project Impacts and Mitigation Measures

a1 & b1) *Would the project increase the use of existing neighborhood or regional parks?*

Potentially significant impacts at both the Program level and the development level.

The proposed development would cause an increase in demand for neighborhood, community and regional park facilities due to an increase in the number of people within the Project area. The 1993 EIR identified the demand for park facilities as a potentially significant impact (IM 3.4/K). Implementation of the mitigation measures as policies within the General Plan and the EDSP (MM 3.4/20.0 – 28.0) reduce this impact to a level of *insignificance*. These mitigation measures and policies include the following: encourage expanding park areas; maintaining and improving outdoor facilities in conformance with the City's Park and Recreation Master Plan; acquire and improve parklands; require land dedication and improvements for parks; designate sites in the General Plan and Specific Plan areas; and implement Specific Plan policies for the provision and maintenance of open space.

The 1993 EIR also identified park facilities as a fiscal impact (IM 3.4/L). Implementation of the three mitigation measures (MM 3.4/29.0 – 31.0) reduce this impact to a level of *less than-significant*.

The City of Dublin recently adopted a major update of the Parks and Recreation Master Plan (February 2004), which could change the number, size and function of proposed park and recreational facilities within both the Stage 1 and Stage 2 Development Plan areas that could result in a *potentially significant* supplemental impact that will be addressed in the SEIR.

a2 & b2) *Does the project include recreational facilities or require the construction of recreational facilities?*

Potentially significant impacts at both the Program level and the development level.

The Project includes neighborhood parks, open space and a community park planned in accordance with the EDGPA and EDSP. The 1993 EIR identified the construction of park facilities and the cost of those facilities as impacts (IM 3.4/k and 3.4/L) and, with implementation of the mitigation measures listed above, these impacts are *less-than-significant* (please see *a*) above for a full discussion).

The City of Dublin recently adopted a major update of the Parks and Recreation Master Plan (February 2004), which could change the number, size and function of proposed park and recreational facilities within both the Stage 1 and Stage 2 Development Plan areas that could result in a *potentially significant* supplemental impact that will be addressed in the SEIR.

XV. TRANSPORTATION/TRAFFIC

This issue was evaluated in the 1993 EIR and was further evaluated in the 2002 SEIR.

Environmental Setting (Stage 1 and Stage 2 Development Plan Areas)

The Project area is served by a number of regional freeways and sub-regional arterial and collector roadways, including: Interstate 580, Dougherty Road, Dublin Boulevard, Hacienda Drive, Arnold Road, Gleason Drive, Tassajara Road, Santa Rita Road and Fallon Road. Development of the Project would introduce new arterial roadways and collector streets into the Project area.

Project Impacts and Mitigation Measures

The 1993 EIR and 2002 Supplemental EIR addressed the traffic and transportation impacts of development of the Project area and mitigation measures were adopted to reduce some of the identified impacts to a less than significant level. However, the 2002

SEIR found that, even with mitigation measures, Project plus cumulative traffic impacts at a number of intersections, and on I-580, were determined to be significant and unmitigable. Due to increased urban development in the Tri-Valley area and beyond which may impact roadways within the Project area, there could be the potential for additional transportation / traffic impacts. The proposed additional commercial uses and additional residences compared with the 2002 Supplemental EIR could further exacerbate traffic impacts. Finally, the City is now using a new traffic model that could yield different results than the earlier models. All of these changes could result in *potentially significant* impacts not previously identified, as previously described below.

a1 & b1) *Cause an increase in traffic which is substantial to existing traffic load and street capacity?*

Potentially significant impacts at both the Program level and the development level. The 1993 EIR considered the development of the Project area with the proposed 3,108 dwelling units and with 1.4 million square feet of commercial/industrial floor space, and indicated mitigation measures to address the related impacts. The 2002 SEIR updated this analysis and provided for 2,526 residences and 1.4 million square feet of commercial uses in the Project area. However, changes in Tri-Valley commute patterns and traffic intensities in addition to the anticipated Project traffic, and the addition of approximately 1,000,000 square feet of commercial/office space may cause *potentially significant* supplemental impacts not anticipated by the 1993 EIR. These impacts could include traffic impacts within the Project area, or at Project intersection, or on freeways, roads, etc. which the Project may utilize. In addition, the Stage 2 Development Plan internal road network has not been evaluated in any CEQA documents. These proposed changes will be analyzed in the SEIR.

a2 & b2) *Exceed, either individually or cumulatively, a LOS standard established by the County CMA for designated roads?*

Potentially significant impacts at the Program level. As noted above, the approximately 3,108 dwelling units and 1.4 million square feet of commercial/industrial building area in the Project area were anticipated and addressed in the 1993 EIR but the substantially expanded commercial/office uses and impacts of development on regional freeways and local roadways in conjunction with changing commute patterns and traffic intensities unrelated to the project may cause *potentially significant* impacts not anticipated by the 1993 EIR. These changes will be analyzed in the SEIR.

a3 & b3) *Change in air traffic patterns?*

Potentially significant impacts at both the Program level and the development level. The Livermore Airport is located to the southeast of the Project area. The Airport Land Use Commission (ALUC) of Alameda County has established land use policies for areas within the APA and the General Referral and Height Referral area of the airport.

Development of the Project area is subject to the policies of the ALUC. Development of the Project area is not expected to create a change in air traffic patterns at the airport, however the City of Livermore, the operator of the airport, is in the process of completing a draft Airport Master Plan Update and Business Plan. This Plan may include airport expansion programs which could potentially result in *potentially significant* impacts with respect to the Project. This issue will be evaluated in the SEIR.

a4 & b4) *Substantially increase hazards due to a design feature or incompatible use?*

Potentially significant impacts exist at the development level. Approval of the proposed Project and future development of the site would add new roads, driveways, sidewalks and other vehicular and pedestrian travel ways where none currently exist. The 1993 EIR anticipated and addressed these potential impacts and suggested mitigation measures to reduce such impacts (DSEIR, pp. 3.6-26 & -27). The 2002 SEIR reevaluated this issue and found no potentially significant supplemental impacts. However, the detailed internal roadway design for the Stage 2 Development Plan areas had not been evaluated and could potentially have significant impacts. These impacts could include traffic impacts within the Project area, or at Project intersections, or on freeways, roads, etc. which the Project may utilize, such that traffic-related hazards to pedestrians or bicyclists using the new roads and other circulation features could increase. These are *potentially significant* impacts that will be evaluated in the SEIR.

a5 & b5) *Result in inadequate emergency access?*

Potentially significant impacts at both the Program level and the development level. The present need for emergency access is low, since there are few current residents or visitors to the site. Construction of new residences and commercial development within the Project area could increase the need for emergency services and related access to new residences and commercial establishments. The 1993 EIR anticipated these impacts and suggested mitigation measures to reduce them. The 2002 SEIR reevaluated this issue and found no potentially significant supplemental impacts. However, the detailed internal roadway design for the Stage 2 Development Plan area had not been evaluated and could potentially have significant impacts. Additionally, potential increased volumes of traffic unrelated to the Project may create a potentially significant impact on emergency access capability on Project streets or intersections during peak traffic hours. These are *potentially significant* supplemental impacts that will be evaluated in the SEIR.

a6 & b6) *Inadequate parking capacity?*

No Supplemental impact at either the Program level or the development level. Parking for individual projects within the Project area would be reviewed by the City of Dublin at the time such proposals are submitted to ensure consistency with City parking requirements. *No impact* is anticipated.

a7 & b7) *Conflict with adopted policies, plans or Programs for alternative transportation?*

No Supplemental impact at either the Program level or the development level. Individual projects within the subject site will be designed with sidewalks, pedestrian walkways and bicycle routes to minimize potential hazards to pedestrians and bicyclists and to support these alternative transportation modes. In accordance with the EDSP, bicycle routes and pedestrian trails are included as part of the proposed Project. The City and EDSP have standards by which bus turn-outs, bicycle paths, trails and sidewalks must be planned and constructed. Bus turn-outs are required to be installed by Project developers in accordance with City requirements and bus service plans. These improvements will be confirmed at the time each individual development project is reviewed by the City.

XVI. UTILITIES AND SERVICE SYSTEMS

Environmental Setting (Stage 1 and Stage 2 Development Plan Areas)

Water and Wastewater

The Dublin San Ramon Services District (DSRSD) is the designated services provider for the Project area. DSRSD would provide water supplies; wastewater collection and treatment, and opportunities for the use of recycled water for landscape purposes. The Project Area is presently undeveloped except for nine residences and scattered outbuildings and no DSRSD services presently serve the Project area.

Project developers would be required to extend new services to the area to provide a public water supply for domestic and fire flow use, a recycled water service for irrigation of public medians and parks, and a public wastewater collection system, all of which would connect with existing facilities maintained and controlled by DSRSD. Project developers would be required to install new storm drainage facilities which would connect with existing facilities maintained and controlled by the Alameda County Flood Control and Water Conservation District, Zone 7. Although most of these infrastructure facilities would be installed by Project developers, all of the water and wastewater, and portions of the storm drainage, systems would be public and would be maintained by public agencies such as the City of Dublin and the Dublin San Ramon Services District. Water quality bioretention filters, as part of a comprehensive storm drainage / water quality system might be maintained by an assessment district.

Solid Waste Service.

Upon development of the Project area, the City of Dublin's solid waste service would be provided by the Livermore/Dublin Disposal Company.

Gas and Electricity

Pacific Gas & Electric Company (PG&E) provides electricity and natural gas to the Project area. Existing service to the Project area includes minor low voltage distribution feeders at 21 kilovolts (kV) and service within the Project vicinity is provided by PG&E distribution lines along Fallon, Croak, and Collier Canyon roads. There are no transmission lines within the Project area. A natural gas main is proposed to be extended along Dublin Boulevard eastward to serve the Project area.

Project Impacts and Mitigation Measures

The 1993 EIR and the 2002 SEIR addressed the provision and extension of services and utilities to the Project area and mitigation measures were adopted to reduce some of the identified impacts to a less than significant level. However, additional or new potential impacts may be *potentially significant* for the Project area due to changed circumstances (increased urban development in the Tri-Valley area, changes in water purveyor and distributor contracts, changes in the handling and disposal of wastewater, changes in supply and distribution of gas and electricity, etc.)

a1 & b1) *Exceed wastewater treatment requirements of the RWQCB?*

Potentially significant impacts at both the Program level and the development level.

Changes in circumstances due to regional policy changes, funding mechanisms and timing of infrastructure improvements may create a *potentially significant* supplemental impact that will be addressed in the Supplemental EIR.

a2 & b2) *Require new water or wastewater treatment facilities or expansion of existing facilities?*

Potentially significant impacts at both the Program level and the development level.

Additional development and changes in circumstances due to timing of wastewater infrastructure improvements may create a *potentially significant* supplemental impact that will be analyzed in the Supplemental EIR.

a3 & b3) *Require new storm drainage facilities?*

Potentially significant impacts at both the Program level and the development level.

New facilities will be needed as a result of development and may exceed those previously analyzed. Detailed storm drainage facilities for the Stage 2 PD area should be evaluated for adequacy. This may be a *potentially significant* supplemental impact that will be addressed in the Supplemental EIR.

a4 & b4) *Are sufficient water supplies available?*

Potentially significant impacts at both the Program level and the development level.

The 2002 SEIR analyzed water supply for the Project area in detail (2002 SEIR pp. 3.7-3 through 3.7-6 and 3.7-11 through 3.7-14). That assessment determined that adequate water supplies have been obtained for the Project area by the DSRSD and Zone 7. The level of residential development intensity remains at or below the level evaluated in the 1993 EIR there are commercial / office uses that exceed what was evaluated. It will also be necessary to get assurances from DSRSD that they can serve the Project consistent with the water assessment requirements of California SB610. This is a *potentially significant* supplemental impact and will be evaluated in the SEIR.

a5 & b5) *Adequate wastewater capacity to serve the proposed project?*

Potentially significant impacts at both the Program level and the development level.

The 2002 SEIR analyzed wastewater collection and treatment capacities in detail and determined that wastewater collection and treatment facilities would be adequate for the Project, and that there would be no new significant impacts associated with wastewater treatment and collection. Additional proposed commercial development may however create a *potentially significant* supplemental impact. This will be evaluated in the SEIR.

a6 & b6) *Solid waste disposal?*

Less than significant impacts exist at both the Program level and the development level. Capacity of solid waste service providers and disposal facilities to handle solid wastes generated by the Project was evaluated in detail in the 2002 SEIR, which determined that the Altamont Landfill, which serves the Project area, has over 25 years of capacity. The landfill continues to have sufficient capacity to accommodate the additional amount of residential and commercial development proposed as part of the Project. Therefore this impact would be *less than significant*.

a7 & b7) *Comply with federal, state and local statutes and regulations related to solid waste?*

No impact at both the Program level and the development level. The City of Dublin and the solid waste hauler would ensure that developers of individual projects constructed in the Project area would adhere to federal, state and local solid waste regulations; therefore, *no impact* would result.

a8 & b8) *Gas and electricity?*

Less than significant impacts at both the Program level and the development level.

Prior to the state-wide energy crisis in 2000-2001, PG&E had the ability to adequately

serve the Tri-Valley with existing facilities until approximately June 2002. PG&E has proposed the Tri-Valley 2002 Capacity Project to increase electric service by adding substations in Dublin and North Livermore, expanding the Vineyard Substation in Pleasanton, and installing approximately 23.5 miles of 230 kilovolt (kV) transmission lines to serve the substations (CPUC, 2000). PG&E is proposing construction of a 5-acre, 230/21 kV substation with four 45 megawatt transformers in eastern Dublin. If the Tri-Valley 2002 Capacity Increase Project or a functional equivalent project is not constructed, PG&E would be forced to respond to growing demand by expanding its existing system to the extent that is possible and by curtailing service if growth in demand exceeds the transmission system's capacity or reliability requirements for essential services (such as hospitals). It is possible that if the Tri-Valley 2002 Capacity Increase Project is delayed, then other alternatives would be identified. This impact was mitigated to less than significant through 2002 SEIR mitigation measures SM-UTS-1 and SM-UTS-2.

The impacts of the Project on the consumption of non-renewable resources are identified in the 1993 EIR (IM 3.4/S) and mitigation measures (MM 3.4/45.0 – 3.4/46.0) were adopted to reduce natural resource consumption and encourage energy conservation as Eastern Dublin developed. The impact was determined to be unavoidable and a Statement of Overriding Consideration was adopted by the City Council for this impact and no additional analysis is necessary.

Most recently, as identified in the certified Dublin Ranch West Supplemental EIR (City of Dublin, SCH# 2003022082) in Eastern Dublin, PG&E representatives were contacted and noted that additional PG&E facilities have been constructed in the Eastern Dublin as discussed in the 2002 SEIR for the EDPO Project area so that increased development could be served with adequate electrical capacity. No

XV. MANDATORY FINDINGS OF SIGNIFICANCE

- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

YES. Please refer to the discussion in the Biological Resources and Cultural Resources sections above regarding additional biological studies, the Resource Management Plan, and cultural resources impacts

- b) *Does the project have impacts that are individually limited, but cumulatively considerable?*

("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of possible future projects.)

YES. The Project constitutes about 25 percent of the overall Eastern Dublin planning area. Other parts of this area have been or are being developed in accordance with the EDSP. Although the 1993 EIR and 2002 SEIR addressed the cumulative impacts of development of the Project area, changed circumstances mentioned throughout this Initial Study may contribute to changed cumulative impacts which should be further analyzed.

- c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

YES. The 1993 EIR and 2002 SEIR addressed the potentially significant adverse impacts of the proposed Project through its evaluation of the proposed EDSP and EDGPA. The 1993 EIR and 2002 SEIR suggested mitigation measures which reduce many such impacts to a less-than significant level and where such impacts could not be reduced or otherwise had a cumulative adverse impact, the City Council adopted a Statement of Overriding Considerations pursuant to CEQA for both the original Eastern Dublin Project and the 2002 Annexation/ Development Plan project.

As discussed previously in this document, however, changes in the project description and circumstances since the 1993 EIR and 2002 SEIR were certified have the potential for significant effects beyond those analyzed in the 1993 EIR and 2002 SEIR.

Initial Study Preparers

City of Dublin

Charity Wagner, Associate Planner, City of Dublin

Jerry Haag, City environmental consultant, City of Dublin

Applicant Team

William Clarke, applicant consultant

Richard Grasseti, applicant consultant

Connie Goldade, MacKay & Soms

References

Eastern Dublin General Plan Amendment and Specific Plan Environmental Impact Report, Wallace Roberts and Todd, 1994.

East Dublin Properties Stage 1 Development Plan and Annexation Revised Supplemental Environmental Impact Report. City of Dublin, March 2002.

Eastern Dublin Specific Plan, revised June 6, 1998

City of Dublin General Plan, revised July 7, 1998

Dublin Ranch West Supplemental EIR, November 2004

Projections 2005, Association of Bay Area Governments, 2005

Persons/Agencies Contacted in Preparation of this Document

City of Dublin, Public Works Department

City of Dublin, Planning Department

Dublin San Ramon Services District

Alameda County Flood Control District Zone 7

Appendix 8.2
Notice of Preparation



CITY OF DUBLIN

100 Civic Plaza, Dublin, California 94568

Website: <http://www.ci.dublin.ca.us>

Notice of Preparation

To: Distribution List

Subject: Notice of Preparation of a Draft Supplemental Environmental Impact Report and Notice of Scoping Meeting

Lead Agency:

City of Dublin

Development Services Department

100 Civic Plaza

Dublin CA 94568

Contact: Eddie Peabody Jr., AICP, Planning Department, (925) 833 6610

The City of Dublin will be the Lead Agency and hereby invites comments on the proposed scope and content of the Supplemental Environmental Impact Report for the project identified below. Your agency may need to use the EIR prepared by the Lead Agency when considering follow-on permits or other approvals for this project.

Project Title: Fallon Village Development Project (PA 04-040).

Project Location: The Project area contains approximately 1,132 acres of land located on the east side of the City of Dublin, California, in an area bounded by Interstate 580 (I-580) to the south and Fallon Road to the west.

Project Description: The project includes: (a) an Amendment to the Eastern Dublin Specific Plan to add approximately 638 acres of the Project area into the Specific Plan area; (b) a Stage 1 Planned Development for the entire Project area to modify land uses within the Project area; and (c) a Stage 2 Planned Development plan for approximately 486 acres of the Project area. Project elements are discussed more fully in the attached Initial Study.

The attached Initial Study identifies potential environmental effects anticipated to be discussed in a Supplemental Environmental Impact Report (SEIR).

Due to time limits mandated by State law, your response must be returned at the earliest possible time **but not later than 30 days following receipt of this notice**. Please send your response to the contact person identified above.

Scoping Meeting

Pursuant to State Law, the City of Dublin has scheduled a Scoping Meeting for the proposed SEIR as follows:

Area Code (925) • City Manager 833-6650 • City Council 833-6650 • Personnel 833-6605 • Economic Development 833-6650
Finance 833-6640 • Public Works/Engineering 833-6630 • Parks & Community Services 833-6645 • Police 833-6670
Planning/Code Enforcement 833-6610 • Building Inspection 833-6620 • Fire Prevention Bureau 833-6606

Date: Friday, June 10, 2005

Time: 11:00 a.m.

Place: Regional Room, Dublin City Hall, 100 Civic Plaza, Dublin CA

Date:

Signature: 
Title: Community Development Director
Telephone: 925-833-6610

Attachment: Initial Study

Appendix 8.3
Responses to Notice of Preparation



June 21, 2005

Mr. Eddy Peabody, Jr.
City of Dublin
Development Services Department
100 Civic Plaza
Dublin, CA 94568

Subject: Scoping Comments on Fallon Village Development Project DEIR

BOARD OF DIRECTORS

Beverly Lane
President
Ward 6

Carol Severin
Vice-President
Ward 3

John Sutter
Treasurer
Ward 2

Ayn Wieskamp
Secretary
Ward 5

Ted Radke
Ward 7

Doug Siden
Ward 4

Jean Siri
Ward 1

Pat O'Brien
General Manager

Dear Mr. Peabody:

Thank you for providing the East Bay Regional Park District ("District") with a copy of the Notice of Preparation ("NOP") for a Draft Environmental Impact Report ("DEIR") on the proposed Fallon Village Development Project, in eastern Dublin. The following are the District's scoping comments for your consideration in preparing the subject DEIR.

The proposed Fallon Village project calls for setting aside 187 acres of the 1132 acre planning area as open space. This is about 16% of the land in the planning area. This small set aside will not mitigate a number of potentially significant impacts identified in the NOP, including impacts to scenic ridgelines and open space, impacts to biological resources and impacts to regional parks that will result from this large scale development. The DEIR should consider reducing the overall scope of the project by consolidating development in the southwestern portions of the planning area, near Interstate 580 and existing City services. The northern and eastern areas, along with an adequate buffer along the creeks, should be set aside as public open space. This will greatly reduce the impacts on scenic ridgelines and open space. It will also provide significant opportunities to avoid or mitigate impacts to biological resources, including California tiger salamander, California red-legged frog, western burrowing owl and golden eagle.

Currently, there are no regional parks in the east Dublin area that can provide for the increased demands for regional recreation and open space that will result from the proposed development of up to 3,108 homes. This project will bring in about 10,000 new residents, many of whom will be seeking opportunities for active and passive recreation that cannot be satisfied by the 46-acres of local parks proposed as part of this development. A large dedication of open space as mitigation for this development could create the foundation for a new public open space area in east Dublin.



As you know, there is community interest in protecting open space in the Doolan Canyon area. If the City were to coordinate its development mitigation and open space dedication efforts in this area, an aggregation of these lands could create a new open space area. Similar to our cooperative effort in the West Dublin hills, where our two agencies are developing a 1,000 acre public open space, we believe a similar open space could be created in the East Dublin area.

Thank you for the opportunity to comment on this project. If you have any questions regarding our letter, please call me at (510) 544-2622. Please provide us with a copy of the DEIR when available for public review.

Sincerely,

A handwritten signature in cursive script that reads "Brad Olson".

Brad Olson
Environmental Programs Manager

cc. Robert E. Doyle, Asst. General Manager



A small, dark, handwritten scribble in the top right corner of the page.

CITY OF SAN RAMON

2222 CAMINO RAMON
SAN RAMON, CALIFORNIA 94583
PHONE: (925) 973-2500
WEB SITE: www.sanramon.ca.gov

June 30, 2005

Eddie Peabody Jr., AICP
Community Development Director
City of Dublin
Community Development Department
100 Civic Plaza
Dublin, Ca 94568

RE Notice of Preparation of a Draft Supplemental Environmental Impact Report (DSEIR) for Fallon Village Development Project (PA 04-040).

Dear Mr. Peabody:

The City is in receipt of your Notice of Preparation for the above referenced project. The City appreciates the opportunity to review the information and supports the City of Dublin's efforts to prepare a new traffic study. We would encourage that the DSEIR include a discussion of the availability of public transportation and Transportation Demand Management opportunities.

We look forward to reviewing the DSEIR when it becomes available.

Sincerely,

A handwritten signature in cursive script, appearing to read "Debbie Chamberlain".

Debbie Chamberlain
Planning Services Manager

cc: Phil Wong, Planning Director

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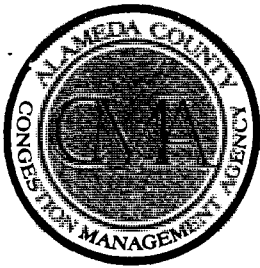
CITY COUNCIL: 973-2530
CITY MANAGER: 973-2530
CITY ATTORNEY: 973-2549
CITY CLERK: 973-2539

HUMAN RESOURCES: 973-2503
FINANCE: 973-2609
POLICE SERVICES: 973-2700
PUBLIC WORKS: OPERATIONS DIV: 973-2800
PUBLIC WORKS: ENGINEERING DIV: 973-2670

PARKS & COMMUNITY SERVICES: 973-3200
AQUATIC CENTER: 973-3240
COMMUNITY CENTER: 973-3200
FOREST HOME FARMS: 973-3280
SENIOR CENTER: 973-3250

ECONOMIC DEVELOPMENT: 973-2554
PLANNING DEPARTMENT: 973-2560
BUILDING & SAFETY DIVISION: 973-2580
TRANSPORTATION DIVISION: 973-2650

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ALAMEDA COUNTY
CONGESTION MANAGEMENT AGENCY

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DUBLIN PLANNING

1333 BROADWAY, SUITE 220 • OAKLAND, CA 94612 • PHONE: (510) 836-2560 • FAX: (510) 836-2185
E-MAIL: mail@accma.ca.gov • WEB SITE: accma.ca.gov

AC Transit
Director
Dolores Jaquez

Alameda County June 30, 2005
Supervisors

Nate Miley
Scott Haggerty
Vice Chairperson

City of Alameda
Mayor
Beverly Johnson

City of Albany
Councilmember
Allen Maris

BART
Director
Thomas Blalock

City of Berkeley
Councilmember
Kris Worthington

City of Dublin
Mayor
Janet Lockhart

City of Emeryville
Councilmember
Nora Davis

City of Fremont
Mayor
Robert Wasserman

City of Hayward
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Roberta Cooper

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Mark Green

Executive Director
Dennis R. Fay

Mr. Eddie Peabody Jr., AICP
Community Development Director
Planning Department
City of Dublin
100 Civic Plaza
Dublin, CA 94568

SUBJECT: Comments on the Notice of Preparation of a Draft Supplemental Environmental Impact Report for the Fallon Village Development Project in the City of Dublin (PA 04-040)

Dear Mr. Peabody:

Thank you for the opportunity to comment on the City of Dublin's Notice of Preparation (NOP) of a Draft Supplemental Environmental Impact Report (SEIR) for the Fallon Village Development Project in the City of Dublin. The project area contains approximately 1,132 acres of land located on the east side of the City of Dublin in an area bounded by Interstate 580 to the south and Fallon Road to the west. The Project includes: (a) an amendment to the Eastern Dublin Specific Plan to add approximately 638 acres of the Project area into the Specific Plan area; (b) a stage 1 Planned Development for the entire Project area to modify land uses within the Project area; and (c) a Stage 2 Planned Development plan for approximately 486 acres of the Project area.

The ACCMA respectfully submits the following comments:

- The City of Dublin adopted Resolution 120-92 on September 28, 1992 establishing guidelines for reviewing the impacts of local land use decisions consistent with the Alameda County Congestion Management Program (CMP). Based on our review of the NOP and the land uses that are being considered, the proposed project appears to generate at least 100 p.m. peak hour trips over existing conditions. If this is the case, the CMP Land Use Analysis Program requires the City to conduct a traffic analysis of the project using the Countywide Transportation Demand Model for Year 2010 and 2025 conditions. Please note the following paragraphs as they discuss the responsibility for modeling.
 - The CMA Board amended the CMP on March 26th, 1998 so that local jurisdictions are now responsible for conducting the model runs themselves or through a consultant. The City of Dublin has not yet returned a signed a Countywide Model Agreement to the ACCMA. A copy of the Model Agreement was delivered

Mr. Eddie Peabody Jr.

June 30, 2005

Page 2

previously to the City of Dublin. Before the model can be released to you or your consultant, the agreement must be signed by the City and the ACCMA and a letter must be submitted to the ACCMA requesting use of the model and describing the project. Copies of the Model Agreement and sample letter agreement are attached.

- If the City chooses to use a model other than the Countywide Model for traffic impact analysis, then for the purposes of the CMP Land Use Analysis Program, it should be demonstrated that the selected model output traffic volumes are conservative compared with the Alameda Countywide Model, with regard to the MTS roadways that are required to be analyzed. This comparison should be included in the environmental document.
- Potential impacts of the project on the Metropolitan Transportation System (MTS) need to be addressed. (See 2003 CMP Figures E-2 and E-3 and Figure 2). The DEIR should address all potential impacts of the project on the MTS roadway and transit systems. These include I-580, I-680, SR 84, Dublin Boulevard, Tassajara Road/Santa Rita Road, Fallon Road/El Charro Road, as well as BART and LAVTA. Potential impacts of the project must be addressed for 2010 and 2025 conditions.
 - Please note that the ACCMA does not have a policy for determining a threshold of significance for Level of Service for the Land Use Analysis Program of the CMP. Professional judgment should be applied to determine the significance of project impacts (Please see chapter 6 of 2003 CMP for more information).
 - In addition, the adopted 2003 CMP requires using 1985 Highway Capacity Manual for freeway capacity standards.
- The CMA requests that there be a discussion on the proposed funding sources of the transportation mitigation measures identified in the environmental documentation. The CMP establishes a Capital Improvement Program (See 2003 CMP, Chapter 7) that assigns priorities for funding roadway and transit projects throughout Alameda County. The improvements called for in the DEIR should be consistent with the CMP CIP. Given the limited resources at the state and federal levels, it would be speculative to assume funding of an improvement unless it is consistent with the project funding priorities established in the Capital Improvement Program (CIP) of the CMP, the federal Transportation Improvement Program (TIP), or the adopted Regional Transportation Plan (RTP). Therefore, we are requesting that the environmental documentation include a financial program for all roadway and transit improvements.
- The adequacy of any project mitigation measures should be discussed. On February 25, 1993 the CMA Board adopted three criteria for evaluating the adequacy of DEIR project mitigation measures:
 - Project mitigation measures must be adequate to sustain CMP service standards for roadways and transit;
 - Project mitigation measures must be fully funded to be considered adequate;
 - Project mitigation measures that rely on state or federal funds directed by or influenced by the CMA must be consistent with the project funding priorities established in the Capital Improvement Program (CIP) section of the CMP or the Regional Transportation Plan (RTP).

Mr. Eddie Peabody Jr.

June 30, 2005

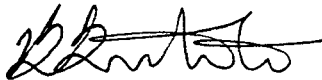
Page 3

It would be helpful to indicate in the DEIR the adequacy of proposed mitigation measures relative to these criteria. In particular, the DEIR should detail when proposed roadway or transit route improvements are expected to be completed, how they will be funded, and what would be the effect on LOS if only the funded portions of these projects were assumed to be built prior to project completion.

- Potential impacts of the project on CMP transit levels of service must be analyzed. (See 2003 CMP, Chapter 4). Transit service standard for BART is 3.75-15 minute headways during peak hours. The DEIR should address the issue of transit funding as a mitigation measure in the context of the CMA's policies as discussed above.
- The DEIR should also consider demand-related strategies that are designed to reduce the need for new roadway facilities over the long term and to make the most efficient use of existing facilities (see 2003 CMP, Chapter 5). The DEIR could consider the use of TDM measures, in conjunction with roadway and transit improvements, as a means of attaining acceptable levels of service. Whenever possible, mechanisms that encourage ridesharing, flextime, transit, bicycling, telecommuting and other means of reducing peak hour traffic trips should be considered.
- For projects adjacent to state roadway facilities, the analysis should address noise impacts of the project. If the analysis finds an impact, then mitigation measures (i.e., soundwalls) should be incorporated as part of the conditions of approval of the proposed project. It should not be assumed that federal or state funding is available.

Thank you for the opportunity to comment on this Notice of Preparation. Please do not hesitate to contact me at 510/836-2560 ext. 24 if you require additional information.

Sincerely,



Saravana Suthanthira
Associate Transportation Planner

cc: file: CMP - Environmental Review Opinions - Responses - 2005

**Master Transportation Demand Model Agreement
For Use of the Alameda Countywide Travel Demand Model
Between the Alameda County Congestion Management Agency and (Jurisdiction)**

This Agreement is made between the Alameda County Congestion Management Agency, a joint powers agency organized under California law ("ACCMA"), and (Jurisdiction), a _____ ("Jurisdiction"), as of _____. As of March 26, 1998, the ACCMA will no longer provide in-house modeling services for Congestion Management Program ("CMP") purposes. These services may be resumed in the future at the Board's direction. The ACCMA will continue as the agency responsible for the upkeep and maintenance of the Alameda Countywide Travel Demand Model ("Countywide Model"). The Countywide Model consists solely of data and supporting information. In conjunction with the separate EMME/2 software, the Countywide Model provides forecasts of the impact of transportation projects and land use changes on traffic in Alameda County. The Countywide Model does not include the EMME/2 software. This software is owned by INRO Consultants, Inc. and must be separately licensed by Jurisdiction and/or any consultant hired by Jurisdiction. The ACCMA will provide, for use by Jurisdiction and/or any consultant hired by Jurisdiction solely for the purposes of, and pursuant to, this Agreement, the Countywide Model EMME/2 data banks, which includes all transportation network and other data inputs and supporting information necessary to run the Countywide Model on EMME/2 and the four step modeling process for CMP purposes. In order for the ACCMA to transfer the data banks and supporting information, Jurisdiction shall agree to the following terms:

1. This agreement is the master agreement between the ACCMA and Jurisdiction which details the terms and use of the Countywide Model. The agreement will be signed once and a copy retained on file with the ACCMA and Jurisdiction. For each individual project or new proposed use of the Countywide Model, a separate letter agreement (sample attached) will be submitted by Jurisdiction to the ACCMA. It is the responsibility of Jurisdiction to ensure that any consultants retained by them have reviewed and agree to the terms of the Master Agreement. The associated consultants will be required to sign the letter agreement. Consultants retained by Jurisdiction must demonstrate through previous work experience and references their ability to operate the EMME/2 model hardware and software. It is the responsibility of Jurisdiction to verify consultant capabilities, which shall be used for CMP purposes only.
2. The Countywide Model data banks and supporting information will be used for analysis of projects and transportation impacts within the study area only. The Countywide Model will not be used to analyze the impacts of any network, land use or other changes outside of the project study area or for any other purpose other than that listed in the letter agreement submitted under separate cover unless prior written agreement is obtained from the ACCMA. Jurisdiction will document with each CMP submittal it makes the changes made to the content of the Countywide Model. Any non-project related modifications need to have written approval from ACCMA. All documentation utilizing Countywide Model results will cite the Countywide Model as its source and will be produced under the direction of and signed by the jurisdiction.
3. Jurisdiction, and /or any consultant hired by Jurisdiction, will use the Countywide Model in accordance with the most current CMA Board approved version of ACCMA's Technical Guidelines, including the Model Application and Use Guidelines (available upon request). For example, this includes analyzing project impacts based on volume changes and not changes in speeds.

4. Jurisdiction, and /or any consultant hired by Jurisdiction, shall use the Countywide Model in its own facilities. Use of the Countywide Model on terminals and devices not on premises defined in the letter agreement is prohibited unless otherwise agreed to in writing by ACCMA. Jurisdiction, and /or any consultant hired by Jurisdiction, agree to only make as many copies and backup copies of the Countywide Model as necessary for the purposes of developing and maintaining the model for the purposes described in the letter attached.
5. Once the project analysis is complete and the project is approved, Jurisdiction shall provide the ACCMA with written and electronic documentation of any revisions to the Countywide Model and a copy of the modified data banks and supporting information. This information shall be kept in ACCMA files. The local jurisdiction is permitted to keep one copy of the same information, but any consultants retained by them are not. Jurisdiction agrees to notify the ACCMA in writing when the Countywide Model has been deleted from computers and processors at all locations, including all computers and processors belonging to any consultant hired by Jurisdiction.
6. Any use, copying or distribution of the Countywide Model by Jurisdiction not authorized by this Agreement shall automatically terminate Jurisdiction's rights to use the Countywide Model outside ACCMA premises. The Jurisdiction would continue to have access to model inputs and outputs as outlined in the current ACCMA Board approved policies regarding use of the Countywide Model. Under these circumstances, the local jurisdiction is entitled to model runs performed by ACCMA staff and/or consultant hired by ACCMA. The costs for such staff and/or consultant performed model runs will be billed to Jurisdiction on a time and materials basis. Any use, copying or distributing of the Countywide Model by consultant hired by Jurisdiction not authorized by this Agreement shall automatically terminate the consultant's rights to use the Countywide Model for a period of two years. Jurisdiction will then have the following options: perform the model work in-house, retain another consultant, or have the ACCMA and/or a consultant hired by ACCMA perform the model runs. All costs are to be borne by the Jurisdiction as described in this agreement.
7. Title to the Countywide Model, including all copies and derivative works prepared by Jurisdiction, and /or any consultant hired by Jurisdiction, will remain with ACCMA. Jurisdiction, and any consultant hired by Jurisdiction, hereby assigns to ACCMA ownership of all such copies and derivative works. Any modified version of the Countywide Model cannot be resold or claimed by the local jurisdiction or consultants to be its own.
8. If Jurisdiction is required to copy and/or distribute any portion of the Countywide Model in response to a request made pursuant to the California Public Records Act (Government Code section 6250 *et seq.*), Jurisdiction shall notify ACCMA promptly upon taking such action, and Jurisdiction shall attach or include the following notice with the copied and/or distributed materials:

The information contained herein is proprietary and belongs to the Alameda County Congestion Management Agency (ACCMA), and may not be utilized for any modeling or related purposes without the express written permission of the ACCMA.

9. Jurisdiction and any consultant hired by (Jurisdiction) hereby agree to hold the ACCMA, its affiliates, subcontractors and representatives harmless for any loss or damage of any kind caused by or arising from the use of the Countywide Model, including, but not limited to, any downtime allegedly caused by defect or damage in the Countywide Model. Jurisdiction and any consultant hired by Jurisdiction hereby agree to hold the ACCMA, its affiliates, subcontractors and representatives harmless for any loss

or damage of any kind caused by or arises from the use of the conclusions, findings, and results produced by the Countywide Model.

Jurisdiction and the ALAMEDA COUNTY CONGESTION MANAGEMENT AGENCY hereby execute this Agreement through their duly authorized representatives.

ALAMEDA COUNTY CONGESTION MANAGEMENT AGENCY

By: _____
Dennis Fay
Executive Director

DATE: _____

(JURISDICTION)

By: _____
(Name/Title)

DATE: _____

APPROVED AS TO FORM:

By: _____
(Name/Title)

DATE: _____

ATTEST:

By: _____
(Name/Title)

DATE: _____

RECOMMENDED FOR APPROVAL:

By: _____
(Name/Title)

SAMPLE LETTER

Date

Mr. Dennis Fay
Alameda County CMA
1333 Broadway, Suite 220
Oakland, CA 94612

SUBJECT: Letter Agreement Between ACCMA and (Jurisdiction) Regarding Use of the Alameda Countywide Travel Demand Model

Dear Mr. Fay:

This is to request the use of the Alameda Countywide Travel Demand Model ("Countywide Model") EMME/2 data banks, which includes all transportation network and other data inputs and supporting information necessary to run the Countywide Model on EMME/2 and the four step modeling process for CMP purposes. Specifically, the Countywide Model will be used for the following: (include project description, project location, land use changes, transportation network modifications, analysis years)

A. Use if Consultant Services will be retained:

(Jurisdiction) will be retaining consultant services from (Consultant). (Jurisdiction) has reviewed their qualifications and they have the necessary experience to operate the EMME/2 and the Countywide Model. (Jurisdiction) and (Consultant) agree to abide by the terms set forth in the attached Master Countywide Model Agreement between the ACCMA and (Jurisdiction) dated (Date). (Consultant) agrees to notify the (Jurisdiction) in writing when the Countywide Model has been deleted from (Consultant) computers and processors at all locations. (Consultant) agrees that any use, copying or distributing of the Countywide Model by consultant hired by (Jurisdiction) not authorized by this Agreement shall automatically terminate the consultant's rights to use the Countywide Model for a period of two years.

B. Use if Consultant Services will not be retained:

(Jurisdiction) has the staff resources in-house and will not be retaining a consultant to operate the Countywide Model. (Jurisdiction) agrees to abide by the terms set forth in the attached Master Countywide Model Agreement dated (Date).

Sincerely,

(Name)
(Jurisdiction)
(Title)

(Name)
(Consultant)
(Title)

ADAMS BROADWELL JOSEPH & CARDOZO

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

601 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037

TEL: (650) 580-1880
FAX: (650) 580-5062

tgulesserian@adamsbroadwell.com

SACRAMENTO OFFICE

1225 8th STREET, SUITE 550
SACRAMENTO, CA 95814-4810

TEL: (916) 444-6201
FAX: (916) 444-6209

DANIEL L. CARDOZO
RICHARD T. DRURY
THOMAS A. ENSLOW
TANYA A. GULESSERIAN
MARC D. JOSEPH
OSHA R. MESEAYE
SUMA PEESAPATI
GLORIA D. SMITH

FELLOW
KEVIN S. GOLDEN

OF COUNSEL
THOMAS R. ADAMS
ANN BROADWELL

July 1, 2005

Via Facsimile and By U.S. Mail

Kay Keck
City Clerk
City of Dublin
100 Civic Plaza
Dublin, CA 94568
Fax: 925-833-6651

Eddie Peabody, Jr.
Community Development Director
City of Dublin
100 Civic Plaza
Dublin, CA 94568
Fax: (925) 833-6628

Re: CEQA Notice Request: Fallon Village Development Project

Dear Ms. Keck and Mr. Peabody:

We are writing on behalf of the Plumbers & Steamfitters Union Local 342, Sheet Metal Workers Local 104 and International Brotherhood of Electrical Workers Local 595 to request mailed notice of the availability of any environmental review document, *i.e.* Draft Environmental Impact Report, Negative Declaration, Exemption or Addendum, prepared pursuant to the California Environmental Quality Act, for the Fallon Village Development Project ("Project"), as well as a copy of the environmental review document when it is made available for public review.

We also request mailed notice of any and all hearings and/or actions related to the Project. These requests are made pursuant to Public Resources Code Section 21092.2 and Government Code Section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

1653-016a



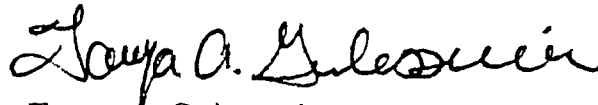
July 1, 2005
Page 2

Please send the above requested items to our South San Francisco Office as follows:

Casey Sondgeroth
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Please call Casey Sondgeroth at (650) 589-1660 if you have any questions.
Thank you for your assistance with this matter.

Sincerely,


Tanya A. Gulesserian

TAG:bh

1653-016a



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551

PHONE (925) 454-5000

July 5, 2005

Mr. Eddie Peabody Jr.
City of Dublin
Development Services Department
100 Civic Plaza
Dublin, CA 94568

Re: *Notice of Preparation of a Draft Supplemental Environmental Impact Report for the Fallon Village Development Project (PA 04-040)*

Dear Mr. Peabody:

Zone 7 has reviewed the referenced CEQA document in the context of Zone 7's mission to provide drinking water, non-potable water for agriculture and irrigated turf, flood protection, and groundwater and stream management within the Livermore-Amador Valley. We have the following comments on the NOP of a DSEIR for the Fallon Village project:

- In reference to Page 73, third paragraph, it states that Zone 7's Salt Management Plan has been submitted to the Regional Water Quality Control Board (RWQCB) and is currently waiting for approval of the Plan by the Board. The RWQCB approved the Salt Management Plan in September 2004. Please revise text accordingly.
- Note that related to the Salt Management Plan is the Groundwater Demineralization Program, which will mitigate existing and projected salt loading of the groundwater basin caused by the increase in development. The Mocho Groundwater Demineralization Facility is the first facility that will be constructed as part of this program. It is anticipated that this facility will be completed in March 2008.
- In reference to Page 92, first paragraph, it states that "adequate water supplies have been obtained for the project area by the Dublin San Ramon Services District (DSRSD) and Zone 7." Zone 7's water supply and future water system are predicated on our retailers' projections for buildout demands, which are based on approved general and specific plans. If this development increases DSRSD's buildout water demand beyond what is in its current plans, the developer(s) will be required to find additional water to meet the increase in buildout demand. Zone 7 concurs with the statement that this development will need to get assurances from DSRSD that they will serve this development in accordance with California Senate Bill 610.
- The proposed project site would be subject to Zone 7 Special Drainage Area (SDA) 7-1 drainage fees for the creation of new impervious areas. Drainage fees are collected by the

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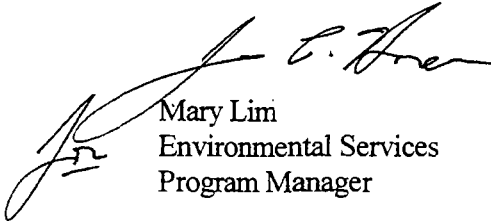
Mr. Eddie Peabody Jr., ACIP
City of Dublin
Development Services Department
July 5, 2005
Page 2

governing agency for new roads (upon application for approval of the Final Map) and building lots (upon application of the building permit), which create the new impervious areas in the development.

- Zone 7 hereby requests that we be able to review all plans and specifications or any additional information and/or studies pertaining to proposed development. Please submit such additional information to me at the address shown above.

We appreciate the opportunity to comment on this document. If you have any questions or comments, please feel free to contact me at (925) 454-5036 at your earliest convenience.

Sincerely,



Mary Lim
Environmental Services
Program Manager

ML:jr

cc: Joe Seto, Senior Engineer, Zone 7
Jack Fong, Associate Engineer, Zone 7

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CITY OF LIVERMORE

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Country
Since
1849"

ADMINISTRATION BUILDING

1052 S. Livermore Avenue
Livermore, CA 94550-4899
Ph: (925) 960-4000
Fax: (925) 960-4058
TDD (925) 960-4104
www.ci.livermore.ca.us

MAYOR / COUNCIL

Ph: 960-4010 • Fax: 960-4025

CITY MANAGER

Ph: 960-4040 • Fax: 960-4045

CITY ATTORNEY

Ph: 960-4150 • Fax: 960-4180

RISK MANAGEMENT

Ph: 960-4170 • Fax: 960-4180

CITY CLERK

Ph: 960-4200 • Fax: 960-4205

COMMUNITY DEVELOPMENT

Ph: 960-4400 • Fax: 960-4459

Building Division

Ph: 960-4410 • Fax: 960-4419

Engineering Division

Ph: 960-4500 • Fax: 960-4505

Housing & Human Services Division

Ph: 960-4580 • Fax: 960-4149

Planning Division

Ph: 960-4450 • Fax: 960-4459

ECONOMIC DEVELOPMENT

Ph: 960-4140 • Fax: 960-4149

FINANCE DEPARTMENT

Ph: 960-4300 • Fax: 960-4309

FIRE DEPARTMENT

4550 East Avenue
Ph: 454-2361 • Fax: 454-2367

LIBRARY

1000 S. Livermore Avenue
Ph: 373-5500 • Fax: 373-5503

HUMAN RESOURCES

Ph: 960-4100 • Fax: 960-4105

POLICE DEPARTMENT

1110 S. Livermore Avenue
Ph: 371-4900 • Fax: 371-4950
TDD 371-4982

PUBLIC SERVICES

3500 Robertson Park Rd.
Ph: 960-8000 • Fax: 960-8005

Airport Division

636 Terminal Circle
Ph: 373-5280 • Fax: 373-5042

Golf Course Division

909 Clubhouse Drive
Ph: 373-5239 • Fax: 373-5203

Maintenance Division

3500 Robertson Park Rd.
Ph: 960-8020 • Fax: 960-8025

Water Resources Division

101 W. Jack London Blvd.
Ph: 960-8100 • Fax: 960-8105

July 6, 2005

Eddie Peabody Jr., Community Development Director
City of Dublin
100 Civic Plaza
Dublin, CA 94568

RE: Notice of Preparation of a Draft Supplemental Environmental Impact Report
for the Fallon Village Development Project

Dear Mr. Peabody:

The City of Livermore appreciates the opportunity to provide comments on the Notice of Preparation (NOP) of a Draft Supplemental Environmental Impact Report (DSEIR) for the Fallon Village Development Project. The proposed project would include amendments to the Dublin General Plan and East Dublin Specific Plan and development plans for 3,108 dwelling units, 2,503,175 square feet of commercial and office uses, public facilities and open space for an approximately 1,132 acre area.

The NOP identified issues where the proposed project could create potentially significant environmental impacts that will be evaluated in the DSEIR. These issues include scenic resources, air quality, biological resources, hazardous materials, water quality, land use, traffic noise, public services, recreation, traffic, utilities, and service systems.

Of concern for the City of Livermore is the analysis of potential noise impacts from aircraft using the Livermore Municipal Airport. The project area is located under the flight path for aircraft departing from the Airport. Residential development, even though located outside of the Airport Protection Area (APA), may be subjected to noise levels exceeding normally acceptable levels. In addition, the proposed development plan (Exhibit 5) includes two elementary schools which are sensitive noise receptors as well. As indicated in the NOP, the DSEIR should evaluate the potential noise impacts from aircraft on sensitive noise receptors such as residential, schools, and parks in the project area.

The NOP indicates that future aircraft noise impacts would be evaluated using information from the Draft Livermore Airport Master Plan. Consideration of the Airport Master Plan is currently on hold pending additional noise monitoring.

Eddie Peabody, Jr.
July 6, 2005
Page 2

Before consideration of the Master Plan resumes in early 2006, there may be significant changes to the Master Plan. Given the current status of the Master Plan, it should not be used in the evaluation of the future impacts of airport operations.

Another concern is potential impacts to the regional roadway networks as identified in the General Plans of Dublin, Livermore, and Pleasanton. The DSEIR should evaluate the timing of planned roadway improvements such as the extension of Dublin Boulevard to North Canyons Parkway, the extension of Jack London Boulevard to El Charro Road, and improvements to the El Charro interchange.

Thank you for the opportunity to provide these comments. Livermore looks forward to reviewing the DSEIR.

Sincerely,



Susan Frost
Principal Planner

cc: Marc Roberts, Community Development Director
Eric Brown, Planning Manager
Leander Hauri, Airport Manager
Cheri Sheets, City Engineer
Judith Propp, Assistant City Attorney

Alameda County Airport Land Use Commission

224 W. Winton Avenue, Room 111

Hayward, CA 94544

(510) 670-6511

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July 6, 2005

Eddie Peabody, Jr.
Community Development Director
City of Dublin
100 Civic Plaza
Dublin, CA 94568

**SUBJ: Alameda County Airport Land Use Commission Administrative Review:
General Plan Amendment, Fallon Village Project Area Land Use Designations**

Dear Mr. Peabody,

Thank you for the opportunity to review the proposed General Plan Amendment. I offer the following comments for your consideration.

As noted in the referral letter, the project site is located within the ALUC's General Referral Area, and the Airport Protection Area for the Livermore Municipal Airport. It is also located within the ALUC Height Referral Area.

ALUC Height Policy

Compatible land use is defined consistent with standards and procedures set forth in FAR Part 77, including Subpart D, which is located in Appendix C of the ALUC Policy Plan. The ALUC Height Referral Area for each airport is identical to the FAA notification requirement for new construction or alteration (FAA Advisory Circular No. 70/7460-2G, November 30, 1977). Any structure eventually built as a result of this proposed General Plan Amendment must conform to these standards to be in compliance with the ALUC Policy Plan.

The referral area encompasses the following airspace:

- For an airport runway more than 3,200 feet in length, a sloping surface identifies the airspace above one foot in height for every 100 feet (100:1) horizontally from the nearest point of the nearest runway, up to 20,000 feet.

Airport Protection Area

The Airport Protection Area (APA) for the Livermore Airport was established in January 1993. The purpose of the APA is to prohibit new residential land use designations within the APA, in order to minimize potential noise exposure and subsequent complaints regarding nearby airport operations. The proposed land use designation of General Commercial/Commercial Office/Industrial (GC/CO/I), and Open Space (OS) are acceptable in terms of APA policies and restrictions.

ALUC Policy Plan Consistency Determination Finding

The proposed General Plan Amendment and Land Use Designations for the Fallon Village Area is consistent with the ALUC Policy Plan. At such time that future specific development projects are proposed for this site, the ALUC requests they be referred to the ALUC for a Plan Consistency Determination.

Again, thank you for the opportunity to review this proposal. Please do not hesitate to contact me at 510/670-6511 if you have any questions or require additional information.

Sincerely,



Cindy Horvath, Sr. Transportation Planner
ALUC Staff

c: Chris Bazar, Alameda County Planning Director, ALUC Administrative Officer

Alameda County Airport Land Use Commission
224 W. Winton Avenue, Room 111
Hayward, CA 94544
(510) 670-6511

July 7, 2005

Eddie Peabody, Jr.
Community Development Director
City of Dublin
100 Civic Plaza
Dublin, CA 94568

SUBJ: Initial Study: Fallon Village Project

Dear Mr. Peabody,

Thank you for the opportunity to review the Initial Study for the Fallon Village Project. My only comment concerns language regarding the Airport Protection Area discussion on Page 70.

In the last paragraph on that page, the second sentence reads: *“Development or expansion of residential uses within the APA is only permitted when approved by a four-fifths vote of the city council.”* I believe you are referring to the process by which a city council (or other local jurisdiction governing body) can override an ALUC Plan consistency determination it does not agree with.

The current Initial Study language is somewhat misleading, in that it implies a simple council vote is sufficient to allow residential uses where none are currently permitted by the APA. The actual process is a little more involved, and I think it's important to accurately describe in your environmental and other documents, the steps that are required to override an ALUC decision.

The process by which an ALUC determination is overridden by a local jurisdiction's governing body is described in Policy #29 on page 19 in the Alameda County Airport Land Use Policy Plan. For clarification, I have included the specific policy language below:

Local Public Agency Proposal Revision or Override

29. In the event that the ALUC finds a proposal to be inconsistent with the ALUC Plan, the governing body of the local public agency may amend the proposal to be consistent, or may vote by two-thirds majority to override the ALUC. Under State ALUC law, in order to override the ALUC the local public agency must make specific findings that the proposed project is consistent with the purpose of the State ALUC law found in Section 21670 of the Public Utilities Code:

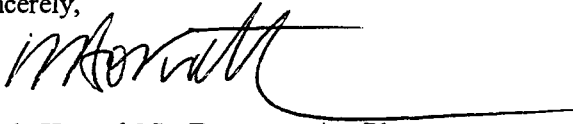
- Provide for the orderly expansion of airports;
- Minimize the public's exposure to excessive noise and safety hazards near airports, to the extent such area are not already devoted to incompatible uses.

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In accordance with State law, an override may result in the airport operator becoming immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to override the ALUC.

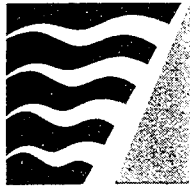
Again, thank you for the opportunity to review the Initial Study. Please do not hesitate to contact me at 510/670-6511 if you have any questions or require additional information as this project moves forward.

Sincerely,

A handwritten signature in black ink, appearing to read "Cindy Horvath", written over a horizontal line.

Cindy Horvath, Sr. Transportation Planner
ALUC Staff

c: Chris Bazar, Alameda County Planning Director, ALUC Administrative Officer



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

July 11, 2005

Eddie Peabody Jr.
City of Dublin
Development Services Department
100 Civic Plaza
Dublin, CA 94568

Subject: Fallon Village Project

Dear Mr. Peabody:



Bay Area Air Quality Management District (District) staff have received your agency's Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Fallon Village Project (project). The project consists of approximately 3,100 residential units and approximately 2.5 million square feet of commercial and office space to be built on approximately 1,100 acres of primarily undeveloped land.

ALAMEDA COUNTY
Roberta Cooper
Scott Haggerty
Nate Miley
Shelia Young

We recommend that the DEIR analyze the project's potential impacts upon air quality, including cumulative impacts, as the NOP identifies potentially significant air quality impacts as a result of project implementation. The Bay Area is currently a non-attainment area for national and State ambient air quality standards for ground level ozone and State standards for fine particulate matter. The air quality standards for these "criteria pollutants" are set at levels to protect public health and welfare. Any project with the potential to expose sensitive receptors or the general public to substantial levels of criteria pollutants or toxic air contaminants (TACs) would be deemed to have a significant impact. As general background for readers, the DEIR should discuss the health effects of air pollution, the region's attainment status with regard to ambient air quality standards, and the contribution of mobile and stationary sources to air pollution emissions.

CONTRA COSTA COUNTY
Mark DeSaulnier
Mark Ross
(Secretary)
Michael Shimansky
Gayle B. Uilkema
(Vice-Chairperson)

MARIN COUNTY
Harold C. Brown, Jr.

NAPA COUNTY
Brad Wagenknecht

To evaluate the project's potential cumulative air quality impacts, the DEIR should include an analysis of the project's consistency with the local general plan and the local general plan's consistency with the Bay Area 2000 Clean Air Plan (CAP). In order to evaluate consistency with the CAP, the City should consider the following: the General Plan's consistency with the CAP's population and vehicle use projections for Dublin; the extent to which the General Plan implements applicable transportation control measures from the CAP; and whether the General Plan provides buffer zones around sources of odors, toxics and accidental releases. The *BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans (1999)* provide guidance on how to evaluate project impacts and cumulative impacts. If planned appropriately, new development in the City need not increase vehicle use at a rate inconsistent with the CAP. A smart growth model of development can encourage more walking, biking and transit use and actually reduce vehicle miles traveled (VMT) in the area.

SAN FRANCISCO COUNTY
Chris Daly
Jake McGoldrick
Gavin Newsom

SAN MATEO COUNTY
Jerry Hill
Marland Townsend
(Chairperson)

SANTA CLARA COUNTY
Erin Garner
Liz Kriss
Patrick Kwok
Julia Miller

SOLANO COUNTY
John F. Silva

SONOMA COUNTY
Tim Smith
Pamela Toriatt

Jack P. Broadbent
EXECUTIVE OFFICER

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District staff support infill and redevelopment of parcels in the Bay Area because these sites are located closer to existing jobs and activity centers, thereby supporting alternative transportation modes more readily than greenfield development. Many areas of Dublin are served by transit, which helps reduce the need to drive and the air pollution associated with automobile use. Infill development also can encourage walking and cycling. District staff recommend the DEIR include a project alternative that accommodates some or all of the proposed growth on infill and redevelopment sites in the City. We also encourage the City to increase the minimum number of affordable housing units. Providing diverse housing options could reduce vehicle trips and VMT by providing housing for local workers in the project area. As a result, long-distance commutes and their associated emissions could be reduced.

Since motor vehicles constitute the largest source of air pollution in the Bay Area, the District has a strong interest in promoting transit and other alternative modes of transportation that reduce single occupant vehicle use. The Dublin/Pleasanton BART station is approximately 2.5 miles southwest of the site, which is too far for most project residents or employees to walk to the station. Bus service in the vicinity of the project is provided by Livermore Amador Valley Transit Authority (LAVTA). We encourage the City to work with the developers, BART and LAVTA on ways to improve bus and shuttle service between the project area and the Dublin/Pleasanton BART station, as well as to provide amenities at new transit stops on or adjacent to the project area. We also recommend that the City work with developers to add a new Park and Ride lot near Fallon Road and Interstate 580 to facilitate carpooling. In addition to the multi-purpose trails proposed on page 9 of the NOP, we recommend that the project include convenient internal bike access and also be linked with Class I or Class II bicycle facilities to major destinations outside the project area such as the Iron Horse Trail, the Dublin/Pleasanton BART station, a new Park and Ride lot, and neighboring retail districts and malls. The District also recommends implementing strong TDM measures in the project area including, but not limited to: implementing a carshare program for the project area; encouraging employers of the commercial space to implement parking cash-out programs; and implementing ridesharing programs for both local employees and residents. Encouraging alternative transportation modes through the specific plan's policies and programs can lead to a reduction in automobile trips and their associated air pollution emissions, thereby improving air quality.

District staff encourage the City of Dublin to locate the denser housing sites closer to Interstate 580 and Fallon Road. This would allow those residents to have more convenient access to transit facilities, new bicycle facilities and a new Park and Ride lot. We commend the City for including a development pattern that includes compact villages with residential and neighborhood-serving uses. We encourage the City to provide additional policies and programs that will implement smart growth such as encouraging appropriate neighborhood-serving commercial development in the mixed-use areas. We also encourage the City to implement project designs that enhance transit, pedestrian and bicycle safety and access. To improve the walkability of the project area, District staff recommend using a traditional grid pattern for the local streets. Cul-de-sacs and long blocks can be deterrents to walking. Pedestrian access could be enhanced by reducing block lengths and minimizing cul-de-sacs and/or providing pedestrian access at the ends of cul-de-sacs. In addition, we suggest providing wide, well-shaded sidewalks

and that pedestrian crossings be well-marked with bulbouts and pedestrian countdown signals. Encouraging residents and employees to walk can reduce air pollution, create more vibrant neighborhoods and support the local businesses in mixed-use areas.

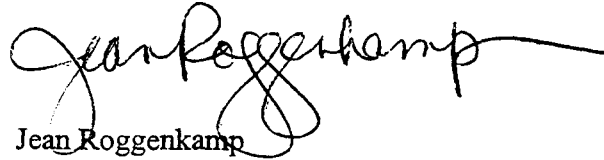
The DEIR should address the project's potential to increase the demand for energy. Increasing the demand for electricity, natural gas, and gasoline may result in an increase of criteria air pollutant emissions from combustion, as well as an increase in greenhouse gas emissions, which can impact regional air quality. We recommend that the DEIR discuss energy demand of the project at build-out, including any cumulative impacts on energy use from this project and other planned projects in the area, such as the need to build "peaker power plants" to provide power during peak demand. We also recommend including all feasible measures for both commercial and residential uses that will reduce energy consumption, including but not limited to the use of: super-efficient heating, ventilation, and air conditioning (HVAC) systems; light-colored and reflective roofing materials, pavement treatments and other building materials; shade trees adjacent to buildings; photovoltaic panels on buildings; and natural light and energy-efficient lighting.

We also recommend implementing all feasible control measures for fugitive dust emissions from grading and construction. The District does not typically require quantification of construction emissions associated with construction activities, but instead bases its threshold of significance for fugitive dust on implementation of all feasible control measures listed in Table 2 of the *BAAQMD CEQA Guidelines*. Further, the kinds of construction equipment commonly used in development projects are primarily diesel-powered, and with continuous use, can lead to significant diesel particulate matter emissions. The California Air Resources Board (ARB) has identified diesel engine particulate matter as a toxic air contaminant and known carcinogen. We recommend, whenever feasible, implementation of additional measures to reduce combustion emissions from construction equipment – particularly diesel emissions. Such measures could include but are not limited to: maintaining properly tuned engines; minimizing the idling time of diesel powered construction equipment; using alternative fueled construction equipment (CNG, biodiesel, water emulsion fuel, electric); using add-on control devices such as diesel oxidation catalysts or particulate filters; phasing the construction of the project; and limiting the hours of operation of heavy duty equipment.

For more details on our agency's guidance regarding environmental review, we recommend that the City refer to the *BAAQMD CEQA Guidelines*. This document provides information on best practices for assessing and mitigating air quality impacts related to projects and plans, including construction emissions, land use/design measures, project operations, motor vehicles, and nuisance impacts. If you do not already have a copy of our *BAAQMD CEQA Guidelines*, we recommend that you obtain a copy by calling our Public Information Division at (415) 749-4900 or downloading the online version from the District's web site at <http://www.baaqmd.gov/pln/ceqa/index.asp>.

If you have any questions regarding these comments, please contact Douglas Kolozsvari, Environmental Planner, at (415) 749-4602.

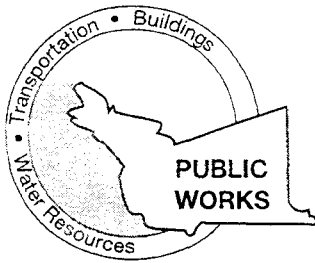
Sincerely,



Jean Roggenkamp
Deputy Air Pollution Control Officer

JR:DK

cc: BAAQMD Director Roberta Cooper
BAAQMD Director Scott Haggerty
BAAQMD Director Nate Miley
BAAQMD Director Shelia Young



COUNTY OF ALAMEDA
PUBLIC WORKS AGENCY
DEVELOPMENT SERVICES DEPARTMENT
951 Turner Court, Room 100
Hayward, CA 94545-2698
(510) 670-6601
FAX (510) 670-5269

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July 12, 2005

Eddie Peabody, Jr., AICP
City of Dublin
Development Services Department
100 Civic Plaza
Dublin, CA 94568

Dear Mr. Peabody:

Subject: Fallon Village Development Project - Notice of Preparation of a Draft Supplemental Environmental Impact Report

Reference is made to your transmittal of June 10, 2005, regarding the Notice of Preparation of a Draft SEIR for the Fallon Village Development Project, located on approximately 1,132 acres on the east side of the City of Dublin, generally bounded by I-580 to the south and Fallon Road to the west.

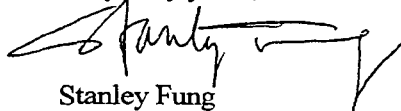
We have reviewed the submitted document and offer the following comments:

1. The document states that the City of Dublin will annex all the roadways within the proposed project. The only roadways or portions thereof that appear to remain a County roadway are El Charro Road at I-580 and Collier Canyon Road. The proposed developments will significantly increase traffic in the region. According to the SEIR, Fallon Road is proposed to be widened to between four and eight lanes from its current two lane configuration. As a result, the portion of County roadway (El Charro Road) that access Fallon Road from I-580 would also need to be widened from its current two lanes up to eight lanes to mitigate the increased traffic. Upon such improvement on El Charro Road, the County will look to the City of Dublin to enter into an agreement for maintenance of the improved roadway.
2. It is important to consider access to the I-580 freeway in the initial project design. The I-580/Fallon Road/El Charro Road interchange is heavily used by quarry vehicles. It is critical that in the geometric design of this interchange, the interaction of passenger vehicles and commercial vehicles (quarry trucks) be considered. Experience has shown that combination of commercial vehicles and residential traffic is often a non-favorable mix. Level of confidence (95% minimum) for left-turn storage capacity needs to be considered.

3. There is no mention of access to the project site from Collier Canyon Road. Exhibit 5 shows Collier Canyon Road but does not clearly state if access is allowed or not. If access from Collier Canyon Road is allowed, improvements to Collier Canyon Road and Doolan Road will be required.
4. Restoration/repair of County roadways due to damage caused by construction traffic will be required. Truck haul routes will need to be designated.
5. Although the project site is located in Zone 7, runoff ultimately drains to the Alameda Creek Federal Project in western Alameda County. This flood control facility is maintained by the Alameda County Flood Control District. The District is concerned with the augmentation in runoff from the site that may impact flow capacity in the Federal Project as well as in the watercourses between the site and the Federal Project. Also of concern to the District is the potential for runoff from the project to increase the rate of erosion along those same watercourses that could cause localized damage and result in deposition of silt in the Federal Project. There should be no augmentation in runoff quantity or duration from the project site that will adversely impact downstream drainage facilities. The District should be involved in the review of the project hydrologic and hydraulic models, including the design of any detention ponds that may be necessary.

Thank you for the opportunity to review the Notice of Preparation of a DSEIR for this project. If you have any questions, please call Andrew Otsuka at (510) 670-6613.

Very truly yours,



Stanley Fung
Deputy Director
Development Services Department

SF:AO

cc: Hank Ackerman, Flood Program
John Fenstermacher, Real Estate Division
James Chu, Road Department
Robert Preston, Traffic Engineering
Tom Hinderlie, Maintenance & Operations
Fred Wolin, Environmental Services
Robert Hale, Clean Water Division
Gary Moore, Permits Section

DRAFT

19149-10A

**DUBLIN
SAN RAMON
SERVICES
DISTRICT**



7051 Dublin Boulevard
Dublin, California 94568
FAX: 925 829 1130

925 828 0515

July 22, 2005

Mr. Eddie Peabody
Community Development Director
City of Dublin
100 Civic Plaza
Dublin, CA 94568

**SUBJECT: WATER AND WASTEWATER SERVICES TO FALLON VILLAGE
& SB 610 Verification of Availability of Sufficient Water Supply**

Dear Eddie:

This letter addresses the availability of water and wastewater service from the Dublin San Ramon Services District (DSRSD) for service to Fallon Village (East Dublin Properties).

The Project is included in the District's Urban Water Management Plan, Water Master Plan, Sewer Master Plan and Wastewater Treatment Plant Master Plan. The Livermore Amador Valley Water Management Authority (LAVMWA) provides wastewater disposal for DSRSD and this project is included in their wastewater disposal project. Therefore, DSRSD does have the capability to provide water and wastewater service to the Fallon Village property. The providing of services is contingent on installation of water and sewer infrastructure, payment of fees, and satisfaction of all requirements contained in the District Code and implementing District Master Plans, policies, and ordinances.

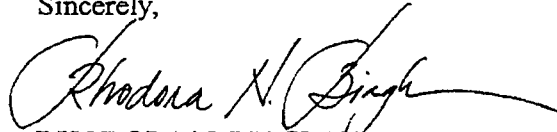
The District's 2005 Urban Water Management Plan Update (UWMP), which was adopted by our Board at its May 17, 2005 meeting, includes detailed water service analysis for the Fallon Village Development Project. The water service analysis included in the UWMP meets the requirements of SB610. Section 7.0 of the UWMP indicates that the District can provide service to the project without significantly and adversely affecting the reliability of water service to the District's existing customers. The UWMP was distributed to the City of Dublin, City of Livermore, Citizens for Balanced Growth, and other parties associated with the "Agreement to Settle Water Litigation By and Between Zone 7 Water Agency, Dublin San Ramon Services District, et. al." The District has received no opposition to the UWMP.

Mr. Eddie Peabody
July 22, 2005
Page 2 of 2

The Board has certified that adequate water supply is available to serve the Fallon Village Development Project. Attached please find a certified copy of Minute Order No. 05-32 that documents the certification. This documentation satisfies the SB610 verification of availability of sufficient water supply.

If you have any questions, please call me at your convenience at (925) 875-2255.

Sincerely,



RHODORA N. BIAGTAN
Associate Engineer

RNB/es
Enclosure

cc: Bert Michalczyk, DSRSD
David A. Requa, DSRSD
Mark McClellan, MacKay & Somps
Chron/File: 23PF04 Fallon Village

DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5513
TTY (800) 735-2929

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*Flex your power!
Be energy efficient!*

July 29, 2005

ALA580816
SCH2005062010

Mr. Eddie Peabody
City of Dublin
Development Services Department
100 Civic Plaza
Dublin, CA 94568

Dear Mr. Peabody:

FALLON VILLAGE PROJECT – NOTICE OF PREPARATION

Thank you for including the California Department of Transportation (Department) in the early stages of the environmental review process for the Fallon Village project. The following comments are based on the Notice of Preparation.

Traffic Analysis

Please include the information detailed below in the Traffic Study to ensure that project-related impacts to State roadway facilities are thoroughly assessed. We encourage the City to coordinate preparation of the study with our office, and we would appreciate the opportunity to review the scope of work. The Department's "Guide for the Preparation of Traffic Impact Studies" should be reviewed prior to initiating any traffic analysis for the project; it is available at the following website:

<http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf>

The Traffic Study should include:

1. Site plan clearly showing project access in relation to nearby state roadways. Ingress and egress for all project components should be clearly identified. State right-of-way (ROW) should be clearly identified.
2. Project-related trip generation, distribution, and assignment. The assumptions and methodologies used to develop this information should be detailed in the study, and should be supported with appropriate documentation.
3. Average Daily Traffic, AM and PM peak hour volumes and levels of service (LOS) on all significantly affected roadways, including crossroads and controlled intersections for existing, existing plus project, cumulative and cumulative plus project scenarios. Calculation of cumulative traffic volumes should consider all traffic-generating developments, both

existing and future, that would affect study area roadways and intersections. *The analysis should clearly identify the project's contribution to area traffic and degradation to existing and cumulative levels of service. Lastly, the Department's LOS threshold, which is the transition between LOS C and D, and is explained in detail in the Guide for Traffic Studies, should be applied to all state facilities.*

4. Schematic illustration of traffic conditions including the project site and study area roadways, trip distribution percentages and volumes as well as intersection geometrics, i.e., lane configurations, for the scenarios described above.
5. The project site building potential as identified in the General Plan. The project's consistency with both the Circulation Element of the General Plan and the Alameda County Congestion Management Agency's Congestion Management Plan should be evaluated.
6. *Mitigation should be identified for any roadway mainline section or intersection with insufficient capacity to maintain an acceptable LOS with the addition of project-related and/or cumulative traffic.* The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should also be fully discussed for all proposed mitigation measures.
7. Special attention should be given to the following trip-reducing measures:
 - Encouraging mixed-use,
 - Maximizing density through offering bonuses and/or credits,
 - Coordinating with LAVTA and BART to increase transit/rail use by expanding routes and emphasizing express service to regional rail stations, and by providing bus shelters with seating at any future bus pullouts,
 - Providing transit information to all future project residents and employees, and
 - Encouraging bicycle- and pedestrian-friendly design.

While the 2000 Highway Capacity Manual (HCM) may not be the preferred level of service methodology, it should be used for analyzing impacts to state facilities, particularly where previous analysis employing alternative methodologies has identified impacts. The residual level of service, assuming mitigation has been implemented, should also be analyzed with HCM 2000.

Encroachment Permit

Please be advised that work that encroaches onto the State ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans, clearly indicating State ROW, must be submitted to the address below. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process. See the following website link for more information:

<http://www.dot.ca.gov/hq/traffops/developserv/permits/>

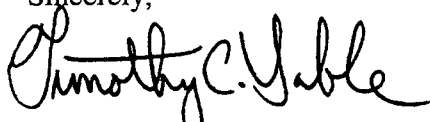
Sean Nozzari, District Office Chief
Office of Permits
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660
"Caltrans improves mobility across California"

Please forward a copy of the environmental document, along with the Traffic Study, including Technical Appendices, and staff report, including project conditions, to the address below as soon as they are available.

Patricia Maurice, Associate Transportation Planner
Office of Transit and Community Planning, Mail Station 10D
California DOT, District 4
111 Grand Avenue
Oakland, CA 94612-3717

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia_maurice@dot.ca.gov with any questions regarding this letter.

Sincerely,



TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

Appendix 8.4
Dublin City Council Resolution No. 53-93
(1993 Eastern Dublin EIR)

A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF DUBLIN

RESOLUTION ADOPTING THE EASTERN DUBLIN GENERAL PLAN
AMENDMENT AND EASTERN DUBLIN SPECIFIC PLAN; MAKING
FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY
ACT AND ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS
FOR THE EASTERN DUBLIN GENERAL PLAN AMENDMENT AND SPECIFIC
PLAN; AND ADOPTING A MITIGATION MONITORING PROGRAM FOR THE
EASTERN DUBLIN GENERAL PLAN AMENDMENT AND SPECIFIC PLAN

Recitals

1. In response to a proposal for residential development of the Dublin Ranch property, the City of Dublin undertook the Eastern Dublin Study to plan for the future development of the eastern Dublin area.

2. The City Council and Planning Commission conducted three joint public study sessions and three workshops relating to planning issues in eastern Dublin.

a. The April 18, 1990, study session considered a land use concept report containing four land use scenarios and the consistency of each land use concept with existing general plan policies. Alternative #4 was considered the preferred land use concept for environmental study by informal consensus.

b. The August 22, 1990, study session considered Alternative #4 and a fifth concept (based on the 1986 annexation agreement with Alameda County). The "Town Center" concept, types of streets, location and types of parks were discussed.

c. The November 15, 1990, workshop solicited comments from the public regarding the existing and desired life style qualities in Dublin and what the public wanted to see in a new community.

d. The December 6, 1990, workshop continued with a similar discussion of desired types of commercial development and discussed circulation systems and parks and open space.

e. The December 18, 1990, workshop presented a preliminary conceptual land use plan. Input was received on the transit spine, location of civic center, types of residential uses, location of commercial uses, the concentration of high density residential uses, and jobs/housing balance.

f. The February 14, 1991, study session considered a land use plan that incorporated comments made at the three workshops and included a discussion of major issues, such as the location of a high school, connection to existing Dublin, size of streets and types of parks.

3. With the identification of a preferred alternative on February 14, 1991, the City prepared a Draft General Plan Amendment for approximately 6,920 acres to plan for future development of a mixed use community of single- and multiple-family residences, commercial uses (general commercial, neighborhood commercial, campus office and industrial park), public and semi-public facilities (including schools), parks and open space.

Draft General Plan Amendment

4. The Draft General Plan Amendment, dated May 27, 1992, designates the proposed general distribution and general location and extent of the uses of Eastern Dublin for residential, commercial, industrial, public, open space and parks, and other categories of public and private uses of land.

5. The Draft General Plan Amendment includes a statement of standards of population density and standards of building intensity for Eastern Dublin.

6. Pursuant to the provisions of State Planning and Zoning Law, it is the function and duty of the Planning Commission of the City of Dublin to review and recommend action on proposed amendments to the City's General Plan.

7. The Planning Commission held a duly noticed public hearing on the Eastern Dublin Draft General Plan Amendment on October 1, 1992, which hearing was continued to October 6, 1992, October 12, 1992, and October 15, 1992.

8. Based on comments received during the public hearing, related text revisions, dated December 21, 1992, were made to the Draft General Plan Amendment and were reviewed by the Planning Commission on December 21, 1992.

9. The Draft General Plan Amendment was reviewed by the Planning Commission in accordance with the provisions of the California Environmental Quality Act through the preparation and review of an Environmental Impact Report. On December 21, 1992, by Resolution No. 92-060, the Planning Commission recommended certification of the Final Environmental Impact Report.

10. On December 21, 1992, the Planning Commission, after considering all written and oral testimony submitted at the public hearing, adopted of Resolution No. 92-061, recommending City

Council adoption of the Draft General Plan Amendment, as revised December 21, 1992.

Draft Specific Plan

11. The Draft Specific Plan, dated May 27, 1992, implements an approximately 3,328-acre portion of the Eastern Dublin General Plan Amendment by providing a detailed framework, including policies, standards and implementation programs, for evaluation of development projects proposed in the portion of eastern Dublin covered by the Draft Specific Plan.

12. Pursuant to State Law, the Eastern Dublin Draft Specific Plan was prepared and reviewed in the same manner as a general plan amendment.

13. The Planning Commission held a duly noticed public hearing on the Eastern Dublin Draft Specific Plan on October 6, 1992, which hearing was continued to October 12, 1992, and October 15, 1992.

14. Based on comments received during the public hearings, related text revisions, dated December 21, 1992, were made to the Draft Specific Plan and were reviewed by the Planning Commission on December 21, 1992.

15. The Draft Specific Plan was reviewed by the Planning Commission in accordance with the provisions of the California Environmental Quality Act through the preparation and review of a Final Environmental Impact Report. On December 21, 1992, by Resolution No. 92-060, the Planning Commission recommended certification of the Final Environmental Impact Report.

16. On December 21, 1992, the Planning Commission, after considering all written and oral testimony submitted at the public hearing, adopted Resolution No. 92-062, recommending City Council adoption of the Draft Specific Plan, dated May 27, 1992, as revised December 21, 1992.

Council Public Hearing

17. The City Council held a duly noticed public hearing on the Eastern Dublin Draft General Plan Amendment and Draft Specific Plan on January 14, 1993, which hearing was continued to January 21, 1993, February 23, 1993, March 30, 1993, and April 27, 1993.

18. On April 27, 1993, the City Council, by Resolution No. 45-93, voted to refer Alternative 2: Reduced Planning Area ("Alternative 2") with modifications back to the Planning Commission for its recommendation, pursuant to Government Code section 65356.

19. The Planning Commission held a public hearing on May 3, 1993, to consider Alternative 2 with modifications and has reported back to the City Council by Planning Commission Resolution No. 93-013.

20. The City Council considered all written and oral testimony submitted at the public hearing and all written testimony submitted prior to the public hearing and the recommendation of the Planning Commission as set forth in Planning Commission Resolution Nos. 92-061, 92-062 and 93-013.

21. On May 10, 1993 the Council held duly noticed a public hearing to hear testimony regarding the Planning Commission's recommendation as set forth in Planning Commission Resolution No. 93-013.

22. On May 10, 1993, the City Council adopted Resolution No. 51-93, certifying the Addendum to the Draft EIR and the Final Environmental Impact Report ("Final EIR") as adequate and complete. The Final EIR identified significant adverse environmental impacts which can be mitigated to a level of insignificance through changes or alterations in the project. Therefore, pursuant to CEQA, findings adopting the changes or alterations are required and are contained in this resolution. Some of the significant impacts cannot be mitigated to a level of insignificance and a statement of overriding considerations is therefore required pursuant to CEQA and is also contained in this resolution.

23. Upon consideration of the land use and environmental effects of the project, as described in the Final EIR, the Council has determined to adopt Alternative 2, as described in the Final EIR, with certain modifications which are described in the Addendum to the Draft EIR ("Alternative 2 With Modifications"). Alternative 2 With Modifications reduces land use impacts, does not disrupt the existing rural residential community in Doolan Canyon, potentially reduces growth-inducing impacts on agricultural lands, reduces certain traffic impacts to a level of insignificance, produces less demand for infrastructure, reduces the noise impacts for Doolan Road to a level of insignificance and will have a positive fiscal impact on the City.

24. Alternative 2 was considered by the Planning Commission at its hearings, in testimony at the public hearings, in staff reports presented to the Commission at its hearings, in the EIR reviewed by the Planning Commission at its hearings and in its deliberations.

25. Alternative 2 With Modifications includes several substantial modifications to Alternative 2, as Alternative 2 is described in the Draft EIR. Although several of these modifications were considered by the Planning Commission at its hearings, the Planning Commission has considered Alternative 2 With

Modifications and has reported back to the Council with its recommendation regarding Alternative 2 With Modifications. The Council has determined to follow the Planning Commission's recommendation as set forth in its Resolution No. 93-013, except with respect to the width of the Transit Spine and with the addition of the phrase "or other appropriate agreements" on page 160 of the Draft Specific Plan (§ 11.3.1, first sentence).

Findings/Overriding Considerations/
Mitigation Monitoring Program

26. Public Resources Code section 21081 requires the City to make certain findings if the City approves a project for which an environmental impact report has been prepared that identifies significant environmental effects.

27. Section 15093 of the State CEQA Guidelines requires adoption by the City Council of a statement of overriding considerations if the Council approves a project which will result in unavoidable significant effects on the environment.

28. Public Resource Code section 21085 and section 15092 of the State CEQA Guidelines require the City to make certain determinations if it approves a project which reduces the number of housing units considered in the environmental impact report.

29. The Final EIR for the Eastern Dublin General Plan Amendment and Specific Plan identifies certain significant adverse environmental effects.

30. Certain of the significant adverse environmental effects can be reduced to a level of insignificance by changes or alterations in the project.

31. Certain of the significant adverse environmental effects cannot be mitigated to a level of insignificance.

32. The Council has selected Alternative 2 identified in the Final EIR with modifications described in the Addendum to the Draft EIR, reducing the number of housing units for such property from the project as reviewed by the Final EIR for the Eastern Dublin General Plan Amendment and Specific Plan.

33. Public Resources Code section 21081.6 requires the City to adopt a reporting or monitoring program for changes in a project or conditions imposed to mitigate or avoid significant environmental effects in order to ensure compliance during project implementation.

34. Government Code section 65300 authorizes a city council to adopt a general plan for land outside its boundaries which in the Planning Commission's judgment bears relation to its planning.

35. The Planning Commission has considered whether land outside the City's boundaries bears relation to the City's planning.

36. The City has referred Alternative 2 With Modifications to the Alameda County Airport Land Use Commission ("ALUC") pursuant to Public Utilities Code section 21676 (b). The City has not received a determination from the ALUC. The 60-day time period for the ALUC to make a determination has not yet run.

NOW, THEREFORE, BE IT RESOLVED THAT

A. The Dublin City Council does hereby approve "Alternative 2: Reduced Planning Area" as the Eastern Dublin General Plan Amendment, with the Revisions dated December 21, 1992, and with the Modifications described in the Addendum to Draft EIR, dated May 4, 1993.

B. The Dublin City Council finds the Eastern Dublin Specific Plan, as described in the Final EIR as "Alternative 2: Reduced Planning Area," with Revisions dated December 21, 1992, and with the modifications described in the Addendum to Draft EIR dated May 4, 1993, to be consistent with the Dublin General Plan, as revised by the Eastern Dublin General Plan Amendment.

C. The Dublin City Council does hereby approve the Eastern Dublin Specific Plan, with the Revisions dated December 21, 1992, and with the Modifications described in the Addendum to Draft EIR, dated May 4, 1993 and with the revision to page 160 referred to in paragraph 25 above.

D. The Dublin City Council does hereby direct the Staff to edit, format, and print the up-to-date Dublin General Plan with all City Council approved revisions and without any other substantive changes.

E. The Dublin City Council does hereby direct the Staff to edit, format, and print the Eastern Dublin Specific Plan with all City Council approved revisions and without any other substantive changes.

BE IT FURTHER RESOLVED THAT the Dublin City Council does hereby make the findings set forth in Sections 1, 2, 3, 4 and 5 of Exhibit A, attached hereto and incorporated herein by this reference, for the Eastern Dublin General Plan Amendment and Specific Plan.

BE IT FURTHER RESOLVED THAT the Dublin City Council finds and declares that the rationale for each of the findings set forth in Sections 1, 2, 3, 4 and 5 of its findings (Exhibit A) is contained in the paragraph entitled "Rationale for Finding" in Exhibit A.

The Council further finds that the mitigation measures for each identified impact in Exhibit A make changes to, or alterations to, the Eastern Dublin General Plan Amendment and Specific Plan, or are measures incorporated in the Eastern Dublin Specific Plan that, once implemented as described in the Mitigation Monitoring Program (Exhibit B hereto), will avoid or substantially lessen the significant effects of the Eastern Dublin General Plan Amendment and Specific Plan on the environment.

BE IT FURTHER RESOLVED THAT the Dublin City Council does hereby adopt the Statement of Overriding Considerations set forth in Section 6 of Exhibit A, attached hereto, which statement shall be included in the record of the project approval.

BE IT FURTHER RESOLVED THAT the Dublin City Council does hereby adopt the "Mitigation Monitoring Program: Eastern Dublin Specific Plan/General Plan Amendment" attached hereto and incorporated herein as Exhibit B, as the reporting and monitoring program required by Public Resources Code section 21081.6 for the Eastern Dublin General Plan Amendment and Specific Plan.

BE IT FURTHER RESOLVED THAT the Dublin City Council does hereby direct that the Applicants for land use approvals in the Specific Plan area shall pay their pro rata share of all costs associated with the implementation of the Mitigation Monitoring Program.

BE IT FURTHER RESOLVED THAT the Dublin City Council does hereby direct that all fees established pursuant to Government Code Section 65456, to recover costs of preparation of the Specific Plan, shall include the cost of preparation, adoption and administration of the Specific Plan plus interest on such costs based upon the City of Dublin's average monthly weighted investment yield calculated for each year or fraction thereof that such costs are unpaid.

BE IT FURTHER RESOLVED THAT the Dublin City Council does hereby direct the City Clerk to file a Notice of Determination for the Eastern Dublin General Plan Amendment and Specific Plan project with the Alameda County Clerk and the State Office of Planning and Research.

BE IT FURTHER RESOLVED THAT the Dublin City Council does hereby direct the City Clerk to make available to the public, within one working day of the date of adoption of this resolution, copies of this resolution (including all Exhibits) and the Eastern Dublin General Plan Amendment, dated May 27, 1992, with the Revisions dated December 21, 1992, and the modifications described in the Addendum to Draft EIR dated May 4, 1993, and the Eastern Dublin Specific Plan, dated May 27, 1992, with the Revisions to Draft Specific Plan, dated December 21, 1992, and the modifications

described in the Addendum to Draft EIR, all as modified by this resolution.

BE IT FURTHER RESOLVED THAT this resolution shall become effective thirty (30) days from the date of passage.

BE IT FURTHER RESOLVED THAT if, on the effective date of this resolution or within the remaining 60-day period for ALUC action, the ALUC has found that Alternative 2 With Modifications is not consistent with the ALUC's Alameda County Airport Land Use Policy Plan, the City shall submit all regulations, permits or other actions implementing the Eastern Dublin General Plan Amendment and Specific Plan to the ALUC for review until such time that the City Council revises the Eastern Dublin General Plan Amendment and Specific Plan to be consistent with the ALUC's Alameda County Airport Land Use Policy Plan or adopts specific findings by a two-thirds vote that the General Plan Amendment and Specific Plan are consistent with the purposes of Article 3.5 of Chapter 4 of Part 1 of Division 9 of the Public Utilities Code as stated in section 21670 of such Code.

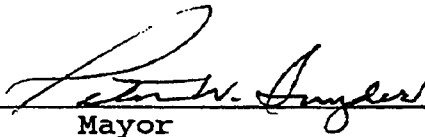
PASSED, APPROVED, AND ADOPTED this 10th day of May, 1993, by the following vote:

AYES: Councilmembers Burton, Houston, Howard, Moffatt & Mayor Snyder

NOES: None

ABSENT: None

ABSTAIN: None



Mayor

ATTEST:



City Clerk

114\RESOL\29\RESOLUTION

Section 1

FINDINGS CONCERNING SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Pursuant to Public Resources Code section 21081, the City Council hereby makes the following findings with respect to the Project's¹ potential significant environmental impacts and means for mitigating those impacts. Findings pursuant to section 21081, subdivision (c), as they relate to "project alternatives," are made in Section 3.

Section 3.1 -- Land Use

IMPACT 3.1/F. Cumulative Loss of Agricultural and Open Space Lands. Agricultural grazing land and open space in Alameda and Contra Costa counties will be converted to urban uses by proposed projects such as Dougherty Valley, Tassajara Valley, North Livermore, and Eastern Dublin. Because it would result in the urbanization of a large area of open space, the proposed Project would contribute to this cumulative loss of agricultural land and open space in the Tri-Valley area. This is considered a significant unavoidable cumulative impact. Response to Comments ("RC") # 34-9.

Finding. No mitigation measures are proposed to reduce this impact to a level of insignificance. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The total amount of open space within the RPA that will be urbanized will be cumulatively significant, in light of numerous other open space areas within the region that is also anticipated for urbanization.

IMPACT 3.1/G. Potential Conflicts with Land Uses to the West. The Parks Reserve Forces Training Area ("Camp Parks") is located due west of the Specific Plan area. Existing and future Army training activities, such as the use of high velocity weapons and helicopters, could result in noise and safety conflicts with adjacent open space and single-family residential areas of the Specific Plan. The extent of future army activity is unknown and

¹The "Project" is Alternative 2 described in the DEIR at pages 4-9 through 4-14 with the modifications described in the May 4, 1993 Addendum to the EIR. Alternative 2 calls for development in the Reduced Planning Area (the portion of eastern Dublin within its sphere-of-influence) (hereafter "RPA").

the Army has not yet completed its Camp Parks Master Plan. DEIR page 3.1-13.

Mitigation Measure 3.1/1.0. The City of Dublin should coordinate its planning activities with the Army to achieve compatibility with adjacent Camp Parks land uses, to solve potential future conflicts, and to reconcile land use incompatibilities. The City should consult with the Army for any specific development proposals within the RPA. DEIR pages 3.1-13, -22.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Coordinated planning activities will allow the City and Army to identify potential noise and safety impacts before they occur and will allow specific mitigation measures, including redesign, to be incorporated into development in the Project Area.

Section 3.3 -- Traffic and Circulation

When a mitigation measure referenced in this section requires development projects within the RPA to pay for a proportionate cost of regional transportation programs and/or traffic and circulation improvements, the proportion shall be as determined by regional transportation studies, such as the current study by the Tri-Valley Transportation Council.

IMPACT 3.3/A. I-580 Freeway, Tassajara-Fallon. Year 2010 growth without the Project would cause cumulative freeway volumes to exceed Level of Service E on I-580 between Tassajara Road and Fallon Road. DEIR pages 3.3-21 (as revised), 5.0-3.

Mitigation Measure 3.3/1.0. Caltrans, in cooperation with local jurisdictions, could construct auxiliary lanes on I-580 between Tassajara Road and Fallon Road to create a total of ten lanes, which would provide Level of Service D operations, consistent with the Caltrans Route Concept Report for I-580. DEIR pages 3.3-21 (as revised), 5.0-3.

Finding. Approval of the construction of the auxiliary lanes, and cooperation by jurisdictions other than the City of Dublin, are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. This mitigation measure provides acceptable Level of Service D operations during peak hours on the freeway.

IMPACT 3.3/B. I-580 Freeway, I-680 to Hacienda. Year 2010 growth with the Project would cause I-580 between I-680 and Dougherty Road to exceed Level of Service E. This is also a significant cumulative impact. DEIR pages 3.3-21 (as revised), 4-11, 5.0-3.

Mitigation Measure 3.3/2.0. Consistent with Specific Plan Policy 5-21², all non-residential projects with 50 or more employees in the RPA shall participate in a Transportation Systems Management (TSM) program to reduce the use of single occupant vehicles through strategies including but not limited to encouraging public transit use, carpooling, and flexible work hours. DEIR pages 3.3-21 (as revised), 5.0-3.

Mitigation Measure 3.3/2.1. All projects within the RPA area shall contribute a proportionate share of the costs of regional transportation mitigation programs, as determined by regional transportation studies. Such regional mitigation programs may include enhanced public transit service and/or upgrading alternate road corridors to relieve demand on I-580 or I-680. DEIR page 3.3-21 (as revised).

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact might not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Approval of Alternative 2 reduces to a level of insignificance the impact on I-580 between Dougherty Road and Hacienda Drive. DEIR page 4-11. The TSM program strategies will reduce single car occupancy, thereby reducing the number of cars expected to use the subject stretch of I-580. Regional actions may focus not only on reducing auto use by reducing single occupant vehicles, but also on increasing Project area road capacities through

² This policy appears in the Eastern Dublin Specific Plan, which plan applies only to the identified Specific Plan area. The provisions of this policy provide useful mitigation outside the Specific Plan area as well. Therefore, the EIR and these findings adopt these provisions for the entire RPA. Hereinafter, those Specific Plan goals, policies, and action programs whose provisions are similarly adopted for the RPA throughout these findings will be indicated by an asterisk.

construction of routes providing convenient alternatives to I-580 and I-680. Given the overall expected increase in traffic, however, these measures are not sufficient to reduce the cumulative impacts on I-580 between I-680 and Dougherty Road to insignificance.

IMPACT 3.3/C. I-580 Freeway, Tassajara-Fallon-Airway. Year 2010 growth with the Project would cause freeway volumes to exceed Level of Service E on I-580 between Tassajara Road and Airway Boulevard. This is also a significant cumulative impact. DEIR page 3.3-21 (as revised), 5.0-3.

Mitigation Measure 3.3/3.0. The City shall coordinate with Caltrans and the City of Pleasanton to construct auxiliary lanes on I-580 between Tassajara Road and Airway Boulevard. All projects within the RPA shall contribute a proportionate share of the costs of these improvements. DEIR pages 3.3-22 (as revised), 5.0-3; RC #7-6

Finding. Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant effects identified in the Final EIR. Freeway construction actions are within the ultimate responsibility and jurisdiction of Caltrans, who can and should take such actions. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The auxiliary lanes will provide sufficient additional capacity on I-580 to provide Level of Service D between Fallon Road and Airway Boulevard, and Level of Service E between Tassajara Road and Fallon Road. Both Level of Service D and E are acceptable during peak freeway hours. DEIR pages 3.3-2, -18. Development in the RPA will be required to contribute its fair share to the auxiliary lane improvements so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the freeway improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

IMPACT 3.3/D. I-680 Freeway, North of I-580. Year 2010 growth with the Project would cause freeway volumes to exceed Level of Service E on I-680 north of the I-580 interchange. This is also a significant cumulative impact. DEIR page 3.3-22, 5.0-4.

Mitigation Measure 3.3/4.0. All projects in the RPA shall contribute a proportionate share of the costs of Caltrans' planned improvements at the I-580/I-680 interchange, including a new two-lane freeway-to-freeway flyover with

related hook ramps to the City of Dublin. DEIR page 3.3-22. (as revised) (see also page 3.3-17 (as revised)).

Finding. Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant effects identified in the Final EIR. Freeway interchange improvement actions are within the responsibility and jurisdiction of Caltrans, who can and should take such actions. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The expected interchanges and related improvements will provide sufficient additional capacity on I-680 to provide Level of Service D north of the I-580 interchange. Development in the RPA will be required to contribute its fair share to the interchange and related improvements so that when such improvements are needed, they will be provided by new development generating the need.

IMPACT 3.3/E. Cumulative Freeway Impacts. Cumulative buildout with the Project would cause additional freeway sections, including I-580 east of Airway Boulevard, and the segment of I-580 between Dougherty and Hacienda to exceed level of service E. DEIR pages 3.3-22 (as revised), 5.0-4.

Mitigation Measure 3.3/5.0. The Project shall contribute a proportionate share to the construction of auxiliary lanes (for a total of 10) on I-580 east of Airway Boulevard, for implementation by Caltrans. The City shall coordinate with other local jurisdictions to require that all future development projects participate in regional transportation mitigation programs as determined by the current Tri-Valley Transportation Council study. DEIR pages 3.3-22 (as revised), 5.0-4.

Finding. Changes or alterations have been required in, or incorporated into, the Project. Actions by other agencies and Caltrans to implement this mitigation measure are within the responsibility and jurisdiction of those other agencies and not the City of Dublin. Such actions can and should be taken by the other agencies. However, even with these changes the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted.

Rationale for Finding. The auxiliary lanes will provide sufficient additional capacity to provide acceptable level of service on part of I-580 widening to ten lanes is consistent with the Route Concept Report. DEIR page 3.3-22 (as revised). Regional transportation mitigations can

reduce cumulative impacts through measures to decrease single occupant vehicle use and increase public transit use to further decrease traffic impacts. However, even with these improvements, part of I-580 (between I-680 and Hacienda Drive) will still be beyond acceptable LOS E. DEIR pages 3.3-20, 3.3-21 (as revised), 4-11.

IMPACT 3.3/F. Dougherty Road and Dublin Boulevard. Year 2010 development with the Project would cause Level of Service F operations at the intersection of Dougherty Road with Dublin Boulevard. DEIR page 3.3-25.

Mitigation Measure 3.3/6.0. The City of Dublin shall monitor the intersection and implement construction of additional lanes when required to maintain LOS D operations. All projects within the RPA shall contribute a proportionate share of the improvement costs. DEIR page. 3.3-25 (as revised).

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The additional lanes at the Dougherty Road/Dublin Boulevard intersection will provide sufficient capacity for Level of Service D operations, which is acceptable at street intersections in Dublin (DEIR pages 3.3-2, -18 (as revised)). Development in the RPA will be required to contribute its fair share of the intersection improvements so that, when such improvements are needed, they will be provided by new development generating the need.

IMPACT 3.3/G. Hacienda Drive and I-580 Eastbound Ramps. Year 2010 development with the Project would cause Level of Service F operations at the intersection of Hacienda Drive with the I-580 eastbound ramps. DEIR page 3.3-25 (as revised).

Mitigation Measure 3.3/7.0. The City of Dublin shall implement improvements in coordination with the City of Pleasanton and Caltrans to widen the eastbound off-ramp to provide a second left turn lane. All projects in the RPA shall contribute a proportionate share of the improvement costs. DEIR page 3.3-25 (as revised); RC # 7-9.

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Off-ramp widening actions are within the ultimate responsibility and jurisdiction of Caltrans. Such actions can and should be taken by Caltrans. If taken, such actions would

avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The additional lanes at the eastbound off-ramp will provide acceptable Level of Service C operations. Development in the Project area will be required to contribute its fair share of the intersection improvements, so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the off-ramp improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

IMPACT 3.3/H. Tassajara Road and I-580 Westbound Ramps. Year 2010 development with the Project would cause Level of Service F operations at the intersection of Tassajara Road with the I-580 westbound ramps. DEIR page 3.3-25 (as revised).

Mitigation Measure 3.3/8.0. The City of Dublin shall implement improvements in coordination with Caltrans to widen the I-580 westbound off-ramp and to modify the northbound approach to provide additional turn and through lanes. All projects in the RPA shall contribute a proportionate share of the improvement costs. DEIR page 3.3-26 (as revised).

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Coordinating and ramp widening actions are within the ultimate responsibility and jurisdiction of Caltrans, which can and should take such actions. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The reconfigured lanes at the eastbound off-ramp will provide acceptable Level of Service B operations. Development in the Project area will be required to contribute its fair share of the intersection improvements so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the off-ramp improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

IMPACT 3.3/I. Santa Rita Road and I-580 Eastbound Ramps. Year 2010 development with the Project would cause Level of Service F operations at the intersection of Santa Rita Road with the I-580 eastbound ramps. DEIR page 3.3-26.

Mitigation Measure 3.3/9.0. The City of Dublin shall implement improvements in coordination with the City of Pleasanton and Caltrans to widen the I-580 eastbound off-ramp to provide two left-turn lanes, one through lane, and one right-turn lane to provide Level of Service E at this intersection. All projects in the RPA shall contribute a proportionate share of the improvement costs. The City of Dublin shall continue to work with the City of Pleasanton to monitor level of service at this intersection and participate in implementing improvements which may be identified in the future to improve traffic operations. DEIR page 3.3-26 (as revised); RC # 7-11.

Finding. Changes or alterations have been required in, or incorporated into the Project. Ramp widening actions are within the ultimate responsibility and jurisdiction of Caltrans, which can and should take such actions. However, even with these changes and actions, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The off-ramp widening will provide LOS E operations, which is still significant. Development in the Project area will be required to contribute its fair share of the intersection improvements, so that when such improvements are needed, they will be provided by new development generating the need.

IMPACT 3.3/K. Airway Boulevard and I-580 Westbound Ramps. Year 2010 development with the Project would cause Level of Service F operations at the intersection of Airway Boulevard with the I-580 westbound ramps. DEIR page 3.3-27 (as revised).

Mitigation Measure 3.3/11.0. The City of Dublin shall implement improvements in coordination with the City of Livermore and Caltrans to replace or widen the Airway Boulevard overcrossing of I-580 and to widen the offramp for additional turn lanes. All projects within the RPA shall contribute a proportionate share of the improvement costs. DEIR page 3.3-27 (as revised); RC #17-2

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Road and ramp widening actions are within the ultimate responsibility and jurisdiction of Caltrans, which can and should take such actions. If taken such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The Airway Boulevard and I-580 improvements will provide an acceptable Level of Service D. Development in the Project area will be required to contribute its fair share of the improvements so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the road and ramp improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

IMPACT 3.3/L. El Charro Road. Project traffic could introduce stops and delays for loaded trucks from the quarries on El Charro Road south of I-580. DEIR page 3.3-27 (as revised).

Mitigation Measure 3.3/12.0. The City of Dublin shall implement improvements in coordination with Caltrans, the City of Pleasanton, and Alameda County to ensure that modifications to the I-580 interchange at Fallon Road/El Charro Road include provisions for unimpeded truck movements to and from El Charro Road. All projects in the RPA shall contribute a proportionate share of improvement costs. DEIR page 3.3-27 (as revised).

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Freeway interchange modification actions are within the ultimate responsibility and jurisdiction of Caltrans, which can and should take such actions. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Providing unimpeded access for the quarry trucks will prevent other traffic from backing up behind the heavily laden trucks with their slow starts and stops. Development in the Project area will be required to contribute its fair share of the improvements so that when such improvements are needed, they will be provided by new development generating the need. State law authorizes the City to enter into a cooperative agreement with Caltrans to make the off-ramp improvements (see, e.g., Streets & Highways Code §§ 113.5, 114).

IMPACT 3.3/M. Cumulative Impacts on Dublin Boulevard. Cumulative buildout with the Project would cause Level of Service F operations at the intersection of Hacienda Drive with Dublin Boulevard and Level of Service E operations at the intersection of Tassajara Road with Dublin Boulevard. DEIR page 3.3-27 (as revised), 5.0-4.

Mitigation Measure 3.3/13.0. The City shall continue to participate in regional studies of future transportation requirements, improvement alternatives, and funding programs. Buildout of proposed projects outside Eastern Dublin would require the City to build grade-separated interchanges on Dublin Boulevard and/or establish alternate routes to redistribute traffic flow. All projects in the RPA shall contribute a proportionate share of improvement costs. DEIR pages 3.3-27 (as revised), 5.0-4.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact might not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Regional transportation programs will attempt to reduce the amount of future traffic and associated impacts. Even with these efforts, however, the cumulative traffic impacts on Dublin Boulevard might not be reduced to insignificance.

IMPACT 3.3/N. Cumulative Impacts on Tassajara Road. Cumulative buildout with the Project would cause Level of Service F operations at the intersections of Tassajara Road with Fallon Road, Gleason Road, and the Transit Spine. These impacts would be caused primarily by traffic from the Tassajara connection to Dougherty Valley, and full buildout of the Tassajara Valley. DEIR page 3.3-28 (as revised), 5.0-4.

Mitigation Measure 3.3/14.0. The City shall reserve sufficient right-of-way to widen Tassajara Road to six lanes between Dublin Boulevard and the Contra Costa County line and monitor traffic conditions and implement widening projects as required to maintain LOS D operations on Tassajara Road. All projects in the RPA shall contribute a proportionate share of the improvement costs. DEIR pages 3.3-28 (as revised), 5.0-4 and -5; RC #5-2, 7-13, 8-2

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Allowing for the widening of Tassajara Road to six lanes, if needed, will allow the City to maintain an acceptable LOS D. Development in the Project area will be required to contribute its fair share of the improvements so that when such improvements are needed, they will be provided by new development generating the need.

IMPACT 3.3/O. Transit Service Extensions. The Project would introduce significant development in an area not currently served by public transit, creating the need for substantial expansion of existing transit systems. DEIR page 3.3-28.

Mitigation Measure 3.3/15.0. Specific Plan Policy 5-10* requires the City of Dublin to coordinate with LAVTA to provide transit service within one quarter mile of 95% of the population, in accordance with LAVTA service standards. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.3-28.

Mitigation Measure 3.3/15.1. Specific Plan Policy 5-11* requires the City of Dublin to coordinate with LAVTA to provide at least one bus every 30 minutes during peak hours, to 90% of employment centers with 100 or more employees, in accordance with LAVTA service standards. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.3-28.

Mitigation Measure 3.3/15.2. All projects in the RPA shall contribute a proportionate share to the capital and operation costs of transit service extensions. DEIR page 3.3-28.

Mitigation Measure 3.3/15.3. The City shall coordinate with BART and LAVTA to provide feeder service to the planned BART stations. Until the BART extension is completed (projected for 1995), the City shall coordinate with BART to ensure that BART express bus service is available to eastern Dublin residents. DEIR page 3.3-28.

Finding. Changes or alterations have been required in, or incorporated into the Project. Some of the transit service coordination actions are within the responsibility and jurisdiction of Bart and LAVTA agencies and not the City of Dublin. Such actions can and should be taken by those agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The mitigations provide for expansion of existing transit systems to meet Project demand, not only on the local level through LAVTA but also on a local and regional level through BART.

IMPACT 3.3/P. Street Crossings for Pedestrians and Bicycles. Pedestrians and bicycles would cross major streets with high projected traffic volumes, such as Dublin Boulevard, Tassajara Road and Fallon Road, introducing potential safety hazards for pedestrians and bicyclists. DEIR page 3.3-29.

Mitigation Measure 3.3/16.0. Specific Plan Policy 5-15* and Specific Plan Figure 5.3* require a Class I paved bicycle/pedestrian path along Tassajara Creek and trails along other stream corridors in the Project area. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.3-29.

Mitigation Measure 3.3/16.1. The City shall locate pedestrian and bicycle paths to cross major arterial streets at signalized intersections. DEIR page 3.3-29.

Finding. Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Placing a major bicycle/pedestrian path along Tassajara Creek and using trails along other stream corridors allows bicycles and pedestrians to avoid traveling on major streets with their high traffic volumes. Where the paths must cross a major arterial street, requiring the crossing at a signalized intersection minimizes path and traffic conflicts by stopping traffic on a regular basis to let path travelers cross the street safely.

Section 3.4 -- Community Services and Facilities

IMPACT 3.4/A and B. Demand for Increased Police Services and Police Services Accessibility. The Project will increase demand for police services from the Dublin Police Department's administrative and sworn staff, and will require reorganization of the police operations to provide new patrol beats in the Project area. The hilly topography of most of the Project site may present some accessibility and crime-prevention problems. DEIR page 3.4-2.

Mitigation Measure 3.4/1.0. Pursuant to Specific Plan Policy 8-4,* the City shall provide additional personnel and facilities and revise beats as needed in order to establish and maintain City standards for police protection service in Eastern Dublin. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-2.

Mitigation Measure 3.4/2.0. Pursuant to Specific Plan Action Program 8D,* the City shall coordinate with the City Police Department regarding the timing of annexation and proposed development, so that the Department can adequately plan for the necessary expansion of services in the RPA. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-2

Mitigation Measure 3.4/3.0. Pursuant to Specific Plan Action Program 8E,* the City shall incorporate into the requirements of project approval Police Department recommendations on project design that affect traffic safety and crime prevention. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-2.

Mitigation Measure 3.4/4.0. Upon annexation of the RPA, the City of Dublin Police Department will be responsible for police services. The City will prepare a budget strategy to hire the required additional personnel and implement a beat system. DEIR page 3.4-2.

Mitigation Measure 3.4/5.0. As part of the development review process for residential and non-residential projects, the Police Department shall review development projects' design and circulation for visibility, security, safety, access, and emergency response times and any other police issues. DEIR pages 3.4-2 to -3.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The five mitigations identified will ensure that additional police will be hired and that other administrative measures will be employed to provide adequate protection for Project area residents. Police Department input into design of Project development will insure that police services are efficiently provided.

IMPACT 3.4/C. Demand for Increased Fire Services. Buildout of the Project will substantially expand the DRFA service area and increase demand for new fire stations and firefighting personnel. This will significantly increase response times and reduce service standards unless new facilities and personnel are added. DEIR page 3.4-5.

Mitigation Measure 3.4/6.0. Pursuant to Specific Plan Policy 8-5,* the City shall time the construction of new facilities to coincide with new service demand in order to avoid periods of reduced service efficiency. The first station will be sited and will begin construction concurrent with initial development in the planning area. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-5.

Mitigation Measure 3.4/7.0. Pursuant to Specific Plan Action Program 8F,* the City shall establish appropriate funding mechanisms to cover up-front costs of capital improvements. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-5.

Mitigation Measure 3.4/8.0. Pursuant to Specific Plan Action Program 8G,* the City shall coordinate with DRFA to identify and acquire specific sites for new fire stations, with the westernmost site in the Specific Plan area assured prior to approval of any development plans. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-5; RC # 15-26.

Mitigation Measure 3.4/9.0. Pursuant to Specific Plan Action Program 8H,* the City shall incorporate DRFA recommendations on project design relating to access, water pressure, fire safety and prevention into development approvals. Require compliance with DRFA design standards such as non-combustible roof materials, minimum fire hydrant flow requirements, buffer zones along open space areas, fire alarm and sprinkler systems, road access, and parking requirements. (*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.4-5 to -6.

Mitigation Measure 3.4/10.0. Pursuant to Specific Plan Action Program 8I,* the City shall ensure, as a requirement of Project approval, that an assessment district, homeowners association, or some other mechanism is in place that will provide regular long-term maintenance of the urban/open space interface. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-6.

Mitigation Measure 3.4/11.0. Pursuant to Specific Plan Action Program 8J,* the City shall ensure that fire trails and fire breaks are integrated into the open space trail system. And that fire district standards for access roads in these areas are met while environmental impacts are minimized. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-6.

Mitigation Measure 3.4/12.0. The City of Dublin, in consultation with DRFA and a qualified wildlife biologist, shall prepare a wildfire management plan for the RPA to reduce open land wildfire risks consistent with habitat protection and other open space values. The plan shall specify ownership, maintenance, use, brush control, and fire-resistant landscaping measures, as well as periodic review of these measures, for RPA open lands. Any park districts or other open space agencies with jurisdiction over lands within the RPA shall be encouraged to participate in the preparation of the plan. DEIR pages 3.4-6 to -7.

Mitigation Measure 3.4/13.0. The City shall consult with DRFA to determine the number, location and timing of additional fire stations for areas within the RPA outside

the specific plan when such areas are proposed for annexation to the City. DEIR page 3.4-7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to determine the number and location of fire stations are within the responsibility and jurisdiction of DRFA and not the City of Dublin. Such actions can and should be taken by DRFA. If taken, such actions can and would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. New fire facilities will be constructed to meet the needs of Project residents; DRFA input into Project design features will enable additional and efficient provision of fire services. The wildfire management plan should further limit the Project fire protection impacts by reducing the risk of wildfires.

IMPACT 3.4/D. Fire Response to Outlying Areas. Based on DRFA's preliminary locations for new fire stations, the northern-most portions of the RPA would be outside the District's standard response area. Development in these areas (especially the north end of Tassajara Road) could experience adverse fire hazard exposure and emergency response impacts. DEIR page 3.4-5.

Mitigation Measures. Mitigation measures 3.4/6.0 to 13.0 as described above. DEIR pages 3.4-5 to -7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to determine the number and location of fire stations are within the responsibility and jurisdiction of DRFA and not the City of Dublin. Such actions should be taken by DRFA. If taken, such actions can and would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. New fire facilities will be constructed to meet the needs of all Project residents, including those in the outerlying areas; DRFA input into project design features will enable additional and efficient provision of fire services. The wildfire management plan should further limit the Project fire protection impacts by reducing the risk of wildfires.

IMPACT 3.4/E. Exposure to Wildfire Hazards. Settlement of population and construction of new communities in proximity to high fire hazard open space areas with difficult access poses an

increasing wildfire hazard to people and property if open space areas are not maintained for fire safety. This is also a significant cumulative impact in that increased development in steep grass and woodlands around the edges of the Tri-Valley's core communities may reduce response times and strain fire-fighting resources for regional firefighting services, many of whom participate in mutual aid systems. DEIR pages 3.4-5, 5.0-5.

Mitigation Measures 3.4/6.0 to 13.0. Mitigation measures 3.4/6.0 to 13.0, as described above. DEIR pages 3.4-5 to -7, 5.0-5; RC #26-26.

Finding. Changes or alterations have been required in, or incorporated into the Project, that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to determine the number and location of fire stations are within the responsibility and jurisdiction of DRFA agencies and the City of Dublin. Such actions should be taken by DRFA. If taken, such actions can and would substantially lessen the significant effect identified in the Final EIR. DEIR pages 3.4-4 to -7.

Rationale for Finding. New fire facilities will be constructed to meet the needs of all Project residents, including those near open space areas; DRFA input into project design features will enable additional and efficient provision of fire services. The wildfire management plan should further limit the Project wildfire exposure impacts through fire safety planning and open space management.

IMPACT 3.4/F, G. Demand for New Classroom Space; Demand for Junior High Schools. Buildout of the Project will increase the demand for new classroom space and school facilities beyond current available capacity. At the junior high school level, classroom demand may exceed both current and planned capacity levels. DEIR page 3.4-11 to -12.

Mitigation Measure 3.4/13.0. Pursuant to Specific Plan Policy 8-1,* the City shall reserve school sites within the RPA designated on the Specific Plan and General Plan Amendment Land Use Maps. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-12.

Mitigation Measure 3.4/14.0. The City shall ensure that the two proposed junior high schools are designed to accommodate the projected number of junior high school students. DEIR page 3.4-12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially

lessen the significant effect identified in the Final EIR. Some actions to determine junior high school siting and design are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by such other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Providing elementary, junior high, and high school sites will accommodate classroom demand generated by Project residents. Mitigation Measures 3.4/17.0 through 3.4/19.0 will ensure sufficient funding for such development.

IMPACT 3.4/H. Overcrowding of Schools. Existing schools may be overcrowded if insufficient new classroom space is provided for new residential development. DEIR page 3.4-12.

Mitigation Measures 3.4/13.0 to 14.0. Mitigation Measures 3.4/13.0 to 14.0, as described above.

Mitigation Measure 3.4/15.0. Pursuant to Specific Plan Policy 8-2,* the City shall promote a consolidated development pattern that supports the logical development of planning area schools, and in consultation with the appropriate school district(s), ensure that adequate classroom space is available prior to the development of new homes. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Some actions to site and design schools are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by such other agencies. If taken, such actions would avoid or substantially lessen the significant effects identified in the Final EIR.

Rationale for Finding. Providing elementary, junior high, and high school sites will accommodate classroom demand generated by Project residents, while a consolidated development pattern ensures that the classroom space will be available when it is needed. Mitigation Measures 3.4/17.0 through 3.4/19.0 will ensure sufficient funding for such development.

IMPACT 3.4/I. Impact on School Financing District Jurisdiction. Development of the RPA under existing jurisdictional boundaries would result in the area being served by two different school

districts and would adversely affect financing of schools and provision of educational services. DEIR page 3.4-12.

Mitigation Measures 3.4/16.0. Pursuant to Specific Plan Action Program 8A,* the City shall work with the school districts to resolve the jurisdictional issue to best serve student needs and minimize the fiscal burden of the service providers. (*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.4-12 to -13.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Some actions to resolve the jurisdictional issue are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by such other agencies. If taken, such actions would avoid or substantially lessen the significant effects identified in the Final EIR.

Rationale for Finding. Resolving the school district jurisdiction issue will limit conflicts and ensure that school services are efficiently provided.

IMPACT 3.4/J. Financial Burden on School Districts. The cost of providing new school facilities could adversely impact local school districts by creating an unwieldy financial burden unless some form of financing is identified. DEIR page 3.4-13.

Mitigation Measures 3.4/17.0 to 19.0. Pursuant to Specific Plan Policy 8-3* and Action Program 8B, ensure that adequate school facilities are available prior to development in the RPA to the extent permitted by law, for example, by requiring dedication of school sites and/or payment of developer fees by new development. Pursuant to Specific Plan Action Program 8C,* the City shall work with school districts to establish appropriate funding mechanisms to fund new school development and encourage school districts to use best efforts to obtain state funding for new construction. (*Specific Plan provisions adopted throughout RPA.) DEIR p. 3.4-13; RC #15-31.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Some actions to fund new school development are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by such other agencies. If taken, such actions would avoid or substantially lessen the significant effects identified in the Final EIR.

Rationale for Finding. Through these mitigations, development creating school facilities demand will have primary responsibility for accommodating that demand, with the school districts being provided with back-up financial support from other sources.

IMPACT 3.4/K. Demand for Park Facilities. Without the addition of new parks and facilities, the increased demand for new park and recreation facilities resulting from buildout of the Project would not be met, resulting in deterioration of the City's park provision standard and of the City's ability to maintain existing services and facilities. This is also a significant cumulative impact. DEIR pages 3.4-16, 5.0-5.

Mitigation Measures 3.4/20.0 to 24.0. General Plan Amendment Guiding Policies A, B, and G and Implementing Policy D require the City of Dublin to provide and maintain parks and related facilities adequate to meet Project and citywide needs and in conformance with the City's Park and Recreation Master Plan 1992. Implementing Policy K specifically requires dedication and improvements for the 20 parks designated in the RPA with collection of in-lieu fees as required by City standards. DEIR pages 3.4-16 to -17, 5.0-5.

Mitigation Measures 3.4/25.0 to 27.0. Sufficient parkland shall be designated and set aside in the RPA to satisfy the City's Park and Recreation Master Plan 1992 and its park provision and phasing standards. DEIR pages 3.4-17, 5.0-5.

Mitigation Measure 3.4/28. The City shall implement Specific Plan Policies 6-1 to -6* to establish large, continuous natural open space areas with convenient access for users, and adequate access for maintenance and management; to preserve views of designated open space areas; and to establish a mechanism for open space ownership, management, and maintenance. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-18 to -19.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations provide added new parks and facilities to meet increased demand from Project residents, and require compliance with phasing plans in the Park and Recreation Master Plan 1992, to ensure that new parks and facilities construction will keep pace with new residential construction.

IMPACT 3.4/L. Park Facilities Fiscal Impact. Acquisition and improvement of new park and recreation facilities may place a financial strain on existing City of Dublin revenue sources unless adequate financing and implementation mechanisms are designed. DEIR page 3.4-18.

Mitigation Measures 3.4/20.0 to 31.0. Pursuant to Specific Plan Policy 4-29* and Action Program 4N,* the City shall ensure that development provides its fair share of planned open space; for example, through in-lieu fees under the City's parkland dedication ordinance. Pursuant to Specific Plan Program 4M,* the City shall develop a Parks Implementation Plan identifying phasing, facilities priorities and location, and design and construction responsibilities. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-18.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations ensure that needed park facilities will be provided by developers at the time of development, thereby avoiding the use of existing revenue sources to build new parks for Project area residents.

IMPACT 3.4/M, N. Impact on Regional Trail System and Impact on Open Space Connections. Without adequate provisions for trail easements and without adequate design and implementation, urban development along stream corridors and ridgelines would obstruct formation of a regional trail system and an interconnected open space system. DEIR page 3.4-18 to -19.

Mitigation Measure 3.4/32.0. Pursuant to General Plan Amendment Guiding Policy H,* establish a trail system with regional and subregional connections, including a trail along the Tassajara Creek corridor. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-19.

Mitigation Measures 3.4/23.0 and 33.0 to 36.0. Pursuant to General Plan Amendment Guiding Policy I, Implementation Policy D, Specific Plan Policies 6-1,* 6-3,* Action Program 40,* and consistent with the City's Parks and Recreation Master Plan 1992, use natural stream corridors and major ridgelines as the basis for a trail system with a continuous, integrated open space network, emphasizing convenient user access, pedestrian and bicycle connections between developed and open space areas, and developer dedication of ridgetop and stream corridor public access easements. (*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.4-17, -19.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Establishing a Project area trail system incorporating planned regional connections contributes to development of a regional trail system and allows the trail planning to be considered and incorporated into individual Project area developments in the RPA. By requiring that open space and trail planning be based on continuous physical features such as stream corridors and ridgelines, and that public access be provided along these features, these mitigations avoid a disconnected open space system.

IMPACT 3.4/O, P. Increased Solid Waste Production and Impact on Solid Waste Disposal Facilities. Increased population and commercial land use will cause a proportional increase in the total projected amount of solid waste and household hazardous waste generated by the City of Dublin. This increase creates the need for additional capacity, personnel, and vehicles to dispose of the wastes. It can create public health risks from improper handling. The increased solid waste and household hazardous waste generated by the Project may accelerate the closing schedule for Altamont landfill unless additional capacity is developed or alternate disposal sites are identified. This impact on the Altamont landfill is also a potentially significant cumulative impact. DEIR pages 3.4-21 to -22, 5.0-6.

Mitigation Measures 3.4/37.0 to 40.0. Pursuant to Specific Plan Action Program 8K* and other EIR mitigations, adopt a Solid Waste Management Plan for the RPA, including waste reduction programs such as composting and curbside and other collection of recyclables. Include goals, objectives, and programs necessary to integrate with the diversion targets of the City's Source Reduction and Recycling Element and Household Hazardous Waste Element. New development in the RPA shall demonstrate adequate available landfill capacity for anticipated wastes. (*Specific Plan provisions adopted throughout RPA.) DEIR pages 3-4.22 to -23, 5.0-6.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations minimize the amount of solid waste production and related needs and risks through compliance with AB 939 solid waste planning. Reducing the amount of Project-generated waste will also avoid an accelerated closing schedule for the Altamont landfill. In addition, these mitigations require that new

development anticipate and provide for adequate waste disposal before the development is approved.

IMPACT 3.4/Q. Demand for Utility Extensions. Development of the Project site will significantly increase demand for gas, electric and telephone services. Meeting this demand will require construction of a new Project-wide distribution system. This is a significant growth-inducing impact. DEIR pages 3.4-24, 5.0-14 to -15.

Mitigation Measures. None proposed. DEIR page 3.4-2.4.

Finding. No changes or alterations are available to avoid or substantially lessen this impact. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

IMPACT 3.4/R. Utility Extension Visual and Biological Impacts. Expansion of electrical, gas, and telephone lines could adversely affect visual and biological resources if not appropriately sited. DEIR page 3.4-24.

Mitigation Measures 3.4/41.0 to 44.0. Pursuant to Specific Plan Action Program 8L* and other identified mitigation measures, development within the RPA must document the availability of electric, gas, and telephone service and must place utilities below grade or, preferably, underground and routed away from sensitive habitat and open space lands. A development project service report shall be reviewed by the City prior to improvement plan approval. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-24 to -25.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Undergrounding utilities will avoid visual effects by placing the utility extensions where they cannot be seen. Routing the utility extensions away from sensitive habitat and open space areas will avoid impacts on biological resources by avoiding the resources themselves.

IMPACT 3.4/S. Consumption of Non-Renewable Natural Resources. Natural gas and electrical service would increase consumption of non-renewable natural resources. DEIR page 3.4-25.

Mitigation Measures 3.4/45.0 to 46.0. Major developers in the Project area shall provide demonstration projects on cost-effective energy conservation techniques including but not limited to solar water and space heating, landscaping

for water conservation, and shading. All development projects in the RPA shall prepare an energy conservation plan as part of their proposals. The plan shall demonstrate how site planning, building design, and landscaping will conserve use of energy during construction and long term operation. DEIR page 3.4-25.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Through the demonstration projects, developers can educate themselves and Project residents about available and feasible techniques to reduce consumption of energy resources. Requiring energy conservation plans forces both developers and the City to actively consider various techniques to reduce energy consumption and to build those techniques directly into the Project. These actions cannot, however, fully mitigate the impact.

IMPACT 3.4/T. Demand for Increased Postal Service. The Project will increase the demand for postal service. DEIR page 3.4-26.

Mitigation Measures 3.4/47.0 to 48.0. Pursuant to Specific Plan Policy 8-10 and Action Program 8M, the City shall encourage the U.S.P.S. to locate a new post office in the Eastern Dublin town center. DEIR page 3.4-26; RC # 15-37.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to site a new post office within the town center are within the ultimate responsibility and jurisdiction of the USPS and not the City of Dublin. Such actions can and should be taken by the USPS. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. A post office conveniently located in the town center area will provide postal service to meet the Project generated demand.

IMPACT 3.4/U. Demand for Increased Library Service. Without additional library facilities and staff, the increase in population resulting from the Project would adversely affect existing library services and facilities DEIR page 3.4-27.

Mitigation Measures 3.4/49.0 to 51.0. Pursuant to Specific Plan Policy 8-11* and Action Program 8N* and other identified mitigation measures, the City shall encourage and assist the Alameda County Library System to provide adequate library service in eastern Dublin, considering such factors as location, phasing, and funding of needed library services. (*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.4-27 to -28; RC #15-38.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to provide library facilities are within the ultimate responsibility and jurisdiction of the Alameda County Library system and not the City of Dublin. Such actions can and should be taken by the Alameda County Library System. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Providing library services to the RPA will meet Project generated demand. Planning how and when to provide those services will ensure that they are efficient and convenient to the maximum number of users.

Section 3.5 -- Sewer, Water, and Storm Drainage

IMPACT 3.5/A. Indirect Impacts Resulting from the Lack of a Wastewater Service Provider. Although Specific Plan Policy 9-4 (page 127) calls for the expansion of DSRSD's service boundaries to include the Specific Plan area, the Project does not provide for wastewater service to areas in the RPA outside the specific plan area. This could result in uncoordinated efforts by future developers in this area to secure wastewater services. DEIR page 3.5-5, RC # 32-18.

Mitigation Measure 3.5/1.0a. Pursuant to Specific Plan Policy 9-4,* the City shall coordinate with DSRSD to expand its service boundaries to encompass the entire RPA. (*Specific Plan provisions adopted throughout RPA.) RC # 32-18.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to expand DSRSD's service boundaries are within the ultimate responsibility and jurisdiction of the DSRSD and not the City of Dublin. Such actions can and should be taken by the DSRSD. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rational for Finding. Expanding DSRSD's service boundaries to include the entire RPA will ensure that securing wastewater services will be coordinated through one agency.

IMPACT 3.5/B. Lack of a Wastewater Collection System. Estimated wastewater flow for the RPA is 4.6 MGD; however, there currently is no wastewater collection system adequate to serve the Project area. DEIR page 3.5-5.

Mitigation Measures 3.5/1.0 to 5.0. Pursuant to Specific Plan Action Programs 9P,* 9I,* 9O,* 9M,* and 9N,* all development in the RPA shall be connected to public sewers and shall obtain a "will-serve" letter prior to grading permits; on-site package plants and septic systems shall be discouraged. The City shall request that DSRSD update its collection system master plan to reflect Project area proposed land uses, with the cost of the plan to be borne by future development in the RPA. All wastewater systems shall be designed and built in accordance with DSRSD standards. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-6; RC # 32-19, 32-20.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations will provide a wastewater collection system adequate to meet Project generated demand, and will ensure the system meets design and construction standards of DSRSD.

IMPACT 3.5/C. Extension of a Sewer Trunk Line with Capacity to Serve New Developments. Construction of a wastewater collection system could result in development outside the RPA that would connect to the Project's collection system. This is also a potentially significant growth-inducing impact. DEIR pages 3.5-6, 5.0-15.

Mitigation Measure 3.5/6.0. The proposed wastewater system shall be sized only for the RPA area. DEIR pages 3.5-6, 4-11, 5.0-15.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. By sizing the planned wastewater collection system only to serve the RPA, growth inducing impacts on lands outside that area are avoided.

IMPACT 3.5/D. Allocation of DSRSD Treatment and Disposal Capacity. There is limited available capacity at the DSRSD Treatment Plant, limiting the number of sewer permits available for new developments. It is very unlikely that any of the presently remaining DUE's will be available for the Eastern Dublin Area. DEIR page 3.5-7; RC #32-21.

Mitigation Measure 3.5/7.0. Pursuant to Specific Plan Action Program 9L,* development project applicants in the RPA shall prepare a design level water capacity investigation, including means to minimize anticipated wastewater flows and reflecting development phased according to sewer permit allocation. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-7.

Mitigation Measure 3.5/7.1. Development project applicants in the RPA shall obtain a wastewater "will-serve" letter from DSRSD before receiving a grading permit. RC #32-22.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The required investigation will allow development to be phased to ensure there are adequate wastewater facilities available to meet Project generated demand. The requirement of a "will-serve" letter will insure that adequate wastewater facilities will exist for all new development. If capacity is not available, DSRSD will not issue a will-serve letter. RC #32-22.

IMPACT 3.5/E. Future Lack of Wastewater Treatment Plant Capacity. Development of the Project require an increase in wastewater treatment plant capacity within DSRSD to adequately treat the additional wastewater flows to meet discharge standards. This is also a potentially significant cumulative impact in that increased demand on area wastewater treatment facilities exceeds current remaining capacity. DEIR page 3.5-7 to -8, 5.0-6.

Mitigation Measures 3.5/7.1, 8.0, 9.0. Pursuant to Specific Plan Policy 9-6* and mitigations identified in the EIR, ensure that wastewater treatment and disposal facilities are available for future development in the RPA through compliance with DSRSD's master plan to fund, design, and construct wastewater treatment plant expansion once export capacity is available (unless TWA approves export of raw wastewater, in which case DSRSD's wastewater treatment plant expansion will not be necessary). Also, development project applicants in the RPA shall obtain a wastewater "will-serve" letter from DSRSD before receiving a grading permit.

(*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.5-7 to -8, 5.0-6; RC #32-23.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Compliance with DSRSD's master plan will ensure that adequate wastewater treatment plant capacity will be available in the future to serve Project generated demand once export capacity of treated wastewater is provided (see Mitigation Measure 3.5/11.0). Alternatively, expanded treatment capacity will not be necessary if export of raw wastewater is approved. The requirement of a "will-serve" letter will insure that adequate wastewater facilities will exist for all new development. If capacity is not available, DSRSD will not issue a will-serve letter. RC #32-22.

IMPACT 3.5/F. Increase in Energy Usage Through Increased Wastewater Treatment. Development of the Project will result in increased wastewater flows and will require increased energy use for treatment of wastewater. DEIR page 3.5-8; RC #32-24.

Mitigation Measure 3.5/10.0. Include energy efficient treatment systems in any wastewater treatment plant expansion and operate the plant to take advantage of off-peak energy. DEIR page 3.5-8; RC #32-24.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. However, even if such actions are taken, this impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Use of energy efficient treatment systems and plant operations will reduce the amount of energy use but these actions cannot fully mitigate the impact.

IMPACT 3.5/G. Lack of Wastewater Current Disposal Capacity. The increase in wastewater flows from the Project and other sub-regional development will exceed available wastewater disposal capacity until additional export capacity is developed. This is also a significant cumulative impact. DEIR page 3.5-8, 5.0-6.

Mitigation Measures 3.5/7.1, 11 to 14.0. Pursuant to Specific Plan Policy 9-5* and Action Programs 9H,* 9J,* and 9K,* the City shall support current efforts to develop

additional export capacity. The City shall require use of recycled water for landscape irrigation in accordance with DSRSD's Recycled Water Policy and require development within the RPA to fund a recycled water distribution system model to reflect proposed land uses. Also, development project applicants in the RPA shall obtain a wastewater "will-serve" letter from DSRSD before receiving a grading permit. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-9, 5.0-6 to -7, RC #32-22, 32-25, 32-26, 32-27.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to develop additional export capacity are within the responsibility and jurisdiction of other public agencies, and not the City of Dublin. Such actions can and should take by such agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations will provide the additional wastewater disposal capacity necessary to meet Project generated demand. The requirement of a "will-serve" letter will insure that adequate wastewater facilities will exist for all new development. If capacity is not available, DSRSD will not issue a will-serve letter. RC #32-22.

IMPACT 3.5/E. Increase in Energy Usage Through Increased Wastewater Disposal. Development of the Project will result in increased wastewater flows and will require increased energy use for disposal of wastewater; more specifically, for (1) pumping raw wastewater to CCCSD for treatment under the TWA proposed project; and/or (2) operation of an advanced treatment and distribution system for recycled water. DEIR page 3-5.9.

Mitigation Measures 3.5/15.0 to 16.0. The City shall encourage off peak pumping to the proposed TWA export system. The City shall plan, design, and construct the Project recycled water treatment system for energy efficient operation including use of energy efficient treatment systems, optimal use of storage facilities, and pumping at off peak hours. DEIR pages 3.5-10 to -11.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. However, even if such actions are taken, this impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The proposed mitigations will reduce the amount of energy used for wastewater disposal but these actions cannot fully mitigate the impact.

IMPACT 3.5/I. Potential Failure of Export Disposal System. A failure in the operation of the proposed TWA wastewater pump stations would adversely affect the overall operation of the wastewater collection system for the Tri-Valley subregion, as well as the Eastern Dublin Project. DEIR page 3.5-10.

Mitigation Measure 3.5/17.0. Engineering redundancy will be built into the TWA pump stations, which will also have provisions for emergency power generators. DEIR page 3.5-10.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Engineering redundancy will minimize the risk of pump station system failure; providing emergency power generators will ensure that any system failure which does occur will be short lived, thereby avoiding the effects of such failure. RC #32-28.

IMPACT 3.5/J. Pump Station Noise and Odors. The proposed TWA wastewater pump stations could generate noise during their operation and could potentially produce odors. DEIR page 3.5-10.

Mitigation Measure 3.5/18.0. TWA's pumps and motors will be designed to comply with local noise standards and will be provided with odor control equipment. DEIR page. 3.5-10.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Requiring compliance with local noise standards will ensure that any noise produced not exceed acceptable levels. Odor control equipment will ensure that odor production effects are avoided. RC #32-28.

IMPACT 3.5/K. Storage Basin Odors and Potential Failure. The proposed TWA Emergency Wastewater Storage Basins could potentially emit odors and/or the basins could have structural failure

due to landslides, earthquakes, or undermining of the reservoir from inadequate drainage. DEIR page 3.5-10.

Mitigation Measure 3.5/19.0. TWA's basins will be covered, buried tanks with odor control equipment and will be designed to meet current seismic codes. DEIR page 3.5-11.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations ensure that any odors related to the TWA basins are contained and controlled within the basins so as not to be detectable beyond the basins. Compliance with seismic codes will ensure that the basins are properly constructed to withstand landslides and earthquakes and are provided with adequate drainage to avoid structural failure. RC #32-28.

IMPACT 3.5/L. Recycled Water System Operation. The proposed recycled water system must be constructed and operated properly in order to prevent any potential contamination or cross-connection with potable water supply systems. DEIR page 3.5-11.

Mitigation Measure 3.5/20.0. Construction of the recycled water distribution system will meet all applicable standards of the Department of Health Services (DHS) and San Francisco Bay Regional Water Quality Control Board (RWQCB). DEIR page 3.5-11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Applicable regulations of the DHS and RWQCB are designed to prevent cross-connection contamination; compliance with these regulations will therefore avoid the contamination impact.

IMPACT 3.5/M. Recycled Water Storage Failure. Loss of recycled water storage through structural damage from landslide, earthquake, and undermining of the reservoir through inadequate drainage. DEIR page 3.5-11.

Mitigation Measure 3.5/21.0. The City shall require reservoir construction to meet all applicable DSRSD and other health standards and shall require preparation of soils and geotechnical investigations to determine potential

landslide and earthquake impacts. Reservoirs shall be designed to meet current seismic codes and to provide adequate site drainage. DEIR page 3.5-11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Soils and geotechnical studies will ensure that reservoirs will be designed and constructed to comply with current seismic, DSRSD, and other applicable health standards, the purpose of which is to avoid structural failure.

IMPACT 3.5/N. Loss of Recycled Water System Pressure. Loss of pressure in the proposed recycled water distribution systems could result in the system being unable to meet peak irrigation demand, which could result in loss of vegetation through lack of irrigation water. DEIR page 3.5-12; RC #32-30.

Mitigation Measure 3.5/22.0. The recycled water pump stations shall meet all applicable DSRSD standards. DEIR page 3.5-12; RC #32-31.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Compliance with DSRSD standards will minimize the risk of pressure being lost.

IMPACT 3.5/O. Secondary Impacts from Recycled Watersystem Operation. Failure to identify and implement treatment plant improvements related to recycled water use may increase salinity in the groundwater basin. DEIR page 3.5-12.

Mitigation Measures 3.5/20.0. Recycled water projects shall incorporate salt mitigation required by Zone 7. DEIR page 3.5-12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Compliance with salt mitigation requirements will reduce the salinity of the recycled water, thereby avoiding the risk of increased salinity in the groundwater basin.

IMPACT 3.5/P. Overdraft of Local Groundwater Resources. If the Project area is not annexed to DSRSD and development projects are

not required to connect to DSRSD's water distribution system, development projects may attempt to drill their own wells, causing overdraft of existing limited groundwater supplies. DEIR page 3.5-17.

Mitigation Measures 3.5/24.0 to 25.0. Pursuant to Specific Plan Policy 9-2* and other EIR mitigations, the City shall coordinate with DSRSD to expand its service boundaries to include the Project area and to develop annexation conditions encouraging water conservation and recycling. The City shall encourage all developments in the RPA to connect to DSRSD's system and discourage the use of groundwater wells. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-17; RC #14-4.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Actions to expand DSRSD's service boundaries are within the responsibility and jurisdiction of the DSRSD and not the City of Dublin. Such actions can and should be taken by the DSRSD. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Annexation to DSRSD and connection to its water distribution system will eliminate the need for development projects to drill their own wells and will therefore avoid the risk of groundwater overdrafting.

IMPACT 3.5/Q. Increase in Demand for Water. Estimated average daily water demand for the RPA is 6.4 MGD, which demand could exceed available supply. This is also a potentially significant cumulative impact in that ongoing urban development in the Tri-Valley is resulting in a cumulative increase in water demand at a time when water supplies and delivery are uncertain. DEIR page 3.5-18, 5.0-7 to -8.

Mitigation Measures 3.5/26.0 to 31.0. Pursuant to Specific Plan Action Programs 9A* and 9B,* the City shall require development projects in the RPA to include water conservation measures within structures as well as in public and other improvements. Require developments to comply with DSRSD and Zone 7 recommendations for developing and using recycled water. Pursuant to other EIR mitigations, implement Zone 7 and DSRSD water supply and water quality improvements and interconnect Project area water systems with existing surrounding water systems for increased reliability. (*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.5-18 to -19; 5.0-9; RC #13-9, 32-43.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR. Some actions to improve water supply and quality are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions should be taken by such other agencies. If taken, such actions can and would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Through required water conservation and water recycling mitigations, the Project reduces the magnitude of the impact by reducing the demand for water using recycled water for irrigation reduces the estimated average daily water demand in the RPA to 5.5 MGD. (RC #32.52.) The remaining water quality and water supply mitigations will result in an increased water availability from Zone 7 and DSRSD to meet Project generated demand.

IMPACT 3.5/R. Additional Treatment Plant Capacity. The increase in water demand through development of the Project will require an expansion of existing water treatment facilities in order to deliver safe and potable water. DEIR page 3.5-19.

Mitigation Measures 3.5/32.0 to 33.0. Implement Zone 7's planned water treatment system improvements. DSRSD should construct two new chlorination/fluoridation stations at the two proposed Zone 7 turnouts to eastern Dublin, with the construction phased west to east as anticipated in the General Plan Amendment. DEIR page 3.5-19.

Finding. Such actions are within the responsibility and jurisdiction of other public agencies and not the City of Dublin. Such actions can and should be taken by other agencies. If taken, such actions would avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Proposed water treatment system improvements will insure that Project water supply meets all applicable water quality requirements.

IMPACT 3.5/S. Lack of a Water Distribution System. There currently is no water distribution system to provide water service for the RPA. DEIR page 3.5-20.

Mitigation Measures 3.5/34.0 to 38.0. Pursuant to Specific Plan Policy 9-1* and Action Programs 9C,* 9D,* 9E,* and 9G,* the City shall provide an adequate water supply system with related improvements and storage facilities for all development, in compliance with applicable DSRSD standards. The

City shall request that DSRSD update its water system masterplan to reflect the proposed land uses, and require a "will-serve" letter from DSRSD prior to grading permits for any Project area development. The City shall encourage the proposed water system to coordinate and combine with existing neighboring water systems. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.5-20.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations will provide a water distribution system adequate to meet Project-generated demand, and will insure the system meets design and construction standards of DSRSD.

IMPACT 3.5/T. Inducement of Substantial Growth and Concentration of Population. The proposed water distribution system will induce growth in the Project area and has been sized to potentially accommodate the Dougherty Valley Development to the north. However, if DSRSD does not provide water to the Dougherty Valley Development, the pipes will be sized to only accommodate the RPA. The impact is also a potentially significant growth-inducing impact. DEIR page 3.5-20, 5.0-15, RC #32-41, 32-55.

Finding. No feasible mitigation measures are identified to reduce this impact. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

IMPACT 3.5/U. Increase in Energy Usage Through Operation of the Water Distribution System. Development of the Project will result in increased water demand and will require increased energy use to operate a water distribution system, especially for pumping water to the system and to storage. DEIR page 3.5-21.

Mitigation Measure 3.5/40. Plan, design, and construct the water distribution system for energy efficient operation. Design pump stations to take advantage of off-peak energy. DEIR page 3.5-21.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Use of energy efficient water distribution systems and operations will reduce the amount of energy used, but these actions cannot fully mitigate the impact.

IMPACT 3.5/V. Potential Water Storage Reservoir Failure. Loss of storage in proposed water distribution reservoirs from landslides, earthquakes, and/or undermining of the reservoir through inadequate drainage would adversely affect the ability of the water supply system to maintain water pressures and to meet fire flows. DEIR page 3.5-21.

Mitigation Measure 3.5/41.0. Require water reservoir construction to meet all applicable DSRSD standards. Prepare soils and geotechnical investigations to determine potential landslide and earthquake impacts. Design the reservoirs to meet current seismic codes, and to provide adequate site drainage. DEIR page 3.5-21.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Soils and geotechnical studies will insure that reservoirs will be designed and constructed to comply with current seismic, DSRSD, and site drainage standards, thereby avoiding the risk of structural damage or failure.

IMPACT 3.5/W. Potential Loss of System Pressure. Loss of pressure in the proposed water distribution systems could result in contamination of the distribution system and would not allow adequate flows and pressures essential for fire flow. DEIR page 3.5-22.

Mitigation Measure 3.5/42.0. The proposed water pump stations shall meet all applicable standards of DSRSD and shall include emergency power generation back-up. DEIR page 3.5-22.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Compliance with DSRSD standards will minimize the risk of pressure being lost. Providing emergency power generators will insure the pumps will continue operating, thereby avoiding the risk of contamination in the distribution system and insuring that adequate water flows are available for fire protection.

IMPACT 3.5/X. Potential Pump Station Noise. Proposed water system pump stations would generate noise during their operation that could adversely affect the surrounding community. DEIR page 3.5-22.

Mitigation Measure 3.5/43.0. Design pump stations to reduce sound levels from operating pump motors and emergency generators. DEIR page 3.5-22.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Reducing sound levels of the mechanical equipment will reduce the amount of noise perceivable by surrounding residents, thereby avoiding the impact.

IMPACT 3.5/Y. Potential Flooding. Development of the Project and development of former agricultural, rural, and open space lands throughout the Tri-Valley will result in an increase in runoff to creeks and will result in an increased potential for flooding. This is also a potentially significant cumulative impact. DEIR page 3.5-25, 5.0-9.

Mitigation Measure 3.5/44.0 to 48.0. Pursuant to Specific Plan Policies 9-7* and 9-8,* Action Programs 9R* and 9S,* and other EIR mitigations, require a master drainage plan for each development project in the RPA to provide drainage facilities adequate to prevent increased erosion or flooding, including channel improvements with natural creek bottoms, and side slopes with natural vegetation. This design level plan shall include studies of the development project area hydrology, potential impacts of the development project, and proposed design features to minimize runoff flows and their effects on erosion and riparian vegetation. Development projects shall also address potential downstream flooding, and shall include retention/detention facilities and/or energy dissipators to minimize and control runoff, discharge, and to minimize adverse biological and visual effects. Construct storm drainage facilities in accordance with approved storm drainage master plan. (*Specific Plan provisions adopted throughout RPA.) DEIR 3.5-25 to -26, 5.0-9.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Through planning and implementation of storm drainage master plans, development projects will minimize the amount of runoff to creeks and will provide drainage facilities to control the rate and location of runoff that does discharge into creeks. These measures will minimize the increase in runoff, thereby avoiding increased flooding potential.

IMPACT 3.5/Z. Reduced Groundwater Recharge. Increasing the amount of impervious surfaces in the Project area could reduce the area's already minimal groundwater recharge capabilities. This is also a potentially significant cumulative impact, as impervious surfaces increase throughout the Tri-Valley. DEIR page 3.5-26; 5.0-9 to -10.

Mitigation Measure 3.5/49.0 to 50.0. Pursuant to Specific Plan Policy 9-9* and other EIR mitigations, plan facilities and operations that protect and enhance water quality; support Zone 7's ongoing groundwater recharge program for the nearby Central Basin, which contains the majority of the Tri-Valley's groundwater resources. (*Specific Plan provisions adopted throughout RPA.) DEIR page 2.5-26, 5.0-9.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigation measures protect and enhance what minimal groundwater recharge capability exists in the Project area.

IMPACT 3.5/AA. Non-Point Sources of Pollution. Development of the Project could result in a deterioration of the quality of stormwater due to an increase in non-point sources of pollution including (1) urban runoff; (2) non-stormwater discharges to storm drains; (3) subsurface drainage; and (4) construction site runoff (erosion and sedimentation). This is also a potentially significant cumulative impact as other projects in the subregion are developed. DEIR page 3.5-26.

Mitigation Measure 3.5/52.0 to 55.0. The City shall develop a community based education program on non-point sources of pollution, coordinating such programs with current Alameda County programs. The City shall require all development to meet the requirements of the City's "Best Management Practices", the City's NPDES permit, and the County's Urban Runoff Clean Water Program to mitigate stormwater pollution. DEIR 3.5-27, 5.0-10, Addendum.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Education programs will acquaint all Project area residents with the issue of non-point pollution, and will suggest ways residents can avoid such pollution. Existing City, County, and State regulatory programs will insure that potential impacts of non-point

sources of pollution or stormwater quality will be mitigated to a level of insignificance.

Section 3.6 -- Soils, Geology, and Seismicity

IMPACT 3.6/B. Earthquake Ground Shaking: Primary Effects.

Earthquake ground shaking resulting from large earthquakes on active fault zones in the region, could be strong to violent, and could result in damage to structures and infrastructure and, in extreme cases, loss of life. DEIR page 3.6-7.

Mitigation Measure 3.6/1.0. Use modern seismic design for resistance to lateral force in construction of development projects, and build in accordance with Uniform Building Code and applicable county and city code requirements. DEIR page 3.6-7.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Modern seismic design and compliance with applicable building codes will reduce the risk of structural failure, major structural damage, and loss of life from the effects of ground-shaking. These actions will not, however, completely avoid the impact.

IMPACT 3.6/C. Earthquake Ground Shaking: Secondary Effects. The secondary effects of ground shaking include seismically-induced landsliding, differential compaction and/or settlement. This is also a significant cumulative impact in that further development in the area could expose residents to significant safety hazards and could strain emergency response systems. DEIR page 3.6-8, 5.0-10.

Mitigation Measure 3.6/2.0. In relatively flat areas, development should be set back from unstable and potentially unstable land or these landforms should be removed, stabilized, or reconstructed. Where improvements are located on unstable land forms, use modern design, appropriate foundation design, and comply with applicable codes and policies. DEIR page 3.6-8, 5.0-10.

Mitigation Measure 3.6/3.0. In hillside areas, where development may require substantial grading, require appropriate grading and design to completely remove unstable and potentially unstable materials. DEIR page 3.6-8, 5.0-10.

Mitigation Measures 3.6/4.0 to 5.0. Use engineering techniques and improvements, such as retention structures, surface and subsurface drainage improvements, properly designed keyways, and adequate compaction to improve the stability of fill areas and reduce seismically induced fill settlement. DEIR page 3.6-8, 5.0-10.

Mitigation Measure 3.6/6.0. Design roads, structural foundations, and underground utilities to accommodate estimated settlement without failure, especially across transitions between fills and cuts. Remove or reconstruct potentially unstable stock pond embankments in development areas. DEIR page 3.6-8, 5.0-10.

Mitigation Measure 3.6/7.0. Require all development projects in the Project area to perform design level geotechnical investigations prior to issuing any permits. The investigations should include stability analysis of natural and planned engineered slopes, and a displacement analysis to confirm the effectiveness of mitigation measures proposed in the investigation. DEIR page 3.6-9, 5.0-10.

Mitigation Measure 3.6/8.0. Earthquake preparedness plans should be developed by the City and all Project site residents and employees should be informed of appropriate measures to take in the event of an earthquake. DEIR page 3.6-9, 5.0-10.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Mitigations 3.6/2.0 to 6.0 provide specific engineering techniques for reducing the effects of ground shaking throughout development in the Project area. Mitigation 3.6/7.0 requires development projects to apply these and other available engineering techniques at a design level, to identify specifically the effects that can occur on a particular site, to propose mitigations specific to those effects and the site, and to provide a means for evaluating the likely success of those measures. Through these engineering, planning, and design mitigations, development projects will be able to anticipate and avoid or reduce ground shaking effects before the development is built.

IMPACT 3.6/D. Substantial Alteration to Project Site Landforms. Development of the Project area could result in permanent change to the Project site's existing topography, particularly in hillside areas. This is also a significant cumulative impact as the hillsides and ridgelands of surrounding Tri-Valley cities are

graded and excavated for development projects. DEIR page 3.6-9, 5.0-10.

Mitigation Measures 3.6/9.0 to 10.0. Adapt improvements to natural landforms in order to minimize required cuts and fills through such techniques as construction of partial pads and use of retaining structures and steeper cut and fill slopes where appropriate and properly designed. Further reduce landform alteration by carefully siting individual improvements on specific lots after identifying geotechnically feasible building areas and alignments. Site improvements to avoid adverse geotechnical conditions and the need for remedial grading and use techniques such as clustering where appropriate to minimize grading and/or avoid adverse geotechnical conditions. DEIR page 3.6-9, 5.0-10.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigation measures provide design and engineering techniques which maintain natural landforms to the greatest degree possible, and thereby minimize alteration of those landforms. The mitigations also require that geotechnical conditions be identified for development projects, allowing individual projects to identify and reduce, or in some cases completely avoid, the condition which might otherwise require alteration.

IMPACT 3.6/F, G. Groundwater Impacts. Groundwater Impacts Associated with Irrigation. Shallow groundwater conditions occur in places throughout the RPA and could be caused by irrigation associated with development of the RPA. These conditions can adversely affect the performance of foundation and pavements, particularly in areas with expansive soils and bedrock. In addition, shallow groundwater can cause slope instability, including landsliding and fill settlement, and can lead to liquefaction of RPA soils. DEIR page 3.6-10.

Mitigation Measures 3.6/11.0 to 13.0. Prepare detailed design level geotechnical investigations on development projects within the RPA, to locate and characterize groundwater conditions and formulate design criteria and measures to mitigate adverse conditions. Control groundwater by construction of subdrain systems, remove stock pond embankments and drain reservoirs in development areas. (See MM 3.6/4, 6, 15, 18, 23, and 27 for additional techniques to control soil moisture and maintain slope stability. DEIR page 3.6-8, -11 through -14.) DEIR page 3.6-10 through -11; RC #15-43.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The geotechnical investigation will identify areas which have groundwater, and development will proceed in accordance with measures to protect structures and improvements from slope and soil instability due to shallow groundwater.

IMPACT 3.6/H. Shrinking and Swelling of Expansive Soils and Bedrock. The Project site contains expansive soils and bedrock, which tend to shrink upon drying and swell upon wetting. This process can cause distress to overlying structures and infrastructure, causing damage to foundations, slabs, and pavements. DEIR page 3.6-11.

Mitigation Measures 3.6/14.0 to 16.0. Prepare design level geotechnical investigations for development projects in the Project area to characterize site-specific soils and bedrock conditions, and to formulate appropriate design criteria and mitigation measures for those conditions. Such responsive measures include, but are not limited to, controlling moisture in the soils and bedrock, and designing foundations and pavements to be built either below the zone of seasonal moisture change, or upon structurally supportive floors and after removal of the expansive materials. DEIR page 3.6-11 to -12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The design level geotechnical evaluation will identify expansive soils and bedrock and insure that special techniques are used in these areas to reduce the risk of structure and infrastructure damage.

IMPACT 3.6/I. Natural Slope Stability. The Project area contains active and dormant landslides, as well as steep slopes and colluvium-filled swales, which are subject to potential slope instability, and could cause damage to structures and infrastructure located in these areas. DEIR page 3.6-12.

Mitigation Measures 3.6/17.0 to 19.0. Development projects within the Project area should prepare design level geotechnical investigations to characterize site-specific slope stability conditions and to formulate appropriate design criteria and mitigation measures in response to those conditions. Such design measures and mitigations include siting development away from unstable landforms and from

slopes greater than about 30%, and providing lower density development in steep, unstable areas. Where unstable areas cannot be avoided, design measures and mitigations include removing the unstable material, reconstructing or repairing the unstable area, or engineering structural responses, including subsurface drainage improvements. (See also MM 3.6/26.0, recommending maintenance and inspection plans for drainage systems. DEIR page 3.6-14.) DEIR page 3.6-12 to -13.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The design level geotechnical investigation will disclose areas which may be susceptible to slope instability. Special techniques, such as siting of structure and improvements, removing the unstable materials, and providing structural remediation, will improve slope stability.

IMPACT 3.6/J. Cut and fill Slope Stability. Potentially unstable cut and fill slopes may fail or settle, causing damage to structures and infrastructure. DEIR page 3.6-13.

Mitigation Measures 3.6/20.0 to 21.0. Require grading plans for hillside areas, which plans minimize grading and required cuts and fills by adapting roads to natural landforms, stepping structures down steeper slopes, and demonstrating compliance with applicable building code and other applicable City and County requirements. DEIR page 3.6-13.

Mitigation Measures 3.6/22.0 to 25.0. Detailed design level geotechnical investigations such as that required by mitigation measure 3.6/17.0 should describe and evaluate cut and fill slopes proposed for development projects in the RPA. Retaining structures, reinforcement and drainage measures should be provided on cut slopes as determined by code requirements and the specific conditions identified in the geotechnical investigation. Unretained cut slopes should generally not exceed 3:1. Filled slopes steeper than 5:1 should be keyed and benched into competent material and provided with subdrainage prior to placing engineered fill. DEIR pages 3.16-13 to -14.

Mitigation Measure 3.6/26.0. Development projects in the Project area should prepare plans for the periodic inspection and maintenance of subsurface drainage features, and the removal and disposal of materials deposited in surface drains and catch basins. (See also measures

described in MM 3.6/28.0.) The plans should include inspection and disposal procedures, schedule and reporting requirements, and a responsible party, and should emphasize overall long-term Project monitoring and maintenance. DEIR page 3.6-14.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The detailed design level geotechnical investigation will identify areas where cut and fill slopes are proposed. Specific grading plans affecting these conditions would be required to show how each development project will minimize cut and fill slopes, and how the remaining slopes will be stabilized through siting or engineering features. Long-term monitoring and maintenance plans will ensure that the design facilities and engineered features effectively protect the cut and fill slopes over the long term.

IMPACT 3.6/K, L. Erosion and Sedimentation: Construction-Related and Long-Term. Construction of development projects in the RPA will modify the ground surface and its protective vegetative cover and will alter surface runoff and infiltration patterns, causing short-term erosion and sedimentation during construction, and long-term erosion and sedimentation once permanent structures and improvements are in place. The long-term impact is also a significant cumulative impact as similar sites are developed throughout the Tri-Valley. DEIR page. 3.6-14, 5.0-11.

Mitigation Measure 3.6/27.0. Time grading activities to avoid the rainy season as much as possible, and implement interim control measures, including but not limited to, providing water bars, mulch and net blankets on exposed slopes, straw bale dikes, temporary culverts and swales, sediment traps, and/or silt fences. DEIR page 3.6-14.

Mitigation Measure 3.6/28.0. Reduce long-term erosion and sedimentation impacts through appropriate design, construction, and continued maintenance of surface and subsurface drainage. Appropriate measures include, but are not limited to, constructing sediment catch basins, adequate storm sewer systems, stabilizing creek banks, revegetating and maintaining wooded slopes, constructing facilities to control drainage and runoff, and emphasizing periodic homeowner/landowner maintenance. (See also MM 3.6/26.) DEIR page 3.6-15, 5.0-11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.
Rationale for Finding. These mitigations include measures to prevent concentration of runoff, control runoff velocity, and trap silts on both a short-term and long-term basis, thereby minimizing the identified impact.

Section 3.7 -- Biological Resources

IMPACT 3.7/A. Direct Habitat Loss. Under Alternative 2, the Project will result in the loss, degradation, or disturbance of 1900 acres of existing vegetation. No unique or rare plant species occur in the Project area; however, urbanization will substantially reduce the habitat and range for botanical and wildlife species which are resident or migratory users of the RPA. The Project contributes to the cumulative, ongoing loss of natural habitat in the Tri-Valley region, and is also a potentially significant cumulative impact. DEIR page 3.7-9, 5.0-11, Addendum.

Mitigation Measures 3.7/1.0 to 3.0. Pursuant to Specific Plan Policies 6-21* and 6-23,* and Action Program 60,* direct disturbance of trees or vegetation should be minimized and restricted to those areas actually designated for construction of improvements. Development projects should include vegetation enhancement/management plans for all open space areas identifying ways to enhance the biological potential of the area as wildlife habitat and focusing on such measures as reintroducing native species to increase vegetative cover and plant diversity. Development projects shall also be required to prepare a detailed revegetation/restoration plan, developed by a qualified revegetation specialist, for all disturbed areas that are to remain undeveloped. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-9, 5.0-11.

Mitigation Measure 3.7/4.0. The City shall develop and implement grazing management plans to protect riparian and wetland areas, increase plant diversity, and encourage the recovery of native plants, especially perennial grasses. DEIR page 3.7-9, 5.0-11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Restricting direct disturbance to actual construction areas will reduce the amount of habitat lost. The vegetation and grazing plans will protect and restore disturbed areas to minimize the amount of habitat

loss and to enhance the value of the habitat area remaining.

IMPACT 3.7/B. Indirect Impacts of Vegetation Removal.

Construction activities on the Project site may cause dust deposition, increased soil erosion and sedimentation, increased potential for slope failures, and alteration of surface and subsurface drainage patterns. DEIR page 3.7-9 to -10.

Mitigation Measure 3.7/5.0. Pursuant to Specific Plan Policy 6-22,* all disturbed areas should be revegetated as quickly as possible with native trees, shrubs, herbs, and grasses, to prevent erosion. The City shall determine specific physical characteristics of proposed revegetation areas to evaluate the long-term feasibility of the proposed mitigation and to identify potential conflicts at the site. Plants used for revegetation will be native to the Tri-Valley Area. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-10; RC # 13-18.

Mitigation Measures 3.6/18.0, 22.0, 23.0, and 3.11/1.0. Development should avoid siting on steep slopes and should observe special design and engineering mitigation features where construction occurs on 3:1 or steeper slopes. The City of Dublin shall require dust deposition mitigations during construction, including but not limited to, watering the construction site, daily clean-up of mud and dust, replanting and repaving and other measures to reduce wind erosion. DEIR pages 3.6-12 to -13, 3.7-10, 3.11-3 to -4.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Requiring construction to avoid siting on steep slopes will protect hillside vegetation and reduce erosion impacts. Where disturbance is necessary, engineering and other techniques to reduce erosion and sedimentation and promote slope stability will also ensure that revegetation efforts to control erosion will be more efficient and successful.

IMPACT 3.7/C. Loss or Degradation of Botanically Sensitive Habitat. Direct loss and degradation from grading, road construction, and culvert crossings could adversely affect the Project area's unique and sensitive Northern Riparian Forest, Arroyo Willow Riparian Woodland, and Freshwater Marsh habitats. Indirect impacts could result from increased sedimentation or spoil deposition affecting stream flow patterns and damaging young seedlings and the roots of woody plants. This impact is also a potentially significant cumulative impact. DEIR page 3.7-10, 5.0-11.

Mitigation Measures 3.7/6.0, 7.0, and 11.0, Riparian and Wetland Areas. Pursuant to Specific Plan Policies 6-9,* 6-10,* and Action Program 6E,* natural riparian and wetland areas shall be preserved wherever possible. All development projects in the RPA shall consult with the Army Corps of Engineers (COE) and the California Department of Fish and Game (DFG) to determine these agencies' jurisdiction over the riparian or wetland area. These areas shall be incorporated into project open space areas. Any lost riparian habitat shall be replaced as required by DFG. Any lost wetlands shall be mitigated per COE's "no net loss" policy. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-10, and -11, 5.0-12.

Mitigation Measures 3.7/8.0 to 10.0, 12.0 to 14.0. Pursuant to Specific Plan Policies 6-11 to 6-13,* and Action Programs 6F to 6H,* the City shall require revegetation of natural stream corridors with native plant species and preservation and maintenance of natural stream corridors in the Project area, through measures including, but not limited to, avoiding underground drainage systems in favor of natural open-stream channels and retention basins. The City shall establish a stream corridor system (see Specific Plan Figure 6.1) to provide multi-purpose open space corridors for pedestrian and wildlife circulation. The City should also work with Zone 7 and DFG to develop a stream corridor restoration program, with standards for grading, stabilization, and revegetation, and long-term management of RPA stream channels. Development projects in the RPA are to be reviewed against, and any approval shall be consistent with, the program standards. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-10 to -12, 5.0-12; RC #14-7, 35-25.

Mitigation Measure 3.7/15.0. Pursuant to Specific Plan Action Program 6K,* the City of Dublin shall establish and maintain a liaison with state and federal resource management agencies throughout the planning and development process of individual development projects, in order to avoid violations of state and federal regulations and insure that specific issues and concerns are recognized and addressed. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-12, 5.0-12.

Mitigation Measures 3.7/16.0 to 17.0. Existing sensitive habitats shall be avoided and protected where feasible. Construction near drainages shall take place during the dry season. DEIR page 3.7-12, 5.0-12.

Finding. Changes or alterations have been required in, or incorporated into the Project. These changes will avoid or

substantially lessen the Project-related significant effects identified in the final EIR. However, these changes will not avoid the cumulative effects of lost or degraded biologically sensitive habitat. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Requiring compliance with "no net loss" policies will ensure that the amount of habitat shall remain constant. By incorporating wildlife corridors into Project plans, wildlife habitats will be enhanced and will not become isolated because wildlife will be able to migrate through these corridors as necessary. Disturbance of natural stream corridors can reduce the habitat value of these areas, but will be minimized by requirements to preserve and maintain these corridors in a natural, open condition, and by requiring construction to take place in the dry season. Any disturbed streams shall be rebuilt, reconstructed and revegetated according to the stream corridor plan, which will further enhance and protect habitat values in the RPA. Even with these protections for the RPA's biologically sensitive resource, the cumulative impact cannot be fully mitigated.

IMPACT 3.7/D. San Joaquin Kit Fox. Construction of new roads and facilities could adversely impact kit fox by destroying potential dens or burying foxes occupying dens at the time of construction. Modification of natural habitat could reduce available prey and den sites. Increased vehicle traffic, the presence of humans and domestic dogs, and resident use of poison for rodent control could kill or disturb foxes or reduce their prey populations. DEIR page 3.7-12 to -13.

Mitigation Measure 3.7/18.0. The City shall require all development in the RPA to comply with the East Dublin San Joaquin Kit Fox Protection Plan outlined in Appendix E, DEIR Part II. Extensive mitigation measures stress siting urban development to avoid kit fox habitat where possible, and protecting and enhancing the habitat which remains primarily in the Open Space and Rural Residential areas. Mitigations include measures for pre-construction and construction conditions, and address steps to be taken if potential or known dens are identified. DEIR page 3.7-13, DEIR Appendix E (as revised following RC #20-7.)

Mitigation Measure 3.7/18.1. The City of Dublin shall work with other agencies to develop a management plan that identifies measures to protect viable habitat for the kit fox in the Tri-Valley area. RC #20-5.

Mitigation Measure 3.7/19.0. Pursuant to Specific Plan Action Program 6N,* the City shall restrict rodenticide and herbicide use. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-13.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Appendix E provides a comprehensive protection plan addressing several phases of kit fox protection, from avoidance of potential dens to maintenance of habitat. Through this plan, the Project will avoid most direct and indirect adverse effects on any kit fox that might be present in the Project area.

IMPACTS 3.7/F to I. Red-legged Frog, California Tiger Salamander, Western Pond Turtle, Tri-Colored Blackbird. The destruction and alteration of water impoundments and stream courses in the RPA threatens to eliminate habitat for these species. Increased sedimentation into the riparian areas could reduce water quality and threaten breeding and larval habitat. Disturbance of the already minimal vegetation in the stream courses could reduce habitat opportunity for adult species. Increased vehicle traffic and new road construction could increase direct mortality. Harassment and predation by feral dogs and cats already occurs, and would increase with increased residential development. DEIR page 3.7-13 to -14.

Mitigation Measures 3.7/20.0 to 22.0. Pursuant to Specific Plan Action Program 6L* and other EIR mitigations, development projects in the RPA shall prepare open space plans to enhance and preserve existing habitat and revegetation plans for any disturbed open space or habitat areas and shall preserve and protect riparian, wetland, and stream corridor areas whenever possible. (See MMs 3.7/2.0 to 3.0.) Maintain a minimum buffer of at least 100 feet around breeding sites of the red-legged frog, California tiger salamander, and Western pond turtle. Development projects in the RPA shall conduct a pre-construction survey within sixty days prior to habitat modification to verify the presence of sensitive species. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.7-14.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Open space protection, revegetation, and restoration planning, as well as planning to protect and enhance wetland and riparian areas will also protect and

minimize impacts to the riparian habitat necessary for the species identified in this impact.

IMPACTS 3.7/K. Golden Eagle: The conversion of grasslands and the consequent reduction of potential prey could reduce the amount and quality of foraging habitat for golden eagles. Noise and human activity associated with development could also disrupt foraging activities. Elimination of golden eagle foraging habitat is also a potentially significant cumulative impact which contributes to the overall regional loss of foraging habitat for this species. DEIR page 3.7-15, 5.0-12.

Mitigation Measure 3.7/25.0. Designate substantial areas of land in the Project area as Open Space or Rural Residential (including future study areas), providing open space protection and low intensity development that will also provide a suitable foraging habitat. DEIR page 3.7-15, 5.0-12.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Providing a natural open space zone around the existing golden eagle nest avoids destruction of the nesting site; providing an additional buffer during the golden eagle reproductive period further protects the integrity of the existing nesting site. The natural open space zone, together with the over _____ acres of open space and low intensity development across the Project site provides ample opportunity to maintain effective foraging habitat for golden eagles.

IMPACT 3.7/L. Golden Eagle and Other Raptor Electrocutions. Golden eagles and other raptors which perch or fly into high-voltage transmission lines may be electrocuted. DEIR page 3.7-15.

Mitigation Measures 3.7/26.0 and 3.4/42.0. Require all utilities to be located below grade where feasible. Pursuant to Specific Plan Action Program 6M,* require all transmission lines to be undergrounded where feasible. Where not feasible, design specifications to protect raptors from electrocution shall be implemented. These specifications include, but are not limited to, spacing dangerous components; insulating conductors, using non-conductive materials, or providing perch guards on cross arms; and avoiding grounded steel cross arm braces. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.4-24, 3.7-15 to -16.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Undergrounding utilities, including all transmission lines, avoids the electrocution hazard. Where the hazard cannot be avoided through undergrounding, the design specifications identified in the mitigations reduce the electrocution hazards by neutralizing and/or covering the features that provide opportunities for electrocution.

IMPACT 3.7/M, N. Burrowing Owl and American Badger. Annual grasslands in the RPA provide suitable habitat for burrowing owls. Development and related construction activity could destroy both burrowing owl and American badger burrows. Harassment by feral dogs and cats, as well as use of poisons for rodent control, could harm these species and/or reduce their prey populations. DEIR page 3.7-16 to -17.

Mitigation Measures 3.7/20.0 and 27.0. Pursuant to Specific Plan Action Program 6L* and other EIR mitigations, development projects in the RPA shall conduct a pre-construction survey within sixty days prior to habitat modification to verify the presence of sensitive species. The projects shall maintain a minimum buffer of at least 300 feet around the breeding sites of the American badger during the breeding season (March to September) to avoid direct loss of individuals. Also, projects shall maintain a minimum buffer of at least 300 feet around known or identified nesting sites of the burrowing owl, or implement other mitigation actions pursuant to standardized protocol now under development, including relocation of nesting sites in coordination with the USFWS and the CDFG. (*Specific Plan provisions adopted throughout RPA.) DEIR pages 3.7-14, and -17; RC #15-60.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The pre-construction survey and required buffer zone around known nesting and breeding sites preserves these species' burrows by allowing them to be avoided during the construction and development process.

IMPACT 3.7/O. Prairie Falcon, Northern Harrier, and Black-Shouldered Kite. Development in the RPA could cause loss of foraging habitat. DEIR page 3.7-17.

Mitigation Measure 3.7/25.0. Substantial areas of land in the Project area are designated for Open Space and low intensity Rural Residential land uses (including future study areas). DEIR pages 3.7-15 and -17.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The designated open space and low intensity rural residential uses provide adequate foraging habitat for these species.

IMPACT 3.7/P. Sharp-Shinned Hawk and Cooper's Hawk. Development in the RPA could cause loss of foraging habitat. DEIR page 3.7-17.

Mitigation Measures 3.7/6.0 through 17.0 and 21.0. Establish protective buffer zones for riparian and freshwater marsh habitats to protect and enhance sensitive habitats. Preserve riparian, wetland, and stream corridor areas; where avoidance of these areas is not feasible, prepare and implement habitat restoration, enhancement and maintenance plans. DEIR pages 3.7-10 to -12, -14, -17.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The mitigations provide preservation, enhancement and maintenance features for riparian and freshwater marsh habitats upon which these species rely for forage. Protecting and enhancing this habitat avoids the impact of lost habitat.

IMPACT 3.7/S. Special Status Invertebrates. Impacts to special status invertebrates cannot be estimated at this time. DEIR page 3.7-18.

Mitigation Measure 3.7/28.0. Species-specific surveys shall be conducted in appropriate riparian/wetland habitats prior to approval of specific projects in the RPA. DEIR page 3.7-18, Addendum.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Any potential impacts to Special Status Invertebrates will be addressed during CEQA review of specific development projects in the RPA.

Section 3.8 -- Visual Resources

IMPACT 3.8/A. Standardized "Tract" Development. Generic "cookie-cutter" development could obscure the specific natural features of the RPA, such as its landforms, vegetation, and watercourses, that make it a unique place with its own identity. DEIR page 3.8-4.

Mitigation Measure 3.8/1.0. Pursuant to the goal statement in Specific Plan Section 6.3.4,* establish a visually distinctive community which preserves the character of the natural landscape by protecting key visual elements and maintaining views from major travel corridors and public spaces. Implement the extensive design guidelines for development as described in Chapter 7* of the Specific Plan. These guidelines provide a flexible design framework, but do not compromise the community character as a whole. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-5.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. By protecting key natural and visual elements, the Project maintains the natural features of the RPA, which make it unique. The general design guidelines for the Project, including a village center, town center, mixed use orientation, and varying lot sizes, provide a varied development pattern, which avoids the look of standard cookie-cutter tract developments.

IMPACT 3.8/B. Alteration of Rural/Open Space Visual Character. Urban development of the RPA will substantially alter the existing rural and open space qualities that characterize eastern Dublin. This is also a significant cumulative impact as the natural rural character of the Tri-Valley subregion is replaced by urban development. DEIR page 3.8-5, 5.10-12.

Mitigation Measure 3.8/2.0. Implement the land use plan for the RPA, which plan emphasizes retaining the predominant natural features, such as ridgelines and watercourses, and preserves the sense of openness that characterizes Eastern Dublin. DEIR page 3.8-5, 5.0-12.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Maintaining predominant natural features minimizes the alteration of the RPA's current rural open space character; however, it does not fully mitigate this impact.

IMPACT 3.8/C. Obscuring Distinctive Natural Features. The characteristic unvegetated landscape of the RPA heightens the visual importance of existing trees, watercourses, and other salient natural and cultural features. The Project has the potential to obscure or alter these existing features and thereby reduce the visual uniqueness of the site. DEIR page 3.8-5.

Mitigation Measure 3.8/3.0. Pursuant to Specific Plan Policy 6-28,* preserve the natural open beauty of the hills and other important visual resources, such as creeks and major stands of vegetation. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-5.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. This mitigation measure calls for preservation of the RPA's important visual resources, thereby avoiding the impact of obscured or altered visually important features.

IMPACT 3.8/D. Alteration of Visual Quality of Hillside. Grading and excavation of building sites in hillside areas will severely compromise the visual quality of the RPA. DEIR page 3.8-6.

Mitigation Measures 3.8/4.0 to 4.5. Pursuant to Specific Plan Policies 6-32,* and 6-34 to -38,* grading and excavation throughout the RPA should be minimized, by using such grading features as gradual transitions from graded areas to natural slopes, by revegetation of graded areas, by maintaining natural contours as much as possible and grading only the actual development areas. Building pads in hillside areas should be graded individually or stepped, wherever possible. Structures and roadways should be designed in response to the topographical and geotechnical conditions. Structures should be designed to blend in with surrounding slopes and topography and the height and grade of cut and fill slopes should be minimized wherever feasible. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-6.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The various grading techniques identified, together with revegetation and sensitive building design will avoid the impact by minimizing physical alteration throughout the RPA.

IMPACT 3.8/E. Alteration of Visual Quality of Ridges. Structures built in proximity to ridges may obscure or fragment the profile of visually-sensitive ridgelines. DEIR page 3.8-6.

Mitigation Measures 3.8/5.0 to 5.2. Pursuant to Specific Plan Policy 6-29,* development is not permitted on the main ridgeline that borders the Specific Plan area to the north and east, but may be permitted on the foreground hills and ridgelands. Minor interruptions of views of the main ridgeline by individual building masses may be permitted only where all other remedies have been exhausted. Pursuant to Specific Plan Policy 6-30* and General Plan Amendment Guiding Policy E, structures shall not obstruct scenic views and shall not appear to extend above an identified scenic ridgetop when viewed from scenic routes. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Prohibiting development along the main ridgeline in the RPA preserves the visual quality of this resource. Limiting development so that structures are not silhouetted against other scenic ridgetops, as well as requiring that a backdrop of natural ridgeline remain visible, minimizes the obstruction or fragmentation of visually sensitive ridgelines.

IMPACT 3.8/F. Alteration of Visual Character of Flatlands. Commercial and residential development of the RPA's flatlands will completely alter the existing visual character resulting from valley grasses and agricultural fields. DEIR page 3.8-7.

Mitigation Measures. None identified. DEIR page 3.8-7.

Finding. No changes or alterations are available to substantially lessen this impact. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Development of the Project site's flatter areas is regarded as a "trade-off" measure designed to preserve slopes, hillsides, and ridgelines.

IMPACT 3.8/G. Alteration of the Visual Character of Watercourses. Urban development of the Project site in proximity to watercourses may diminish or eliminate their visibility and function as distinct landscape elements. DEIR page 3.8-7.

Mitigation Measure 3.8/6.0. Pursuant to Specific Plan Policy 6-39,* protect the visual character of Tassajara Creek and other stream corridors from unnecessary alteration or disturbance. Adjoining development should be sited to maintain visual access to the stream corridors. Implement earlier identified mitigation measures 3.7/8.0, 12.0, and 13.0, to revegetate stream corridors to enhance their natural appearance, to prepare a comprehensive stream corridor restoration program, and to establish dedication of land along both sides of stream corridors. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-7 to -8, 3.7-10 to -11.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Preserving the RPA watercourses will retain both their visibility and function as distinct landscape elements. Special attention to stream corridors through revegetation, restoration, and dedication of land along both sides, will further enhance this distinct landscape element.

IMPACT 3.8/I. Scenic Vistas. Development on the RPA will alter the character of existing scenic vistas and may obscure important sightlines. DEIR page 3.8-8.

Mitigation Measure 3.8/7.0 to 7.1. Pursuant to Specific Plan policy 6-5* and other EIR mitigations, preserve views of designated open space areas. The City will conduct a visual survey of the RPA to identify and map viewsheds of scenic vistas. (*Specific Plan provisions adopted throughout RPA.)

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Identifying and mapping critical viewsheds allows the City to consider specific ways of preserving those views when reviewing development projects within the RPA.

IMAGE 3.8/J. Scenic Routes. Urban development of the RPA will significantly alter the visual experience of travelers on scenic

routes in eastern Dublin. As quiet rural roads become major suburban thoroughfares, foreground and distant views may be obstructed. DEIR page 3.8-8 to -9.

Mitigation Measure 3.8/8.0. Pursuant to Specific Plan Action Program 6Q,* the City should officially adopt Tassajara Road, I-580, and Fallon Road as designated scenic corridors, should adopt scenic corridor policies, and should establish development review procedures and standards to preserve scenic vistas. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-9.

Mitigation Measure 3.8/8.1. Pursuant to Specific Plan Action Program 6R,* the City should require that projects with potential impacts on scenic corridors submit detailed visual analysis with development project applications. The analysis shall include graphic simulations and/or sections drawn from affected travel corridors and representing typical views from scenic routes. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.8-9.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Establishing scenic corridor policies will insure that the visual experience of travelers along scenic routes be maintained as much as possible. Requiring visual analyses will allow the City to specifically review development projects for their visual impacts and to review how locations of structures and associated landscaping can be used to adjust the project design to minimize its visual impacts from scenic routes.

Section 3.9 -- Cultural Resources

IMPACT 3.9/A. Disruption or Destruction of Identified Prehistoric Resources. Due to the level of development proposed in the RPA, it is assumed that all prehistoric sites identified in the 1988 inventory will be disturbed or altered in some manner. DEIR page 3.9-6.

Mitigation Measures 3.9/1.0 to 4.0. Develop a testing program to determine the presence or absence of hidden deposits in all locations of prehistoric resources. All locations containing these components shall be recorded with the State of California and their borders will be staked so that professional survey teams may develop accurate location maps. If any of these recorded and mapped locations are affected by future construction or increased access to the areas, evaluative testing, consisting of collecting and

analyzing any surface concentration of materials, shall be undertaken in order to prepare responsive mitigation measures. The City shall hire a qualified archaeologist to develop a protection program for prehistoric sites containing significant surface or subsurface deposits of cultural materials in areas where development will alter the current condition of the resource. DEIR page 3.9-6 to -7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Through these mitigations, prehistoric resources can be identified and mapped, and specific mitigation plans prepared as part of review of development projects that will affect the resources.

IMPACT 3.9/B. Disruption or Destruction of Unidentified Pre-Historic Resources. Previously unidentified pre-historic resources may exist in the RPA and would be subject to potential disruption or destruction by construction and development activities associated with the Project. DEIR page 3.9-7.

Mitigation Measures 3.9/5.0 to 6.0. Pursuant to Specific Plan Policy 6-25* and Action Program 6P,* cease any grading or construction activity if historic or prehistoric remains are discovered until the significance and extent of those remains can be ascertained by a certified archaeologist. Development projects in the RPA shall prepare an archaeological site sensitivity determination and detailed research and field reconnaissance by a certified archaeologist, and develop a mitigation plan. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.9-7.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. These mitigations will insure that any significant prehistoric resources which are discovered during development activities are not disrupted or destroyed.

IMPACT 3.9/C. Disruption or Destruction of Identified Historic Resources. Due to the level of development proposed in the RPA, it is assumed that all historic sites identified in the 1988 inventory will be disturbed or altered in some manner. Even cultural resources in the proposed Open Space and Rural Residential areas will potentially be disturbed or altered due to the presence of new residential population in the area. DEIR page 3.9-8.

Mitigation Measures 3.9/7.0 to 12.0. Pursuant to Specific Plan Policies 6-26* and 6-27* and other mitigations identified in the EIR, all properties with historic resources and all standing structural remains shall be evaluated by an architectural historian as part of in-depth archival research to determine the significance of the resource prior to any alteration. All historic locations in the 1988 inventory shall be recorded on official State of California historical site inventory forms. These records should be used to make sure that historical locations are recorded onto development maps by professional surveyors. Where the disruption of historical resources is unavoidable, encourage the adaptive reuse or restoration of the structures whenever feasible. A qualified architectural historian shall be hired to develop a preservation program for historic sites found to be significant under Appendix K of the CEQA guidelines. (*Specific Plan provisions adopted throughout RPA.) DEIR page 3.9-8.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Archival research and recordation of historical sites on state inventory forms will insure that historical resources are identified throughout the Project area. Encouraging adaptive reuse or restoration of historic structures and development of a preservation program for historic sites will insure that identified resources are not disturbed or destroyed.

IMPACT 3.9/D. Disruption or Destruction of Unidentified Historic Resources. Previously unidentified historic resources may exist in the RPA and would be subject to potential disruption or destruction by construction and development activities associated with the Project. DEIR page 3.9-8.

Mitigation Measures 3.9/5.0 to 7.0, 9.0, 10.0, and 12.0. These previously identified mitigation measures will be used to ascertain the presence of unidentified historic resources on a development project site in the RPA. If a historic resource is identified, archival research shall be performed to determine the significance of the resource or structure. The City shall hire a qualified architectural historian to develop a preservation program for significant historic sites. DEIR page 3.9-7 to -9.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Mitigations will ensure that any significant historic resources which are discovered during development activities are not disrupted or destroyed.

Section 3.10 -- Noise

IMPACT 3.10/A. Exposure of Proposed Housing to Future Roadway Noise. Proposed residential housing along Dublin Boulevard, Tassajara Road, Fallon Road, and Hacienda Drive will be exposed to future noise levels in excess of 60 dB CNEL. DEIR page 3.10-2.

Mitigation Measure 3.10/1.0. Require acoustical studies for all residential development projects within the future CNEL 60 contour to show how interior noise levels will be reduced to 45 dB.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The required acoustical studies must show how interior noise exposures are reduced to 45 dB CNEL, the minimum acceptable noise level.

IMPACT 3.10/B. Exposure of Existing Residences to Future Roadway Noise. Increased traffic noise on local roads would result in significant cumulative noise level increases along Tassajara (4 dB), Fallon (6dB), and Hacienda Roads of 6 dB. This is a potentially significant cumulative impact in that small individual Project noise increases considered together and over the long term, will substantially increase overall noise levels. DEIR page 3.10-3, 5.0-13.

Mitigation Measures 3.10/2.0. All development projects in the RPA shall provide noise barriers or berms near existing residences to control noise in outdoor use spaces. DEIR page 3.10-3.

Mitigation Measure 3.10/7.0. To mitigate cumulative noise impacts, the City shall develop a noise mitigation fee to pay for on- and off-site noise mitigations, including but not limited to, noise barriers, earthen berms, or retrofitting structures with sound-rated windows. DEIR page 5.0-13.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Providing noise barriers or berms will reduce noise exposure for existing residences; however, mitigation may not be feasible at all locations because of site constraints such as driveways and proximity to roadways. Furthermore, while developers will provide funding for noise mitigations to reduce overall noise levels, funds derived from the experimental program may not adequately mitigate the cumulative impact. Therefore, this noise impact cannot be fully mitigated.

IMPACT 3.10/D. Exposure of Proposed Residential Development to Noise from Future Military Training Activities at Parks Reserve Forces Training Area (Camp Parks RFTA) and the County Jail. Residential development on the Project site within 6000 feet of Camp Parks RFTA and the County Jail could be exposed to noise impacts from gunshots and helicopter overflights. DEIR page 3.10-4.

Mitigation Measure 3.10/3.0. The City shall require an acoustical study prior to future development in the Foothill Residential, Tassajara Village Center, County Center, and Hacienda Gateway subareas (as defined in Figure 4.2 of the Specific Plan) to determine whether future noise impacts from Camp Parks and the county jail will be within acceptable limits. This study should identify and evaluate all potential noise generating operations. DEIR page 3.10-4.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The required acoustical study will identify noise sensitive areas in the Project site and noise generating operations at Camp Parks and the jail and will propose mitigation to reduce noise impacts to acceptable limits. However, mitigation may not be possible at all critical locations, so the impact may not be fully mitigated.

IMPACT 3.10/E. Exposure of Existing and Proposed Residences to Construction Noise. Construction would occur over years on the Project site and will be accompanied by noise from truck activity on local roads, heavy equipment used in grading and paving, impact noises during structural framing, and pile driving. Construction impacts will be most severe near existing residential uses along Tassajara Road and near existing uses in the southern portion of the Project area. DEIR page 3.10-4.

Mitigation Measures 3.10/4.0 to 5.0. Development projects in the RPA shall submit a Construction Noise Management Program that identifies measures proposed to minimize construction noise impacts on existing residents. The Program shall include a schedule for grading and other major noise-generating activities, limiting these activities to the shortest possible number of days. Other noise mitigation measures include, but are not limited to, restricting hours of construction activity, developing construction vehicle access routes which minimize truck traffic through residential areas, and developing a mitigation plan for construction traffic that cannot be avoided in residential areas. In addition, all development-related operations should comply with local noise standards, including limiting activity to daytime hours, muffling stationary equipment, and locating that equipment as far away from sensitive receptors as possible. DEIR page 3.10-4 to -5.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. Through these mitigation measures, developers will limit the intensity and duration of noise exposure experienced by existing residences in construction areas. Other mitigations will limit noise exposure by moving the noise-generating equipment as far away from residential uses as possible.

IMPACT 3.10/F. Noise Conflicts due to the Adjacency of Diverse Land Uses Permitted by Plan Policies Supporting Mixed-Use Development. The presence of different land use types within the same development creates the possibility of noise impacts between adjoining uses, particularly when commercial and residential land uses abut. DEIR page 3.10-5.

Mitigation Measure 3.10/6.0. Development projects in the RPA shall prepare noise management plans to be reviewed as part of the development application for all mixed use projects involving residential uses and non-residential uses. To be prepared by a qualified acoustical consultant, the plan should aim to provide a high quality acoustic environment for residential and non-residential users and should propose steps to minimize or avoid potential noise problems. The plan should address the concerns of residents, non-residential users, and maintenance personnel, and should make maximum use of site planning to avoid noise conflicts. DEIR page 3.10-5 to -6.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Final EIR.

Rationale for Finding. The required noise management plans allow both the developer and the City to anticipate possible noise conflicts in mixed-use developments and to propose specific measures to address the specific conflicts identified. Occurring at an early stage in the process and reviewed with the development application, projects can make use of the greatest array of conflict reducing techniques, including building design and site planning. Compliance with these mitigations will lessen or avoid potential noise conflicts from adjacent mixed uses.

IMPACT 3.11/A. Dust Deposition Soiling Nuisance from Construction Activity. Clearing, grading, excavation, and unpaved roadway travel related to project construction will generate particulate matter which may settle out near the construction sites, creating a soiling nuisance. Any additional dust pollution will worsen the air basin's non-attainment status for particulates. Dust emissions is therefore also a potentially significant cumulative impact. DEIR page 3.11-3, 5.0-13.

Mitigation Measure 3.11/1.0. Require development projects in the Project area to implement dust control measures, including but not limited to, watering construction sites, cleaning up mud and dust carried by construction vehicles, effective covers on haul trucks, planting, repaving, and other revegetation measures on exposed soil surfaces, avoiding unnecessary idling of construction equipment, limiting on-site vehicle speeds, and monitoring particulate matter levels. These measures will reduce project dust deposition to acceptable levels, but will not avoid cumulative impacts of dust generation. DEIR page 3.11-3 to -4, 5.0-13.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, cumulative dust generation impacts will not be substantially avoided. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The mitigation measures identify various feasible and reasonable dust control measures that developers can take during construction activity. These measures eliminate and/or minimize the amount and effect of dust deposition in construction areas. Even with these measures, however, some small amount of additional pollution will occur. Therefore, the cumulative impacts of dust emissions cannot be fully mitigated.

IMPACT 3.11/B. Construction Equipment/Vehicle Emissions. Construction equipment operation generates daily exhaust emissions. Normally considered a temporary impact, buildout of the Project area over the long term will be a chronic source of equipment/vehicle emissions. This is also a potentially significant cumulative impact due to the non-attainment status of the air basin. DEIR page 3.11-4, 5.0-13.

Mitigation Measures 3.11/2.0 to 4.0. Minimize construction interference with regional non-Project traffic movement by scheduling and routing construction traffic to non-peak times and locations. Provide ride-sharing incentives for construction personnel. Require routine low-emission tune-ups for on-site equipment. Require development projects in the Project area to prepare a Construction Impact Reduction Plan incorporating all proposed air quality mitigation strategies with clearly defined responsibilities for plan implementation and supervision. DEIR page 3.11-4, 5.0-13.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The mitigations include construction timing and siting measures that will reduce equipment and vehicle emissions over the long-term buildout of the Project. Even with these mitigations, however, neither Project nor cumulative air quality impacts can be fully mitigated.

IMPACT 3.11/C. Mobile Source Emissions: ROG or NOx. Project implementation at full buildout will generate 500,000 daily automobile trips within the air basin. Mobile source emissions for ROG and NOx associated with these vehicle trips are precursors to ozone formation. The emissions associated with this level of vehicle use will far exceed BAAQMD thresholds for significant effect. This is also a potentially significant cumulative impact. DEIR page 3.11-5, 5.0-14.

Mitigation Measures 3.11/5.0 to 11.0. Exercise interagency cooperation on a subregional and regional basis to integrate local air quality planning efforts with transportation, transit and other infrastructure plans. Implement techniques, such as transportation demand management (TDM), shifting travel to non-peak periods, and encouraging mixed-use development which provides housing, jobs, goods and services in close proximity as a means of reducing vehicle trips and related emissions and congestion. At the development Project level, maintain consistency between

specific development plans and regional transportation and growth management plans, coordinate levels of growth with roadway transportation facilities and improvements, and require linkage between housing growth and job opportunities to achieve a positive subregional jobs/housing balance. DEIR page 3.11-5, 5.0-14.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The various techniques described in the mitigation measures provide opportunities to reduce vehicle trips, and therefore reduce vehicle emissions. However, because of the size of this Project, neither Project nor cumulative impacts can be fully mitigated.

IMPACT 3.11/E. Stationary Source Emissions. Specific Plan buildout will create emissions from a variety of sources, including but not limited to, fuel combustion in power plants, evaporative emissions from paints, and subsurface decay of organic materials associated with solid waste disposal. This is also a potentially significant cumulative impact. DEIR page 3.11-6, 5.0-14.

Mitigation Measures 3.11/12.0 to 13.0. Minimize stationary source emissions associated with Project development where feasible, with the goal of achieving 10 percent above the minimum conservation target levels established in Title 24 of the California Code of Regulations. Include solid waste recycling in all development planning. DEIR page 3.11-6, 5.0-14.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Focusing on reducing emissions from various sources will allow an incremental reduction in stationary source emissions. These reductions will not, however, be sufficient to avoid either Project-related or cumulative impacts.

Section 2

ENVIRONMENTALLY INSIGNIFICANT IMPACTS

The City Council finds that all other impacts of the proposed Project are not environmentally significant as documented in the FEIR and supported by evidence elsewhere in the record. No mitigation is required for these insignificant impacts.

Section 3

FINDINGS CONCERNING ALTERNATIVES

The City Council is adopting Alternative 2 (with minor changes) described in the Final EIR in place of the originally proposed Project. The City hereby finds the remaining three alternatives identified and described in the Final EIR were considered and are found to be infeasible for the specific economic, social, or other considerations set forth below pursuant to CEQA Section 21081, subdivision (c). The City also declines to adopt the Project as originally proposed for the reasons set forth below.

THE ORIGINALLY PROPOSED PROJECT.

Section 21081, subdivision (c) does not require the City Council to make findings as to why the originally proposed Project was not adopted. Such findings need only be made as to project alternatives which would mitigate significant environmental effects. Alternative 2 has no significant environmental effects which could be avoided by adopting the originally proposed project in its stead. Rather, the City Council finds that Alternative 2 will pose no significant environmental effects that would not be posed at least to the same extent (and often to a greater extent) by the Project as originally proposed.

Public Resources Code section 21085 prohibits public agencies from reducing the proposed number of housing units as a project alternative pursuant to CEQA for a particular significant affect on the environment if it determines that there is another feasible specific mitigation measure or project alternative that would provide a comparable level of mitigation. The Project as adopted does indeed involve a reduction of the number of housing units than were originally proposed, both because the Project as adopted does not provide for residential development in the Livermore Municipal Airport Protection Zone and because the Project as adopted only involves residential development approximately two-thirds of the area originally proposed for development. Moreover, these reductions do result in mitigation of some significant environmental impacts, especially impacts on Doolan Canyon.

The prohibition of residential development within the Livermore Municipal Airport Protection Zone is adopted in order to comply with Public Utilities Code section 21676 and the decision of the Alameda County Airport Land Use Commission pursuant to that action to prohibit residential development in

the Zone. This prohibition is, thus, not adopted merely as a mitigation measure pursuant to CEQA.

The City also finds that no feasible alternatives or mitigation measures will provide the level of mitigation of significant environmental effects as are provided by the adoption of Alternative 2 rather than the project as originally proposed. Alternative 2 will leave Doolan Canyon in its current largely undeveloped state, thereby mitigating significant impacts involving loss of open space, and biologically sensitive habitat in a way that could not be accomplished by any mitigation measure or alternative were Doolan Canyon in fact developed as originally proposed.

ALTERNATIVE 1: NO PROJECT. DEIR pages 4-1 to 4-8, 4-20

Finding: Infeasible. This option assumes the Project as proposed would not be built on the site; instead any development would be pursuant to the existing general plan. Under that plan, a limited amount of business park/industrial development could occur on the 600 acre County property and on the 200 acre portion of the Project area south of the proposed Dublin Boulevard extension.

The No Project Alternative is found to be infeasible because the City's General Plan has designated the Eastern Dublin area for planned development, subject to the preparation of a Specific Plan. In addition, the No Project Alternative fails to provide needed housing. The need for housing is documented in the Housing Element of the City's General Plan, and in other plan documents of the City and other jurisdictions in the area.

ALTERNATIVE 3: REDUCED LAND USE INTENSITIES.

DEIR pages 4-14 to 4-19

Finding: Infeasible. This option assumes development of both the Specific Plan and the General Plan Amendment except that 285 acres of higher traffic generating commercial uses will be replaced with lower traffic generating residential uses. The Reduced Land Use Intensities alternative is found to be infeasible for the following reasons:

- (1) **Airport Safety.** This alternative will increase the number of housing units within the Livermore Municipal Airport Protection Zone. (p. 4-15).
- (2) **Unavoidable impacts.** Even with the reduced intensities of this alternative, all the unavoidable impacts identified for the Project would remain except traffic impacts at I-580, I-680/Hacienda, at I-580, Tassajara/Airway, at Airway

Boulevard/Dublin Boulevard and cumulative traffic impacts on Dublin Boulevard (Impacts 3.3/B, C, J, and M). DEIR Page 4-15.

- (3) Fiscal impacts. This alternative may have potentially significant fiscal impacts on the City budget's cost/revenue balance by reducing commercial development which generally generates less service costs and more property tax revenues than housing. These potential impacts can be mitigated. However, any mitigating revenues raised would have to be shared mitigation for capital facilities, possibly reducing the amount of revenue available for both the budget and capital facility programs. (page 4-19, 3.12-2 to -4).

ALTERNATIVE 4: NO DEVELOPMENT. DEIR page 4-19

Finding: Infeasible. This alternative assumes no development of the Project site beyond existing conditions, assumes no annexation and therefore no application of even the current General Plan. The No Development alternative is found to be infeasible because the City's General Plan has designated the Eastern Dublin area for planned development, subject to the preparation of a Specific Plan. In addition, the No Development Alternative fails to provide needed housing. The need for housing is documented in the Housing Element of the City's General Plan, and in other plan documents of the City and other jurisdictions in the area. (page 4-19 to -20).

Section 4

STATEMENT OF OVERRIDING CONSIDERATIONS

1. General.

Pursuant to CEQA Guidelines section 15093, the City Council of the City of Dublin makes the following Statement of Overriding Considerations.

The City Council has balanced the benefits of the eastern Dublin Project to the City of Dublin against the adverse impacts identified in the EIR as significant and potentially significant which have not been eliminated or mitigated to a level of insignificance.

The City Council, acting pursuant to CEQA Guidelines Section 15093, hereby determines that the benefits of the Project outweigh the unmitigated adverse impacts and the Project should be approved.

The City Council has carefully considered each impact in reaching its decision to adopt the Project and to allow urbanization of the eastern Dublin Project area. Although the City Council believes that many of the unavoidable environmental effects identified in the EIR will be substantially lessened by mitigation measures incorporated into the General Plan Amendment, Specific Plan, and future development plans as well as future mitigation measures implemented with future approvals, it recognizes that the implementation of the Project carries with it unavoidable adverse environmental effects.

The City Council specifically finds that to the extent that the identified adverse or potentially adverse impacts have not been mitigated to acceptable levels, there are specific economic, social, environmental, land use, and other considerations which support approval of the Project. The City Council further finds that any one of the overriding considerations identified herein-after in subsection 3 is sufficient basis to approve the Project as mitigated.

2. Unavoidable Significant Adverse Impacts

The following unavoidable significant environmental impacts are associated with the proposed Project as identified in the Final Environmental Impact Report for the Project, which consists of a Draft Environmental Impact Report, Parts I and II (Appendix), dated August 28, 1992; Comments and Response to Comments, dated

December 7 and December 21, 1992; letter of December 15, 1992 from DKS Associates to Laurence Tong; and the Addendum to draft EIR dated May 4, 1993. These impacts cannot be fully mitigated by changes or alterations to the Project.

Land Use Impact 3.1/F. Cumulative Loss of Agricultural and Open Space Lands. Even with mitigation, the Project would still result in the loss of a large area of open space. This loss is cumulatively significant, given the loss of numerous other areas of open space in the area. No feasible mitigation measures are available to reduce this impact to a level of insignificance. The only Project alternatives which could reduce this impact to a level of insignificance are the No Project Alternative and the No Development Alternative, both of which have been found to be infeasible (see Section 3 above). RC #34-9.

Traffic and Circulation Impact 3.3/B: I-580 Freeway, I-680-Hacienda. Even with mitigation, the Level of Service on I-580 between I-680 and Dougherty Road could exceed Level of Service E, the minimum acceptable level of service. No feasible mitigation measures are available to reduce this impact to a level of insignificance, since the freeway has already been widened to its maximum practical capacity. Project alternatives which could reduce this impact to a level of insignificance are the No Project Alternative and the No Development Alternative. These alternatives have been found to be infeasible (see Section 3 above). (DEIR pages 3.3-21, 5.0-16).

Traffic and Circulation Impact 3.3/E: Cumulative Freeway Impacts. Even with mitigation, portions of I-580 will operate at Level of Service F under the Cumulative Buildout with Project scenario. No feasible mitigation measures are available to reduce this impact to a level of insignificance. The only Project alternative which could reduce this impact to a level of insignificance is the No Development Alternative. This alternative has been found to be infeasible (see Section 3 above). (DEIR pages 3.3-22, 5.0-16)

Traffic and Circulation Impact 3.3/I: Santa Rita Road and I-580 Eastbound Ramps. Year 2010 development with the Project will cause Level of Service F operations at this intersection. No feasible mitigation measures are available to reduce this impact to a level of insignificance. Project alternatives which could reduce this impact to a level of insignificance are the No Project Alternative and the No Development Alternative. These alternatives have been found to be infeasible (see Section 3 above). (DEIR pages 3.3-26, 5.0-16)

Traffic and Circulation Impact 3.3/M: Cumulative Impacts on Dublin Boulevard. Cumulative Buildout with the Project will cause Level of Service F operations at the Hacienda Drive intersection and Level of Service E operations at the Tassajara

Road intersection. No feasible mitigation measures are available to reduce this impact to a level of insignificance. Project alternatives which could reduce this impact to a level of insignificance are the Reduced Land Use Intensities Alternative and the No Development Alternative. These alternatives have been found to be infeasible (see Section 3 above). (DEIR pages 3.3-27, 5.0-16).

Community Services and Facilities Impact 3.4/O: Demand for Utility Extensions. The extension of gas, electric and telephone service lines onto the Project site is necessary for development and will require new distribution systems or substantial extensions of existing systems onto undeveloped lands currently in agricultural and open space uses. No feasible mitigation measures are available to reduce this growth inducing impact to a level of insignificance. Project alternatives which could reduce this impact to a level of insignificance are the No Project Alternative and the No Development Alternative. These alternatives have been found to be infeasible (see Section 3 above). (DEIR pages 3.4-24, 5.0-16).

Community Services and Facilities Impact 3.4/S: Consumption of Non-Renewable Natural Resources. Natural Gas and electrical service would increase consumption of non-renewable natural resources. Requiring energy conservation plans provides partial mitigation. However, because energy use will still increase, the impact cannot be reduced to a level of insignificance. Project alternatives which could reduce this impact to a level of insignificance are the No Project Alternative and the No Development Alternative. These alternatives have been found to be infeasible (see Section 3 above). DEIR page 3.4-25.

Sewer, Water, and Storm Drainage Impact 3.5/F,H,U: Increases in Energy Usage Through Increased Water Treatment and Disposal and Thorough Operation of the Water Distribution System. Increased Wastewater Flows to and from the Project will require increased energy. Using energy efficient water distribution treatment, and disposal systems provides partial mitigation. However, because energy use will still increase, the impact cannot be reduced to a level of insignificance. Project alternatives which could reduce this impact to a level of insignificance are the No Project Alternative and the No Development Alternative. These alternatives have been found to be infeasible (see Section 3 above). DEIR pages 3.5-8 to -10.

Sewer, Water and Storm Drainage Impact 3.5/T: Inducement of Substantial Growth and Concentration of Population. The proposed water distribution system will induce significant growth in the Project area. No feasible mitigations are available to reduce this impact to a level of insignificance. The only Project alternatives which could reduce this impact to a level of

insignificance are the No Project alternative and the No Development alternative. These alternatives have been found to be infeasible (see Section 3 above). (DEIR, pages 3.5-20, 5.0-15).

Soils, Geology, and Seismicity Impact 3.6/B: Earthquake Ground Shaking, Primary Effects. Development of the RPA will expose more residents to the risk of potentially large earthquakes on active fault zones in the region, which could result in damage to structures and infrastructure and, in extreme cases, loss of life. Using modern seismic design for resistance to lateral force in construction of development projects, and building in accordance with the Uniform Building Code and applicable local code requirements will partially mitigate this impact. However, the impact cannot be reduced to a level of insignificance. The only Project alternative which could reduce this impact to a level of insignificance is the No Development alternative. This alternative has been found to be infeasible (see Section 3 above). (DEIR page 3.6-7.)

Biological Resources Impact 3.7/C: Loss or Degradation of Botanically Sensitive Habitat. Development of the RPA will result in a significant loss and degradation of biologically sensitive habitat. As described in section 1, mitigation measures will partially reduce this impact. However, because biologically sensitive habitat will still be lost, the impact cannot be reduced to a level of insignificance. The only Project alternative which could reduce this impact to a level of insignificance is the No Development alternative. This alternative has been found to be infeasible (see Section 3 above). (DEIR pages 3.7-10, 5.0-11).

Visual Impacts 3.8/B: Alteration of Rural/Open Space Visual Character and 3.8/F: Alteration of Visual Character of Flatlands. Project development will permanently alter the existing rural, agricultural character of the Project area. Although the highest ridgelines will be preserved as open space, the visual character of the rounded lower foothills along I-580 will be altered by construction of homes and roads. No feasible mitigations are available to reduce these visual impacts to a level of insignificance. The only Project alternative which could reduce these impacts to a level of insignificance is the No Development alternative. This alternative has been found to be infeasible (see Section 3 above). (pages 3.8-5, -7, 5.0-17).

Noise Impact 3.10/B: Exposure of Existing Residences to Future Roadway Noise. Increased traffic on area roadways will significantly increase noise levels, thus adversely affecting existing residences and population. Mitigation can be achieved to buffer residents from levels that exceed acceptable standards, by providing berms or walls adjacent to outdoor use spaces of

existing residences. However, the magnitude of change in the noise environment, from quiet rural roads with little traffic to busy suburban thoroughfares, cannot be avoided. Project alternatives which could reduce this impact to a level of insignificance are the No Project Alternative and the No Development Alternative. These alternatives have been found to be infeasible (see Section 3 above). (DEIR pages 3.10-3 to 4, 5.0-16).

Noise Impact 3.10/D: Exposure of Proposed Residential Development to Noise from Future Military Training Activities at Camp Parks and from the County Jail. Residential development in the Specific Plan area would be within 6000 feet of Camp Parks and the County Jail and could be exposed to noise from gunshots and helicopter overflight. Mitigations calling for noise studies may not be feasible at all locations; therefore this impact might not be reduced to a level of insignificance. Project alternatives which could reduce this impact to a level of insignificance are the No Project Alternative and the No Development Alternative. These alternatives have been found to be infeasible (see Section 3 above). (page 3.10-4, 5.0-16).

Air Quality Impacts 3.11/A,B,C,E. Project development will have a potentially significant cumulative impact on air quality as a result of dust deposition, construction equipment emissions, mobile source emissions of ROF and NOx, and stationary source emissions. While some measures have been adopted to partially mitigate these impacts, the impacts remain potentially significant, especially given the region's existing non-compliance with air quality standards. The only Project alternative which could reduce these impacts to a level of insignificance is the No Development alternative. This alternative has been found to be infeasible (see Section 3 above). (DEIR pages 3.11-3 through -6, 5.0-13 through -16.)

3. Overriding Considerations

The City Council has considered the public record of proceedings on the proposed Project and does determine that approval and implementation of the Project would result in the following substantial public benefits.

Economic Considerations. Substantial evidence is included in the record demonstrating the economic benefits which the City would derive from implementation of the Project. Specifically, the Project will result in:

- a. The creation of about 28,200 new jobs in the Specific Plan area alone, and a substantial number of construction jobs.
- b. Increases in sales revenues for the City.

- c. Substantial increases in property tax revenues.

Social Considerations. Substantial evidence exists in the record demonstrating the social benefits which the City would derive from the implementation of the Project. Specifically, the Project will result in:

- a. Increases in housing opportunities in the City and in a region where housing is costly and in short supply.
- b. Increases in the amount of affordable housing in the community.
- c. An arrangement for the City to contribute its fair share of regional housing opportunities.
- d. Provision of upper-end executive housing in the City.

Other Considerations. Substantial evidence exists in the record demonstrating other public benefits which the City would derive from implementation of the Project. They include:

- a. Comprehensive planning incorporating innovative and extensive environmental premitigation measures not usually found in projects of this type.
- b. Designating substantial areas of land for Open Space and low intensity Rural Residential uses. This includes a potential regional trail system link through the open space of the Project site. This open space will conserve the ecological values of the site and surrounding areas and provide recreational and open space amenity opportunities for residents of the Project, the City, and the region. 3.4-15, 3.7-15.

**MITIGATION MONITORING PLAN:
EASTERN DUBLIN
SPECIFIC PLAN/GENERAL PLAN AMENDMENT**

prepared by

WALLACE ROBERTS & TODD

May 7, 1993

ATTACHMENT 6 =
EXHIBIT B

MITIGATION MONITORING PLAN

EASTERN DUBLIN SPECIFIC PLAN/GENERAL PLAN AMENDMENT

The State of California now requires public agencies to adopt a mitigation monitoring program for changes to the project or conditions of approval which have been identified and adopted as methods to reduce environmental impacts. Thus with the certification of the Eastern Dublin EIR and adoption of the Specific Plan and General Plan Amendment, the City of Dublin is required to establish a mitigation monitoring program for all approved mitigation measures.

In order to ensure that all adopted mitigation measures are implemented in a timely fashion, the Mitigation Monitoring Program provides the following information for each measure:

- Why has the mitigation measure been recommended?
- Who is responsible for implementing the mitigation?
- What is the mitigation measure being monitored and how?
- When should mitigation monitoring be undertaken? What schedule is required?
- Completion: when should the mitigation measure be in place and monitoring be completed?
- Verification: what agency is required to ensure that the mitigation measure was implemented?

SECTION 3.1 LAND USE

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

IM 3.1/G Potential Conflicts with Land Uses to the West

2. Mitigation Implementation and Monitoring Program

Impact 3.1/G Potential Conflicts with Land Uses to the West

Mitigation Measure 3.1/1.0: Coordination of Planning Activities with U.S. Army

Why:	To resolve potential land use conflicts between activities at Camp Parks and proposed uses in the Project area
Who:	Planning Department/U.S. Army; Directorate of Engineering and Housing.
What:	Establish a liaison committee between the City and the Army. Establish a schedule for periodic meetings to discuss and provide updates on planning and development efforts within the Project site and in Camp Parks. The City of Dublin Planning Department will send to the base commander a copy of new applications for development adjacent to Camp Parks for review and comment. Projects will be considered by liaison committee at request of Camp Parks.
When:	Periodically, pursuant to agreed-upon calendar, and as required for review of specific project proposals.
Completion:	On-going. Specific project review will be considered complete when City has received written comments from Camp Parks.
Verification:	City of Dublin Planning Director.

SECTION 3.2: POPULATION, HOUSING AND EMPLOYMENT

This section provides baseline data related to population, housing and employment and does not identify environmental impacts or related mitigation measures. No mitigation monitoring program is required.

SECTION 3.3: TRAFFIC AND CIRCULATION

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

- IM 3.1/G Potential Conflicts with Land Uses to the West
- IM 3.3/B I-580 Freeway; between I-680 and Hacienda
- IM 3.3/C I-580 Freeway; between Tassajara-Fallon-Airway
- IM 3.3/D I-680 Freeway; North of the I-580 Interchange
- IM 3.3/E Cumulative Freeway Impacts (I-580 west of I-680; I-580 east of Airway)
- IM 3.3/F Dougherty Road and Dublin Boulevard
- IM 3.3/G Hacienda Drive and I-580 Eastbound Ramps
- IM 3.3/H Tassajara Road and I-580 Westbound Ramps

IM 3.3/I Santa Rita Road & I-580 Eastbound Ramps
IM 3.3/J Airway Boulevard and Dublin Boulevard
IM 3.3/K Airway Boulevard & I-580 Westbound Ramps
IM 3.3/L Impediments to Truck Traffic on El Charro Road
IM 3.3/M Cumulative Impacts on Dublin Boulevard (Dublin/Hacienda; Dublin/Tassajara)
IM 3.3/N Cumulative Impacts on Tassajara Road (Tassajara/Fallon; Tassajara/Fallon; Tassajara/Transit Spine)
IM 3.3/O Transit Service Extensions
IM 3.3/P Street Crossings

2. Mitigation Implementation and Monitoring Program

Daily Traffic Volumes (Year 2010 With Project)

Impact 3.3/B I-580 Freeway; between I-680 and Hacienda

Mitigation Measure 3.3/2.0: Transportation Systems Management (TSM)

Why: To reduce project-generated vehicle trips
Who: All non-residential projects with 50± employees.
What: Require compliance with BAAQMD Regulation 13 Transportation Control Measures Rule 1 to satisfaction of BAAQMD or City of Dublin (Public Works Department)
When: Prior to occupancy
Completion: Upon issuance of Planning Department sign-off on compliance
Verification: City of Dublin Planning Director

Mitigation Measure 3.3/2.1: Regional Transportation Mitigation Programs

Why: To assist in the funding of improvements to regional transportation system
Who: All approved projects
What: Proportionate monetary contribution to regional transportation mitigation programs as approved by the City of Dublin.
When: As a condition of project approval. When applying for a permit, the applicant developer will be notified of this fee assessment.
Completion: Payments shall be made prior to issuance of building permits
Verification: City of Dublin Department of Public Works

Impact 3.3/C I-580 Freeway; between Tassajara-Fallon-Airway

Mitigation Measure 3.3/3.0: Construction of Auxiliary Lanes

Why: To assist in the funding of the construction of auxiliary lanes on I-580 between Tassajara and Airway boulevards
Who: Caltrans/City of Dublin Public Works Department.
What: Payment of a regionally-assessed fee for all new development within the Project area as approved by the City of Dublin.
When: As a condition of project approval. When applying for a permit, the applicant developer will be notified of this fee assessment.

Completion: Payments shall be made prior to issuance of building permits
Verification: City of Dublin Department of Public Works

Impact 3.3/D I-680 Freeway; North of the I-580 Interchange

Mitigation Measure 3.3/4.0: I-580/I-680 Interchange Improvements

Why: To establish funding for construction of future I-580/I-680 Interchange improvements.
Who: Caltrans/City of Dublin Public Works Department.
What: Payment of a regionally-assessed fee for all new development within the Project area as approved by the City of Dublin.
When: As a condition of project approval, the applicant developer will be notified of this fee assessment.
Completion: Payments shall be made prior to issuance of building permits
Verification: City of Dublin Department of Public Works

Daily Traffic Volumes (Cumulative Buildout with Project)

Impact 3.3/E Cumulative Freeway Impacts

Mitigation Measure 3.3/5.0: Transportation Systems Management (TSM)

Why: To establish funding for construction of auxiliary lanes on I-580 east of Airway Boulevard
Who: All approved development projects in the Project area/City of Dublin.
What: 1) Proportionate monetary contribution to regional transportation mitigation programs as approved by the City of Dublin.
2) City coordination with other local jurisdictions to require that all future development projects participate in regional transportation mitigation programs.
When: 1) The contribution to regional improvements will be implemented as a condition of project approval. Applicants will be notified of this fee assessment.
Completion: 1) Payments shall be made prior to issuance of building permits.
2) Coordination will be ongoing.
Verification: 1) Fee payments will be verified by the City of Dublin Planning Department.
2) Coordination will be the responsibility of the Department of Public Works

Peak Hour Intersection Operation (Year 2010 with Project)

Impact 3.3/F Dougherty Road and Dublin Boulevard

Mitigation Measure 3.3/6.0: Construction of Additional Lanes

Why: To ensure the funding and construction of improvements to the Dougherty Road/Dublin Blvd. intersection as needed
Who: City of Dublin Department of Public Works/All approved projects.

- What:** 1) Payment of fees towards the construction of additional lanes at the intersection of Dougherty Road and Dublin Boulevard.
2) Monitoring of the need for intersection improvements and coordination of their construction.
- When:** 1) Fees will be collected as a condition of project approval. Applicants will be notified of fees.
2) Monitoring will be ongoing annually.
3) Construction will occur prior to intersection declining to LOS F.
- Completion:** 1) Payment of fees shall be made prior to issuance of building permits.
2) Monitoring of intersection level of service will be ongoing.
3) Construction will be complete with implementation of specific improvements or equivalent as identified in mitigation measure.
- Verification:** 1) City of Dublin Planning Department will verify payment of fees.
2) Department of Public Works will be responsible for monitoring calculating fees and construction.

Impact 3.3/G Hacienda Drive and I-580 Eastbound Ramps

Mitigation Measure 3.3/7.0: Widening of Eastbound Off-Ramp

- Why:** To provide improvements that will prevent congestion on the eastbound off-ramps from I-580 at Hacienda Drive.
- Who:** Caltrans/City of Pleasanton/City of Dublin Public Works/Project Applicants
- What:** 1) Payment of fee towards widening.
2) Coordination of improvement with Caltrans and the City of Pleasanton.
- When:** 1) Fees will be assessed as a condition of project approval.
2) Coordination will occur as needed prior to implementation of mitigation.
3) Construction will be underway prior to decline of level of service to unacceptable LOS E.
4) Monitoring and coordination will begin with development review processing.
- Completion:** 1) Payment of fees shall be made prior to issuance of building permits.
2) Mitigation will be complete with implementation of widening described in mitigation measure.
- Verification:** 1) City of Dublin Planning Department will verify payment of fees.
2) Department of Public Works will be responsible for calculating fees and coordination with other agencies.

Impact 3.3/H Tassajara Road and I-580 Westbound Ramps

Mitigation Measure 3.3/8.0: Widening of I-580 Westbound Ramps

- Why:** To fund and implement improvements necessary to ensure the efficient operation of the intersection of Tassajara Road with the I-580 westbound ramps.
- Who:** Caltrans/Pleasanton and Dublin Departments of Public Works/Developers
- What:** 1) Payment of fee to fund design and construction of improvements, including widening of the I-580 westbound off-ramp and modification of northbound approach to provide additional turn and through lanes.
2) Monitoring of service levels and coordination of construction.

- When:** 1) Fees will be assessed as a condition of project approval.
2) Monitoring and coordination will be begin with development review processing.
3) Construction will be underway prior to decline of level of service to unacceptable level (LOS E).
- Completion:** 1) Payment of fees shall be made prior to issuance of building permits.
2) Mitigation will be complete with implementation of widening described in mitigation measure.
- Verification:** 1) City of Dublin Planning Department will verify payment of fees.
2) Department of Public Works will be responsible for coordinating construction.

Impact 3.3/I Santa Rita Road & I-580 Eastbound Ramps

Mitigation Measure 3.3/9.0: Improvements to I-580 Eastbound Ramps

- Why:** To fund and implement improvements necessary to ensure adequate service levels on Santa Rita Road and I-580 eastbound ramps.
- Who:** Caltrans/Pleasanton and Dublin Departments of Public Works/Developers
- What:** 1) Payment of fee to fund design and construction of improvements; including widening of I-580 eastbound off-ramps.
2) Monitoring of service levels and coordination of construction.
- When:** 1) Fees will be assessed as a condition of project approval.
2) Monitoring and coordination will be begin with development review processing.
3) Widening of eastbound ramps will occur prior to decline of level of service to unacceptable level (LOS E).
- Completion:** 1) Payment of fees shall be made prior to issuance of building permits.
2) Mitigation will be complete with implementation of widening described in mitigation measure.
- Verification:** 1) City of Dublin Planning Department will verify payment of fees.
2) City of Dublin Department of Public Works will be responsible for coordinating improvements with the City of Pleasanton Department of Public Works and Caltrans.

Impact 3.3/K Airway Boulevard & I-580 Westbound Ramps

Mitigation Measure 3.3/11.0: Widening of Airway Boulevard Overcrossing

- Why:** To fund and implement improvements necessary to ensure adequate service levels at the intersection of Airway Boulevard and the westbound ramps.
- Who:** City of Dublin/Caltrans/City of Livermore/Developers
- What:** 1) Payment of fee to fund design and construction of improvements; including the widening or replacement of the Airway Blvd. overcrossing and the widening of the I-580 westbound off-ramp.
2) Monitoring of service levels and coordination of construction.
- When:** 1) Fees will be assessed as a condition of project approval.
2) Monitoring and coordination will be begin with development review process.
3) Improvements to ramps and overcrossing will occur prior to decline of

- level of service to unacceptable level (LOS E).
- Completion:** 1) Payment of fees shall be made prior to issuance of building permits.
2) Mitigation will be complete with implementation of improvements described in mitigation measure.
- Verification:** 1) City of Dublin Planning Department will verify payment of fees.
2) City of Dublin Department of Public Works will be responsible for coordinating improvements with the City of Livermore Department of Public Works and Caltrans.

Impact 3.3/L Impediments to Truck Traffic on El Charro Road

Mitigation Measure 3.3/12.0: Provisions to Ensure Unimpeded Truck Traffic

- Why:** To fund and implement improvements necessary to ensure unimpeded movement of trucks to and from the quarries on El Charro Road south of I-580.
- Who:** City of Dublin/Caltrans/City of Pleasanton/Developers/City of Livermore
- What:** 1) Payment of fees to fund design and construction of necessary improvements.
2) Monitoring of service levels and coordination of improvements with Caltrans and the City of Pleasanton Department of Public Works.
- When:** 1) Fees will be assessed as a condition of project approval.
2) Monitoring and coordination will begin with development review processing.
3) Improvements will occur prior to decline of level of service to unacceptable level (LOS E).
- Completion:** 1) Payment of fees shall be made prior to issuance of building permits.
2) Mitigation will be complete with implementation of improvements.
- Verification:** 1) City of Dublin Planning Department will verify payment of fees.
2) City of Dublin Department of Public Works will be responsible for coordinating improvements with the City of Pleasanton Department of Public Works and Caltrans and City of Livermore.

Impact 3.3/M Cumulative Impacts on Dublin Boulevard

Mitigation Measures 3.3/13.0: Maintain Adequate Levels of Service at Intersections.

- Why:** To identify, fund and implement improvements that will maintain adequate service levels at the intersections Dublin Blvd with Hacienda Drive and Tassajara Road with buildout of cumulative projects.
- Who:** City of Dublin
- What:** 1) The City of Dublin will participate in the regularly-scheduled meetings of the Congestion Management Agency and Tri-Valley Transportation Council to determine long-term mitigation measures for cumulative impacts on Dublin Boulevard.
2) Payment of fees to fund design and construction of necessary improvements.
3) Monitoring of service levels and coordination of improvements with Caltrans and the City of Pleasanton Department of Public Works.
- When:** 1) Participation in the Tri-Valley Transportation Council is current and on-

- going.
- 2) Fees will be assessed as a condition of project approval.
 - 3) Monitoring and coordination will be begin with development review process and continue through to identification and construction of necessary improvements.
 - 4) Construction will be underway prior to decline of level of service to unacceptable level (LOS E).
- Completion:** 1) Participation in the Tri-Valley Transportation Council is on-going.
2) Payment of fees shall be made prior to issuance of building permits.
3) Mitigation will be complete with implementation of improvements.
- Verification:** 1) City of Dublin Planning Department will verify payment of fees.
2) City of Dublin Department of Public Works will be responsible for coordinating Project area improvements resulting from regional growth.

Impact 3.3/N Cumulative Impacts on Tassajara Road

Mitigation Measure 3.3/14.0: Widening of Tassajara Road to Six Lanes

- Why:** To reserve sufficient right-of-way along Tassajara Road to accommodate cumulative development of projects north of the Project area.
- Who:** City of Dublin Planning Department/City of Dublin Department Public Works.
- What:** Reservation of sufficient right-of-way to accommodate six travel lanes on Tassajara Road.
- When:** Reservation of right-of-way to be adopted prior to approval of tentative map.
- Completion:** Dedication of right-of-way required prior to filing of Final maps for development projects adjacent to the Tassajara Road corridor.
- Verification:** City of Dublin Planning Department.

Impact 3.3/O Transit Service Extensions

Mitigation Measure 3.3/15.0: Provision of Transit Service to Meet LAVTA standards

- Why:** To extend transit service within 1/4 mile of 95% of the Project area population.
- Who:** City of Dublin Planning Department/Department of Public Works/LAVTA
- What:** 1) Meetings between the City of Dublin and LAVTA to coordinate extension of bus service to the Project area.
2) Notification to LAVTA of development approvals involving potential for 100 or more employees or residents.
- When:** 1) Initial meeting to review the plan and ultimate service needs should be held within one year of plan adoption to allow LAVTA to plan for future expansion. Thereafter, meetings should be held periodically at the request of either the City or LAVTA.
- Completion:** On-going.
- Verification:** City of Dublin Planning Department.

Mitigation Measure 3.3/15.1: Bus Service to Employment Centers with 100+ Employees

Why: To provide transit service at a minimum frequency of one bus every 30 minutes during peak hours, to employment centers with 100 or more employees.

Who: City of Dublin Planning Department/Department of Public Works/LAVTA

What: 1) Meetings between the City of Dublin and LAVTA to coordinate extension of bus service to employment centers.
2) Notification to LAVTA of development approvals involving potential for 100 or more employees.

When: 1) Meetings should be held periodically at the request of either the City or LAVTA.

Completion: On-going.

Verification: City of Dublin Planning Department.

Mitigation Measure 3.3/15.2: Monetary Contribution to Support Transit Service Extensions

Why: To provide funding in support of expansion of transit service to the Project area.

Who: City of Dublin Planning Department/Department of Public Works/LAVTA/Developers

What: Payment of fees or construction of capital improvements to support extension of transit service.

When: Fees/improvements will be identified as a condition of project approval.

Completion: Prior to approval of Final Map.

Verification: City of Dublin Planning Department.

Mitigation Measure 3.3/15.3: Feeder Transit Service to the East Dublin/Pleasanton BART station

Why: To coordinate provision of feeder bus service to the planned BART stations from the Project area.

Who: City of Dublin Planning Department/Department of Public Works/LAVTA/BART

What: Meetings with BART and LAVTA to coordinate feeder transit service to BART.

When: Initial meeting to review the plan and ultimate service needs should be held within one year of plan adoption to allow BART and LAVTA to plan for future expansion. Thereafter, meetings should be held periodically at the request of the City, BART, or LAVTA.

Completion: On-going.

Verification: City of Dublin Planning Department.

Impact 3.3/P Street Crossings

Mitigation Measure 3.3/16.0: Provision of a Class I bicycle/pedestrian path

Why: To provide a paved bicycle/pedestrian path along Tassajara Creek.

Who: Developers in consultation with the City of Dublin Planning Department,

What:	Department of Public Works, and East Bay Regional Park District. Design and construction of a Class I bicycle/pedestrian path along Tassajara Creek.
When:	As a condition of approval for development projects adjacent to the Tassajara Creek corridor.
Completion:	Construction to occur prior to occupation of first phase of homes responsible for providing the path.
Verification:	City of Dublin Department of Public Works.

Mitigation Measure 3.3/16.1: Signalized Bicycle/Pedestrian Intersections

Why:	To provide for safe pedestrian/bicycle crossings of major arterial streets.
Who:	Developers/Department of Public Works
What:	Locate pedestrian and bicycle crossings at signalized intersections.
When:	As a condition of project approval.
Completion:	Final approval of detailed improvement plans.
Verification:	Department of Public Works.

SECTION 3.4: COMMUNITY SERVICES AND FACILITIES

Prior to approval of rezoning.1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

- IM 3.4/A Demand for Increased Police Services.
- IM 3.4/B Police Services Accessibility
- IM 3.4/C Demand for Increased Fire Services
- IM 3.4/D Fire Response to Outlying Areas
- IM 3.4/E Exposure to Wildlands Hazards
- IM 3.4/F Demand for New Classroom Space
- IM 3.4/G Demand for Junior High School Space
- IM 3.4/H Overcrowding of Schools
- IM 3.4/I Impact on School District Jurisdiction
- IM 3.4/J Financial Burden on School Districts
- IM 3.4/K Demand for Park Facilities
- IM 3.4/L Park Facilities Fiscal Impact
- IM 3.4/M Impact on Regional Trail System
- IM 3.4/N Impact on Open Space Connections
- IM 3.4/O Increased Solid Waste Production
- IM 3.4/P Impact on Solid Waste Disposal Facilities
- IM 3.4/Q Demand for Utility Extensions
- IM 3.4/R Utility Extension: Visual and Biological Impacts
- IM 3.4/S Consumption of Non-Renewable Natural Resources
- IM 3.4/T Demand for Increased Postal Service
- IM 3.4/U Demand for Increased Library Service

2. Mitigation Implementation and Monitoring Program

Police Services

Impact 3.4/A Demand for Increased Police Services

Impact 3.4/B Police Services Accessibility

Mitigation Measure 3.4/1.0: Additional Personnel, Facilities and "Beats"

Why: To provide additional personnel, facilities, and procedures to police service standards.

Who: City of Dublin Police Department/Planning Department.

What: 1) Police Department will hire and train new sworn and civilian staff, revise "beat" system to serve eastern Dublin, and estimate and schedule projected facility needs in eastern Dublin.
2) Planning Department to notify Police Department of development approvals to assist the Police Department in its annual budget formulation.

When: On-going.

Completion: Annually as part of the Police Department's planning and budgetary process.

Verification: Chief of Police.

Mitigation Measure 3.4/2.0: Coordination of expansion of Police services

Why: To provide the Police Department information needed to adequately plan for expansion of services.

Who: Planning Department/City of Dublin Police Department.

What: Notification to the Police Department of the timing of annexation and approved development.

When: During processing of rezoning and annexation applications.

Completion: Ongoing.

Verification: Planning Department

Mitigation Measure 3.4/3.0: Police Department Review

Why: To provide for Police Department input into the design of proposed development.

Who: City of Dublin Police Department/Planning Department.

What: Police Department review of proposed development plans for safety issues, and provide the Planning Department with recommendations for inclusion in the final plans.

When: During development review process.

Completion: Prior to final site plan approval.

Verification: Chief of Police or representative.

Mitigation Measure 3.4/4.0: Budgeting for Police Services

Why: To prepare a budget strategy to hire the required additional personnel and implement necessary changes in the "beat" system.

Who: City of Dublin/City of Dublin Police Department

What: 1) Police Department will estimate projected personnel and facility needs for eastern Dublin and develop a budget strategy to meet these needs.
2) Planning Department will notify Police Department of development approvals in order to assist the Police Department in its annual budget formulation.

When: On-going.

Completion: Annually as part of the Police Department's planning and budgetary process.

Verification: Chief of Police.

Mitigation Measure 3.4/5.0: Police Department Review

Why: To ensure Police Department review of proposed development for safety issues.

Who: City of Dublin Police Department/Planning Department.

What: Police Department review of proposed development plans for safety issues.

When: During development review process.

Completion: Prior to final site plan approval.

Verification: Chief of Police or representative.

Fire Protection

Impact 3.4/C Demand for Increased Fire Services

Impact 3.4/D Fire Response to Outlying Areas

Impact 3.4/E Exposure to Wildlands Hazards

Mitigation Measure 3.4/6.0: Construction of New Fire Facilities

Why: To provide for the construction of new facilities coincident with new service demand in eastern Dublin.

Who: Developers/Dougherty Regional Fire Authority

What: Design and Construction of New Facilities

When: Condition of tentative map and/or development review approval

Completion: Construction of fire station(s) will occur concurrently with new service demand not addressed by other agreements.

Verification: DRFA/City Planning Department.

Mitigation Measure 3.4/7.0: Funding of New Fire Facilities

Why: To establish appropriate funding mechanisms to cover up-front costs of capital improvements.

Who: City of Dublin City Manager's Office/DRFA.

What: Establish funding mechanism for capital improvements.

When: Condition of tentative map and/or development review approval

Completion: Construction of fire station(s) will occur concurrently with new service demand not addressed by other agreements.

Verification: City of Dublin City Manager responsible for establishing funding mechanisms; Planning Department responsible for verifying completion prior to project approval.

Mitigation Measure 3.4/8.0: Sites for New Fire Facilities

Why: To ensure acquisition of sites for construction of new fire stations.
Who: City of Dublin Planning Department in consultation with DRFA.
What: Identification and acquisition of sites for new fire stations.
When: Condition of tentative map and/or development review approval
Completion: Construction of fire station(s) will occur concurrently with new service demand not addressed by other agreements.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/9.0: Fire Department Review

Why: To ensure DRFA input on project design relating to access, water pressure, fire safety and prevention.
Who: DRFA/City of Dublin Planning Department.
What: Review of proposed developments by DRFA for fire safety. Incorporation of DRFA recommendations into project conditions by Planning Department.
When: During development review process.
Completion: Prior to development review and/or Final Map approval.
Verification: Fire Chief or representative to provide recommendations; Planning Department to verify incorporation of DRFA recommendations as conditions of project approval.

Mitigation Measure 3.4/10.0: Urban/Open Space Interface Management

Why: To ensure that a mechanism is in place to provide long-term maintenance for the urban/open space interface.
Who: Developers/DRFA/City of Dublin Planning Department.
What: Establishment of an assessment district or other suitable mechanism to maintain safe fire conditions along the urban/open space interface.
When: Condition of tentative map approval.
Completion: Prior to Final Map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/11.0: Fire Trails/Open Space System

Why: To integrate fire trails and fire breaks into the open space trail system.
Who: City of Dublin Planning Department/City of Dublin Recreation Department/DFRA/Developers.
What: Design and dedication of fire trails and fire breaks.
When: Condition of tentative map approval.
Completion: Prior to Final Map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/12.0: Wildfire Management Plan

Why: To prepare a wildfire management plan for the Project area in order to

reduce the risk of impact related to wildland fire.
Who: City of Dublin/DRFA.
What: Prepare a wildfire management plan.
When: During rezoning and annexation application processing.
Completion: Prior to approval of any development in lands adjacent to land designated for permanent open space or rural residential/agriculture.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/13.0 Sites for Fire Facilities for the GPA Increment

Why: To determine the number, location and timing of additional fire stations for areas within the Project area yet outside the Specific Plan area.
Who: DRFA/City of Dublin Planning Department.
What: Identification of future fire station sites.
When: During rezoning and annexation application processing.
Completion: Prior to development approvals in the areas outside the Specific Plan area.
Verification: City of Dublin Planning Department.

Schools

Impact 3.4/F Demand for New Classroom Space
Impact 3.4/G Demand for Junior High School Space

Mitigation Measure 3.4/13.0: Dedication of New School Sites

Why: To reserve school sites within the Project area as designated in the Specific Plan and GPA.
Who: Developers/City of Dublin Planning Department/DUSD/LVJUSD
What: Identification of new school sites.
When: Condition of tentative map approval.
Completion: Prior to Final Map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/14.0: Planning for Additional Junior High School Capacity

Why: To ensure that adequate capacity is provided for junior high school age students.
Who: DUSD.
What: Planning for projected junior high school demand within two proposed sites and/or provide for a third site in the Future Study Area to the east of the Project area.
When: During planning and design of the first Junior High School site.
Completion: Prior to final map approval for the first junior high school.
Verification: City of Dublin/DUSD.

IM 3.4/H Overcrowding of Schools

Mitigation Measure 3.4/15.0: Provision of Adequate Schools to Serve the Project site

Why: To ensure that adequate classroom space is provided prior to the development of new homes.
Who: DUSD/City of Dublin Planning Department.
What: 1) Coordination between City of Dublin and DUSD to monitor available school capacity and proposed development.
2) DUSD sign-off on available capacity to accommodate new development.
When: Coordination to occur during development review process, with written sign-off from DUSD submitted prior to tentative map approval.
Completion: Prior to occupancy approval.
Verification: City of Dublin Planning Department.

Impact 3.4/I Impact on School District Jurisdiction

Mitigation Measure 3.4/16.0: Resolution of School District Jurisdiction Issue

Why: To resolve the jurisdictional issue of which school district(s) will provide service to the Project area.
Who: City of Dublin/DUSD/LVJUSD.
What: City will assist with resolution of District boundary dispute.
When: Within two years of plan adoption.
Completion: Prior to occupancy of residential units within the Project area.
Verification: City of Dublin Planning Department.

Impact 3.4/J Financial Burden on School Districts

Mitigation Measure 3.4/17.0: Full mitigation of Project impact on school facilities

Why: To ensure that adequate school facilities are available prior to development in the Project area to the extent permitted by law.
Who: City of Dublin/DUSD/LVJUSD.
What: Establish liaison between City of Dublin and school districts.
When: Ongoing as part of development review process.
Completion: On-going.
Verification: City of Dublin Planning Department with input from school districts.

Mitigation Measure 3.4/18.0: Provision of School Sites

Why: To ensure that the development of new facilities is provided for through the dedication of school sites and/or payment of development fees by developers.
Who: Developers/City of Dublin/DUSD/LVJUSD.
What: Dedication of School Sites/Payment of Development Fees.
When: Condition of Tentative Map Approval.
Completion: Prior to occupancy approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/19.0: Funding of New Schools

Why: To establish appropriate funding mechanisms, such as Mello Roos Community Facilities District, development impact fees, or a general obligation bond measure, to fund new school development in eastern Dublin.
Who: City of Dublin/DUSD/LVJUSD.
What: Creation of funding mechanism(s).
When: During processing of rezoning and annexation applications.
Completion: Prior to occupancy of residential units within the Project area.
Verification: City of Dublin Planning Department.

Parks and Recreation

Park Facilities

Impact 3.4/K Demand for Park Facilities

Mitigation Measure 3.4/20.0: Expansion of park area (Guiding Policy. No monitoring applicable or required.)

Mitigation Measure 3.4/21.0: Maintenance and improvement of outdoor facilities in conformance with Park and Recreation Master Plan (Guiding Policy. No monitoring applicable or required.)

Mitigation Measure 3.4/22.0: Provide adequate active parks and facilities (Guiding Policy. No monitoring applicable or required.)

Mitigation Measure 3.4/23.0: Acquire and improve parklands

Why: To acquire and improve parklands in conformance with the priorities and phasing recommended in the City's Park and Recreation Master Plan.
Who: City of Dublin Planning Department/Dublin Recreation Department.
What: Coordination between the Planning Department and Recreation Department to ensure adherence with standards of Park and Recreation Master Plan.
When: Ongoing as part of the development review process.
Completion: Ongoing.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/24.0: Land dedication and parks improvements/Collection of in-lieu park fees

Why: To require land dedication and improvements as designated in the GPA and collect in-lieu fees per City standards.
Who: City of Dublin Planning Department/Recreation Department.
What: Require land dedication or payment of in-lieu fees as condition of approval for individual projects.
When: Condition of tentative map approval.
Completion: Prior to Final Map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/25.0: Park Acreage Dedication

Why: To provide an adequate ratio of developed parklands to population.
Who: Developers/City of Dublin Planning Department.
What: Park dedication.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/26.0: Specific Park Acreage Dedication

Why: To provide an adequate ratio of developed parklands to population.
Who: Developers/City of Dublin Planning Department.
What: Park dedication.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/27.0: Park standards

Why: To ensure that park development is consistent with the standards and phasing recommended in the City's Park and Recreation Master Plan.
Who: Developers/City of Dublin Recreation Department.
What: Monitor individual project conformance with standards in Master Plan.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Recreation Department.

Mitigation Measure 3.4/28.0: Implementation of Specific Plan policies related to the provision of open space.

Why: To ensure the provision of open space, access and areas for public recreation.
Who: Developers/City of Dublin Planning Department.
What: Monitor individual project conformance with open space policies.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Park Financing

Impact 3.4/L Park Facilities Fiscal Impact

Mitigation Measure 3.4/29.0: Provision of Fair Share of Park Space

Why: To ensure that each new development reserves the open space and parkland designated in the Plan.

Who: Developers/City of Dublin Planning Department
What: Review each development proposal against the Specific Plan/GPA to ensure that designated park and open space is set aside.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/30.0: Parks Implementation Plan

Why: To develop a Parks Implementation Plan for eastern Dublin.
Who: Dublin Recreation Department
What: Preparation of a Parks Implementation Plan.
When: Within two years of Plan adoption or prior to any significant residential development, whichever occurs first.
Completion: Prior to final map approval on the first residential projects.
Verification: Dublin Recreation Department.

Mitigation Measure 3.4/31.0: Calculation and Assessment of In-Lieu Park Fees

Why: To calculate and assess in-lieu park fees.
Who: City of Dublin Planning Department
What: Assessment of In-Lieu Park Fees.
When: Notification at time of permit application. Condition of tentative map approval.
Completion: Payment at time of final map approval.
Verification: City of Dublin Planning Department.

Impact 3.4/M Impact on Regional Trail System

Mitigation Measure 3.4/32.0: Trail Linkage and Access

Why: To establish a trail system with connections to planned regional and subregional system.
Who: Developers/City of Dublin Planning Department
What: Dedication of trail rights-of-way.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Impact 3.4/N Impact on Open Space Connections

Mitigation Measure 3.4/33.0: Establish a comprehensive trail network

Why: To establish a comprehensive, integrated trail network that permits safe and convenient pedestrian and bicycle access.
Who: Developers/City of Dublin Planning Department/City of Dublin Recreation Department.
What: Provide guidelines to developers on right-of-way alignment and design

When: standards, and ensure implementation.
Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/34.0: Establish a continuous open space network

Why: To establish a continuous open space network that integrates large natural open space areas, stream corridors, and developed parks and recreation areas.
Who: Developers/City of Dublin Planning Department/City of Dublin Recreation Department.
What: Ensure dedication/preservation of designated open space areas.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/35.0: Provision of access to open space areas

Why: To provide convenient pedestrian connections between developed areas and designated open space areas and trails.
Who: Developers/City of Dublin Planning Department/City of Dublin Recreation Department.
What: Ensure designation of appropriately located trails and access points as part of development review.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/36.0: Require public access easements

Why: To require developers to dedicate public access easements along ridgetops and stream corridors to accommodate the development of trails and staging areas.
Who: Developers/City of Dublin Planning Department.
What: Ensure dedication of public access easements.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Solid Waste

Impact 3.4/O Increased Solid Waste Production
Impact 3.4/P Impact on Solid Waste Disposal Facilities

Mitigation Measure 3.4/37.0: Preparation of Solid Waste Management Plan

Why: To prepare/update a Solid Waste Management Plan as needed to address eastern Dublin.
Who: Dublin City Manager's Office.
What: Prepare plan.
When: Within two years of the adoption of the Eastern Dublin Specific Plan/GPA.
Completion: Prior to issuance of building permits.
Verification: Dublin City Manager's Office.

Mitigation Measure 3.4/38.0: Revise Waste Generation Projections

Why: To revise waste generation projections of the City's SRRE/HHWE as needed to reflect the population and commercial land use projections of the adopted Project.
Who: Dublin City Manager's Office.
What: Revise projections and update solid waste generation and disposal capacity characteristics.
When: Within two years of the adoption of the Eastern Dublin Specific Plan/GPA.
Completion: Prior to issuance of building permits.
Verification: Dublin City Manager's Office.

Mitigation Measure 3.4/39.0: Integration of Eastern Dublin Solid Waste Plan into City's SRRE/HHWE

Why: To ensure that the Solid Waste Management Plan for Eastern Dublin addresses and incorporates the goals, objectives, and programs of Dublin's SRRE and HHWE.
Who: Dublin City Manager's Office/Public Works Department.
What: Updating of SRRE/HHWE to reflect Project.
When: Within two years of the adoption of the Eastern Dublin Specific Plan/GPA.
Completion: Prior to issuance of building permits.
Verification: Dublin City Manager's Office.

Mitigation Measure 3.4.40: Assessment of Landfill Capacity

Why: To ensure that adequate landfill capacity is available to accommodate project waste.
Who: City Manager's Office/City Planning Department/Alameda County Solid Waste Management Authority.
What: Determine the adequacy of available disposal capacity.
When: As a condition of Tentative Map approval.
Completion: Prior to Final Map approval.
Verification: City of Dublin Planning Department.

Electricity, Natural Gas and Telephone Service

Impact 3.4/Q Demand for Utility Extensions

Impact 3.4/R Utility Extension: Visual and Biological Impacts

Mitigation Measure 3.4/41.0: Provision of documentation that electric, gas and telephone service can be provided.

Why: To require project applicants to provide documentation that electric, gas, and telephone service can be provided to all new development.
Who: Developers/City of Dublin Planning Department.
What: Submit documentation from utilities providers.
When: As a condition of Tentative Map approval.
Completion: Prior to final map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/42.0: Undergrounding of Utilities

Why: To require all utilities to be located below grade where feasible and designed to City standards.
Who: City of Dublin Public Works Department.
What: Require developers to provide for installation of utilities below grade.
When: Prior to issuance of building permits.
Completion: Construction of infrastructure improvements.
Verification: City of Dublin Public Works Department.

Mitigation Measure 3.4/43.0: Avoidance of Infrastructure Impacts on Sensitive Habitat

Why: To mitigate the effects of utilities expansion, the city will work with PG&E to plan the undergrounding of all new electric lines and to route infrastructure away from sensitive habitat and open space lands.
Who: Developers/City of Dublin Public Works Department/PG&E.
What: Coordinate routing of electric lines.
When: During site design phase.
Completion: Prior to final map approval.
Verification: City of Dublin Public Works Department.

Mitigation Measure 3.4/44.0: Submittal of Service Report

Why: To require project applicants to submit a utilities service report to the City prior to Public Improvement Plan approval.
Who: Project Applicants/City of Dublin Planning Department.
What: Submittal of utilities service report.
When: Prior to approval of Public Improvement Plan.
Completion: Prior to issuance of building permits.
Verification: City of Dublin Planning Department.

Impact 3.4/S Consumption of Non-Renewable Natural Resources

Mitigation Measure 3.4/45.0: Demonstration Projects

Why: To require the installation of a demonstration project(s) of cost-effective energy conservation techniques.
Who: Developers/PG&E/City of Dublin Planning Department.
What: Meet with major land owners and PG&E to determine how to set up an Energy Conservation Demonstration Project within the Project area.
When: During development review process.
Completion: Prior to occupancy approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/46.0: Site Planning, Building Design and Landscaping

Why: To require developers to demonstrate the incorporation of energy conservation measures into the design, construction, and operation of proposed development.
Who: Developers/City of Dublin Planning Department.
What: Preparation of an Energy Conservation Plan.
When: Upon filing of tentative map.
Completion: Prior to building permit approval.
Verification: City of Dublin Planning Department.

Postal Service

Impact 3.4/T Demand for Increased Postal Service

Mitigation Measure 3.4/47.0: Provision of a Post Office in Eastern Dublin

Why: To provide for the creation of a post office with the eastern Dublin Town Center.
Who: Developer/City of Dublin Planning Department.
What: The City will work with developers of Town Center and the U.S. Postal Service to determine need and procedures for implementation.
When: Prior to tentative map approval for the Public/Semi-Public designated area in the Town Center subarea.
Completion: Prior to approval of Final Map.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/48.0: Coordination with U.S. Postal Service

Why: To provide for the creation of a post office with the eastern Dublin Town Center.
Who: Developer/City of Dublin Planning Department.
What: The City will work with developers of Town Center and the U.S. Postal Service to determine need and procedures for implementation.
When: Prior to tentative map approval for the Public/Semi-Public designated area in the Town Center subarea.

Completion: Prior to approval of Final Map.
Verification: City of Dublin Planning Department.

Library Service

Impact 3.4/U Demand for Increased Library Service

Mitigation Measure 3.4/49.0: Provision of Adequate Library Services

Why: To provide a library(ies) and associated services for eastern Dublin.
Who: Alameda County Library System/City of Dublin Planning Department.
What: Assessment of eastern Dublin library needs and formulation of strategy to meet these needs.
When: During processing of rezoning and annexation applications.
Completion: Prior to Final Map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/50.0: Coordination with Alameda County Library System

Why: To provide a library(ies) and associated services for eastern Dublin.
Who: Alameda County Library System/City of Dublin Planning Department.
What: Assessment of eastern Dublin library needs and formulation of strategy to meet these needs.
When: During processing of rezoning and annexation applications.
Completion: Prior to Final Map approval.
Verification: City of Dublin Planning Department.

Mitigation Measure 3.4/51.0: Specific Site Selection for New Library

Why: To have the City Library Task Force identify appropriate location and timing for development of new library(ies).
Who: City Library Task Force.
What: Assessment of site requirements and timing of projected need.
When: During processing of rezoning and annexation applications.
Completion: Prior to Final Map approval.
Verification: City of Dublin Planning Department.

SECTION 3.5: SEWER, WATER AND STORM DRAINAGE

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

- IM 3.5/B Lack of a Wastewater Collection System
- IM 3.5/C Extension of Sewer Trunk Line
- IM 3.5/D Current Limited Treatment Plant Capacity
- IM 3.5/E Future Lack of Wastewater Treatment Plant Capacity
- IM 3.5/F Increase in Energy Usage Through Increased Wastewater Treatment

IM 3.5/G Lack of Current Wastewater Disposal Capacity
IM 3.5/H Increase in Energy Usage Through Increased Wastewater Disposal
IM 3.5/I Potential Failure of Export Disposal System
IM 3.5/J Pump Station Noise and Odors
IM 3.5/K Storage Basin Odors and Potential Failure
IM 3.5/L Recycled Water System Operation
IM 3.5/M Recycled Water Storage Failure
IM 3.5/N Loss of Recycled Water System Pressure
IM 3.5/O Secondary Impacts from Recycled Water System Operation
IM 3.5/P Overdraft of Local Groundwater Resources
IM 3.5/Q Increase in Demand for Water
IM 3.5/R Additional Water Treatment Plant Capacity
IM 3.5/S Lack of Water Distribution System
IM 3.5/T Inducement of Substantial Growth and Concentration of Population
IM 3.5/U Increase in Energy Usage Through Operation of the Water Distribution System
IM 3.5/V Potential Water Storage Reservoir Failure
IM 3.5/W Potential Loss of System Pressure
IM 3.5/X Potential Pump Station Noise
IM 3.5/Y Potential Flooding
IM 3.5/Z Reduced Groundwater Recharge
IM 3.5/AA Non-Point Sources of Pollution

2. Mitigation Implementation and Monitoring Program

Impact 3.5/B Lack of a Wastewater Collection System

Mitigation Measure 3.5/1.0a: Expansion of DSRSD Service Boundaries

Why: To provide for the expansion of DSRSD's service boundaries to include the Project area.
Who: DSRSD.
What: DSRSD will revise its service area boundaries.
When: Prior to approval of any development outside the current service boundaries.
Completion: Prior to tentative map approval.
Verification: City of Dublin Department of Public Works.

Mitigation Measure 3.5/1.0: Connection to Public Sewers

Why: To require that all development within the Project area be connected to public sewers.
Who: City of Dublin Department of Public Works/DSRSD.
What: Require connection to public sewers.
When: Condition of approval for tentative map.
Completion: Prior to final map approval.
Verification: Department of Public Works.

Mitigation Measure 3.5/2.0: Wastewater Collection System Master Plan

Why: To have DSRSD update its wastewater collection system master plan computer model to reflect the adopted Specific Plan/GPA.
Who: Department of Public Works/DSRSD.
What: Public Works will request DSRSD to update Master Plan. DSRSD will be responsible to update the Master Plan.
When: As soon as possible after the adoption of the Specific Plan/GPA.
Completion: Before approval of any detailed wastewater improvement plans.
Verification: Department of Public Works/DSRSD.

Mitigation Measure 3.5/3.0: On-site Wastewater Treatment

Why: To discourage the use of on-site package plants and septic systems within the Project area.
Who: Department of Public Works/DSRSD.
What: Communicate to project applicants the City's desire that all projects be connected to the DSRSD sewer system.
When: Ongoing, as part of the development application process.
Completion: Prior to tentative map filing.
Verification: Department of Public Works.

Mitigation Measure 3.5/4.0: DSRSD Service

Why: To require a "will serve" letter from DSRSD prior to permit approval for grading.
Who: Department of Public Works/DSRSD.
What: Confirm receipt of a "will-serve" letter for all proposed projects.
When: Prior to tentative map approval.
Completion: Prior to issuance of grading permit.
Verification: Department of Public Works.

Mitigation Measure 3.5/5.0: DSRSD Standards

Why: To require that design and construction of all wastewater systems is in conformance with DSRSD standards.
Who: Department of Public Works/DSRSD.
What: Confirm that wastewater system meet DSRSD standards.
When: Prior to issuance of building permits.
Completion: Approval of improvement plans.
Verification: Department of Public Works/DSRSD.

Impact 3.5/C Extension of Sewer Trunk Line

Mitigation Measure 3.5/6.0: Sizing of Wastewater System

Why: To ensure that the planned wastewater collection system has been sized to accommodate only the development within the Project area.

Who: DSRSD.
What: Engineer wastewater capacity for Project site capacity only.
When: Wastewater system design phase.
Completion: Prior to installation of Project area sewer system.
Verification: DSRSD.

Impact 3.5/D Current Limited Treatment Plant Capacity

Mitigation Measure 3.5/7.0: Design Level Wastewater Investigation

Why: To require project applicants to prepare detailed wastewater capacity investigations, including means to minimize wastewater flows.
Who: Applicants in coordination with DSRSD.
What: Prepare a detailed wastewater capacity investigation.
When: Preparation of preliminary Public Improvement Plan.
Completion: Final Public Improvement Plan Approval.
Verification: DSRSD/Department of Public Works.

Mitigation Measure 3.5/7.1: DSRSD Service

Why: To require a "will serve" letter from DSRSD prior to permit approval for grading.
Who: Department of Public Works/DSRSD.
What: Confirm receipt of a "will-serve" letter for all proposed projects.
When: Prior to tentative map approval.
Completion: Prior to issuance of grading permit.
Verification: Department of Public Works.

Impact 3.5/E Future Lack of Wastewater Treatment Plant Capacity

Mitigation Measure 3.5/8.0: Ensure Adequate Wastewater Treatment Capacity

Why: To ensure that wastewater treatment and disposal facilities are available to meet the needs of future development in eastern Dublin.
Who: Department of Public Works/DSRSD.
What: DSRSD will prepare a Master Plan including growth projections and facility expansion needs and timing to meet the needs of projected development.
When: As soon as possible after adoption of the Specific Plan/GPA.
Completion: Prior to approval of any development.
Verification: Department of Public Works.

Mitigation Measure 3.5/9.0: Wastewater Treatment Plant Expansion Schedule

Why: To ensure that proposed development is consistent with wastewater treatment plant expansion as set forth in DSRSD's master plan.
Who: DSRSD/Department of Public Works.
What: The City must confirm that proposed development is consistent with the capacity and timing identified in DSRSD's Master Plan

When: During review of tentative map.
Completion: Prior to approval of Final Map.
Verification: Department of Public Works.

Impact 3.5/F Increase in Energy Usage Through Increased Wastewater Treatment

Mitigation Measure 3.5/10.0: Use of Energy-Efficient Treatment System

Why: To include energy efficient treatment systems in any wastewater treatment plant expansion and operate the plant to take advantage of off-peak energy.
Who: DSRSD
What: Design and construct energy-efficient treatment systems.
When: Design phase for WWTP expansion.
Completion: On-going.
Verification: DSRSD.

Impact 3.5/G Lack of Current Wastewater Disposal Capacity

Mitigation Measure 3.5/11.0: (Program 9H) Export Pipeline

Why: To support TWA in its current efforts to implement a new wastewater export pipeline system.
Who: Tri-Valley Wastewater Authority/Dublin City Manager's Office.
What: Support implementation of new export pipeline.
When: Ongoing.
Completion: Approval of TWA improvement plans.
Verification: Dublin City Manager's Office.

Mitigation Measure 3.5/12.0: (Policy 9-5) Construction of Recycled Water System

Why: To promote recycled water use for landscape irrigation in eastern Dublin through upgrading of treatment and construction of a recycled water distribution and storage system in eastern Dublin.
Who: DSRSD.
What: Promote recycled water use.
When: During development review process.
Completion: Ongoing.
Verification: DSRSD.

Mitigation Measure 3.5/13.0: (Program 9J) Recycled Water Distribution System

Why: To have DSRSD update its proposed recycled water distribution system computer model to reflect the adopted Specific Plan/GPA.
Who: Department of Public Works/DSRSD.
What: Public Works will request DSRSD to update its computer model. DSRSD will be responsible to update the model.
When: As soon as possible after the adoption of the Specific Plan/GPA.
Completion: Before approval of any detailed wastewater improvement plans.

Verification: Department of Public Works/DSRSD.

Mitigation Measure 3.5/14.0: (Program 9K) Wastewater Recycling and Reuse

Why: To support the efforts of the Tri-Valley Water Recycling Task Force Study through Zone 7, encouraging wastewater recycling and reuse for landscape irrigation.
Who: City of Dublin Department of Public Works/Zone 7.
What: Encourage wastewater recycling as detailed in the Tri-Valley Water Recycling Task Force Study.
When: As soon as possible after the adoption of the Specific Plan/GPA.
Completion: Ongoing.
Verification: Department of Public Works.

Impact 3.5/H Increase in Energy Usage Through Increased Wastewater Disposal

Mitigation Measure 3.5/15.0: Energy for Export Disposal

Why: To encourage LAVWMA to continue its program of off-peak pumping of wastewater to balance electric demands in the PG&E system.
Who: City of Dublin/LAVWMA.
What: Encourage off-peak pumping.
When: Upon adoption of the Specific Plan/GPA.
Completion: On-going.
Verification: Department of Public Works.

Mitigation Measure 3.5/16.0: Energy for Disposal through Recycled Water System

Why: To ensure that the recycled water treatment system is planned, designed and constructed for energy efficiency in operation.
Who: City of Dublin Department of Public Works/DSRSD
What: Design, construction, and operation of energy-efficient system.
When: Upon agreement to use a recycled water treatment system.
Completion: On-going.
Verification: DSRSD.

Impact 3.5/I Potential Failure of Export Disposal System

Mitigation Measure 3.5/17.0: Redundancy in Engineering

Why: To avoid potential failure in the operation of the pumps in the TWA wastewater collection system.
Who: TWA
What: Incorporate engineering redundancy into the design of the pump stations and provide emergency power generators.
When: Design and construction phase of export system.
Completion: Approval of export system improvement plans.
Verification: Department of Public Works.

Impact 3.5/J Pump Station Noise and Odors

Mitigation Measure 3.5/18.0: Design of Pump and Motors

Why: To ensure that pump station design minimizes potential for impacts related to noise and odors.
Who: TWA
What: Design pump and motors to meet local noise standards. Install odor control equipment.
When: Design phase of export system.
Completion: Approval of export system improvement plans.
Verification: Department of Public Works.

Impact 3.5/K Storage Basin Odors and Potential Failure

Mitigation Measure 3.5/19.0: Design/Engineering of Storage Basins

Why: To ensure that wastewater storage basins are designed to control odors and minimize the risk of failure in the event of an earthquake.
Who: TWA
What: Design storage basins to meet seismic codes, and limit odors by burying tanks and incorporating odor control equipment.
When: Design phase of export system.
Completion: Approval of export system improvement plans.
Verification: Department of Public Works.

Impact 3.5/L Recycled Water System Operation

Mitigation Measure 3.5/20.0: Construction of Recycled Water Distribution System

Why: To require that construction of the recycled water distribution system be in accordance with all applicable State and local regulations.
Who: DSRSD
What: Require compliance of recycled water distribution system with applicable regulations of the DHS and the SFBRWQCB.
When: Condition of approval for recycled water distribution system.
Completion: Approval of improvement plans.
Verification: DSRSD.

Impact 3.5/M Recycled Water Storage Failure

Mitigation Measure 3.5/21.0: Design/Engineering of Water Storage Basins

Why: To ensure that reservoir construction meets all applicable standards of DSRSD and appropriate health agencies.
Who: DSRSD/Department of Public Works.
What: Confirm the reservoir design and construction meets all applicable standards.
When: Design phase.

Completion: Approval of improvement plans.
Verification: Department of Public Works/DSRSD.

Impact 3.5/N Loss of Recycled Water System Pressure

Mitigation Measure 3.5/22.0: Compliance with DSRSD standards

Why: To ensure that proposed recycled water pump stations meet all applicable standards of DSRSD and include emergency power generation.
Who: DSRSD/Department of Public Works.
What: Confirm compliance of pump station design with DSRSD standards, and include emergency power generators.
When: Design phase.
Completion: Approval of improvement plans.
Verification: Department of Public Works.

Impact 3.5/O Secondary Impacts from Recycled Water System Operation

Mitigation Measure 3.5/23.0: Salt Reduction

Why: To ensure that recycled water projects meet any applicable salt mitigation requirements of Zone 7.
Who: DSRSD.
What: Coordinate with Zone 7 to confirm whether or not a recycled water system in the Project area would require demineralization.
When: Design Phase.
Completion: Approval of improvement plans.
Verification: DSRSD.

Impact 3.5/P Overdraft of Local Groundwater Resources

Mitigation Measure 3.5/24.0: (Policy 9-2) Annexation of Specific Plan area to DSRSD

Why: To expand DSRSD service boundaries to encompass the entire eastern Dublin Specific Plan/GPA area.
Who: DSRSD.
What: Development of annexation application.
When: Condition of approval for planned development rezoning.
Completion: Prior to approval of detailed improvement plans.
Verification: DSRSD.

Mitigation Measure 3.5/25.0: Connection to DSRSD Water System

Why: To encourage all development in the Project area to connect to the DSRSD water system.
Who: City of Dublin Public Works Department/DSRSD.
What: Inform all project applicants of preference for connection of new development to the DSRSD system.
When: During preparation of tentative map.

Completion: Prior to approval of final map.
Verification: City of Dublin Department of Public Works.

Impact 3.5/Q Increase in Demand for Water

Mitigation Measure 3.5/26.0: (Program 9A) Water Conservation

Why: To require water conservation measures to be designed into individual projects.
Who: Developers/City of Dublin Public Works Department/DSRSD.
What: Review project applications for incorporation of water conservation measures.
When: Condition of approval for tentative map.
Completion: Prior to approval of final map.
Verification: Department of Public Works.

Mitigation Measure 3.5/27.0: (Program 9B) Water Recycling

Why: To require water recycling measures be incorporated into individual projects.
Who: Developers/City of Dublin Public Works Department/DSRSD.
What: Review projects for incorporation of DSRSD and Zone 7 recommendations relating to the use of recycled water.
When: Condition of approval for tentative map.
Completion: Approval of detailed improvement plans.
Verification: Dublin Department of Public Works.

Mitigation Measure 3.5/28.0: Zone 7 Improvements

Why: To ensure that Zone 7 has water supply needed to meet requirements of the Project.
Who: Public Works Department/DSRSD/Zone 7.
What: Confirm status of Zone 7 water supply improvements.
When: Condition of approval for "will serve" letter.
Completion: Prior to approval of final map.
Verification: DSRSD/Public Works Department.

Mitigation Measure 3.5/29.0: New Zone 7 Turnouts

Why: To provide for the construction of two additional turnouts from the Zone 7 Cross Valley Pipeline to serve the Eastern Dublin area.
Who: Zone 7/DSRSD.
What: Construction of two additional turnouts.
When: As needed to provide adequate service to new development.
Completion: Ongoing.
Verification: DSRSD.

Mitigation Measure 3.5/30: Interconnections with Existing Systems

Why: To provide for increased water source reliability, the Project water system should be interconnected with existing adjoining systems.
Who: DSRSD/Public Works Department.
What: Plan water system to interconnect with existing systems.
When: Ongoing as system within the Project area is built out.
Completion: Ongoing.
Verification: Public Works Department.

Mitigation Measure 3.5/31.0: Reimbursement for New DSRSD Groundwater Wells

Why: To provide a backup source of water supply to its Zone 7 source, DSRSD will reimburse City of Pleasanton for construction and operation of new groundwater wells south of the Project area.
Who: DSRSD/City of Pleasanton.
What: DSRSD will reimburse City of Pleasanton for groundwater wells.
When: On schedule to be determined by DSRSD and the City of Pleasanton.
Completion: Ongoing.
Verification: DSRSD.

Impact 3.5/R Additional Water Treatment Plant Capacity

Mitigation Measure 3.5/32.0: Zone 7 Phasing for Water Treatment System Improvements

Why: To meet increasing demands on its water system, Zone 7 has established a phasing for water treatment system improvements.
Who: Zone 7.
What: Implementation of phased improvements.
When: Pursuant to established schedule.
Completion: Pursuant to established schedule.
Verification: Zone 7.

Mitigation Measure 3.5/33.0: Construction of New Chlorination/Fluoridation Stations

Why: To meet increased demand resulting from the project, DSRSD should construct two new chlorination/fluoridation stations at the two proposed Zone 7 turnouts to eastern Dublin.
Who: DSRSD/Zone 7.
What: Construction of two new stations.
When: As needed to provide adequate service, with the western turnout being developed first. The eastern turnout would not be developed until development of the eastern portion of the Project area.
Completion: On schedule to be determined by DSRSD and Zone 7.
Verification: DSRSD.

Impact 3.5/S Lack of a Water Distribution System

Mitigation Measure 3.5/34.0: (Policy 9-1) Provision of an Adequate Water Supply System

Why: To provide an adequate water supply system and related improvements and storage facilities for all new development in the Project area.
Who: DSRSD/Developers.
What: Require new development to build the water supply system needed per DSRSD Master Plan and service standards.
When: Condition of approval for tentative map.
Completion: Prior to approval of Final Public Improvements Plan.
Verification: DSRSD/Department of Public Works.

Mitigation Measure 3.5/35.0: (Program 9C) Water System Master Plan

Why: To ensure that DSRSD updates its water system master plan computer model to reflect the adopted Specific Plan/GPA land uses.
Who: City of Dublin/DSRSD
What: Request that DSRSD update its water system master plan computer model.
When: As soon as possible after adoption of the Specific Plan/GPA.
Completion: Prior to the approval of a Public Improvement Plan for any new development.
Verification: Public Works Department.

Mitigation Measure 3.5/36.0: (Program 9D) Combining of Water Systems

Why: To consolidate the Camp Parks and Alameda County water systems and turnouts with the DSRSD system.
Who: City of Dublin Public Works Department/Camp Parks/Alameda County/DSRSD.
What: Encourage agencies to combine water systems with DSRSD.
When: Ongoing from date of Project adoption.
Completion: Ongoing.
Verification: DSRSD.

Mitigation Measure 3.5/37.0: DSRSD Standards

Why: To require that design and construction of all water system facility improvements be in accordance with DSRSD standards.
Who: City of Dublin Public Works Department/DSRSD/Developers
What: Review each development proposal to verify that all water system facility improvements conform to DSRSD standards.
When: Condition of approval for Public Improvements Plan.
Completion: Prior to approval of Final Public Improvements Plan.
Verification: Public Works Department.

Mitigation Measure 3.5/38.0: DSRSD Service

Why: To require a "will serve" letter from DSRSD prior to issuance of a grading permit.
Who: City of Dublin/DSRSD/Developer.
What: Confirm receipt of a "will-serve" letter from DSRSD.
When: Condition of approval for tentative map.
Completion: Prior to approval of final map.
Verification: Planning Department.

Impact 3.5/T Inducement of Substantial Growth and Concentration of Population

Mitigation Measure 3.5/39.0: Sizing of Water Distribution System

Why: To reduce the growth-inducing potential of water system expansion, the water distribution system will be sized to accommodate only the estimated water demands from approved land uses within the Project.
Who: DSRSD.
What: Limit capacity of water distribution system to serve only the Project site.
When: Update of DSRSD water system master plan computer model.
Completion: Prior to the approval of a Public Improvement Plan for any new development in the Project area.
Verification: Department of Public Works.

Impact 3.5/U Increase in Energy Usage through Operation of the Water Distribution System

Mitigation Measure 3.5/40.0: Energy-Efficient Operation of Water Distribution System

Why: To ensure that the water distribution system is planned, designed and constructed for energy-efficient operation.
Who: City of Dublin/DSRSD.
What: Design and operation of energy efficient water distribution system.
When: Ongoing.
Completion: On-going.
Verification: Public Works Department.

Impact 3.5/V Potential Water Storage Reservoir Failure

Mitigation Measure 3.5/41.0: Design/Engineering of Water Storage Basins

Why: To require all reservoir construction to meet all the applicable standards of DSRSD, to meet current seismic building standards, and to provide adequate site drainage.
Who: DSRSD.
What: Design basins to reduce failure potential.
When: Design phase.
Completion: Approval of improvement plans.
Verification: DSRSD.

Impact 3.5/W Potential Loss of System Pressure

Mitigation Measure 3.5/42.0: Compliance With All DSRSD Standards

Why: To require the proposed new water pump stations to meet all the applicable standards of DSRSD and include emergency power generators at each pump station.

Who: City of Dublin/DSRSD.

What: Engineering provisions for emergency conditions.

When: Design phase.

Completion: Approval of final improvement plans.

Verification: Public Works Department.

Impact 3.54/X Potential Pump Station Noise

Mitigation Measure 3.5/43.0: Reduction of Potential Noise

Why: To include design provisions to pump stations that will reduce sound levels from operating pump motors and emergency generators.

Who: DSRSD.

What: Incorporate necessary engineering provisions in design of pump stations to minimize operational noise.

When: Design phase.

Completion: Approval of final improvement plans.

Verification: Public Works Department.

Impact 3.5/Y Potential Flooding

Mitigation Measure 3.5/44.0: (Policy 9-7) Provision of Drainage Facilities

Why: To provide drainage facilities that will minimize any increased potential for erosion or flooding.

Who: Developers/DSRSD.

What: Review drainage facilities design to verify that erosion/flooding potential will be minimized.

When: Condition of tentative map approval.

Completion: Approval of final grading and improvement plans.

Verification: Public Works Department.

Mitigation Measure 3.5/45.0: (Policy 9-8) Natural Channel Improvements

Why: To require channel improvements consisting of natural creek bottoms and side slopes with natural vegetation where possible.

Who: Developers/Zone 7.

What: Review required channel improvements for their attempt to maintain natural-appearing conditions while addressing the drainage requirements.

When: Condition of tentative map approval.

Completion: Prior to final grading plan approval.

Verification: Department of Public Works with input from Zone 7.

Mitigation Measure 3.5/46.0: (Program 9R) Storm Drainage Master Plan

Why: To require the preparation of a Master Drainage Plan for each development.
Who: Developers.
What: Preparation of Storm Drainage Master Plan.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: Public Works Department.

Mitigation Measure 3.5/47.0: (Program 9S) Flood Control

Why: To require Project area development to provide facilities to alleviate potential downstream flooding due to Project area development.
Who: Developers.
What: Provision of flood control improvements.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: Public Works Department.

Mitigation Measure 3.5/48.0: Construction of Storm Drainage Facilities

Why: To require the construction of the backbone drainage facilities consistent with the Storm Drainage Master Plan.
Who: Developers.
What: Construction of storm drainage facilities.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: Public Works Department.

Impact 3.5/Z Reduced Groundwater Recharge

Mitigation Measure 3.5/49.0: (Policy 9-9) Protection and Enhancement of Water Resources

Why: To plan facilities and management practices that protect and enhance water quality.
Who: City of Dublin Public Works Department/Zone 7.
What: Oversight of facilities to protect and enhance water quality.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: Public Works Department.

Mitigation Measure 3.5/50.0: Zone 7 Groundwater Recharge Program

Why: To protect groundwater resources, Zone 7 supports an ongoing groundwater recharge program for the Central Basin.
Who: City of Dublin Public Works Department.
What: Support Zone 7 groundwater recharge program, by encouraging recharge areas within the Project area where feasible.

When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: Public Works Department.

Impact 3.5/AA Non-Point Sources of Pollution

Mitigation Measure 3.5/52.0: Community Education Programs

Why: To develop community-based programs to educate local residents and businesses on methods to reduce non-point sources of pollution, and coordinate such programs with current Alameda County programs.
Who: City of Dublin Public Works Department.
What: Development/dissemination of information to reduce non-point sources of pollution.
When: Condition of tentative map approval
Completion: On-going
Verification: Public Works Department.

Mitigation Measure 3.5/53.0: "Best Management Practices"

Why: To require all development to meet the requirements of the City of Dublin's "Best Management Practices" to mitigate storm water pollution.
Who: City of Dublin Public Works Department.
What: Review proposed development plans to ensure that "Best Management Practices" have been incorporated to reduce pollution.
When: During development review processing.
Completion: Prior to building permit approval.
Verification: Public Works Department.

Mitigation Measure 3.5/54.0: National Pollution Discharge Elimination System Requirements

Why: To require all development to meet the water quality requirements of the City of Dublin's NPDES permit.
Who: City of Dublin Public Works Department.
What: Review proposed development plans to ensure that NPDES requirements have been incorporated to reduce pollution.
When: During development review processing.
Completion: Prior to building permit approval.
Verification: Public Works Department.

Mitigation Measure 3.5/55.0: Urban Runoff Clean Water Program Requirements

Why: To require all development to meet the water quality requirements of the Alameda County Urban Runoff Clean Water Program.
Who: City of Dublin Public Works Department.
What: Review proposed development plans to ensure that the requirements of the County's Urban Runoff Clean Water Program have been incorporated to reduce pollution.
When: During development review processing.

Completion: Prior to building permit approval.
Verification: Public Works Department.

SECTION 3.6: SOILS, GEOLOGY AND SEISMICITY

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

IM 3.6/B Earthquake Ground Shaking: Primary Effects
IM 3.6/C Earthquake Ground Shaking: Secondary Effects
IM 3.6/D Substantial Alteration to Project Site Landforms
IM 3.6/F Groundwater Impacts
IM 3.6/G Groundwater Impacts Associated with Irrigation
IM 3.6/H Shrinking and Swelling of Expansive Soils and Bedrock
IM 3.6/I Natural Slope Stability
IM 3.6/J Cut-and-Fill Slope Stability
IM 3.6/K Erosion and Sedimentation: Construction-Related
IM 3.6/L Erosion and Sedimentation: Long-Term

2. Mitigation Implementation and Monitoring Program

Impact 3.6/B Earthquake Ground Shaking: Primary Effects

Mitigation Measure 3.6/1.0: Implementation of Current Seismic Design Standards

Why: To require the use of modern seismic design in construction of development projects, and build in accordance with Uniform Building code and applicable county and city code requirements.
Who: Developers/Public Works Department.
What: Review plans to ensure conformance to UBC and all other applicable codes.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Impact 3.6/C Earthquake Ground Shaking: Secondary Effects

Mitigation Measure 3.6/2.0: Design Requirements for Flat Areas

Why: To provide setbacks from or modification of unstable and potentially unstable landforms, and use of appropriate design to ensure seismic safety.
Who: Developers/Public Works Department.
What: Verify that improvements have been located away from unstable landforms; that potentially unstable landforms have been stabilized; and that development plans conform to UBC and all other applicable codes.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Mitigation Measure 3.6/3.0: Design Requirements for Hillside Areas

Why: To require appropriate grading and design to completely remove unstable and potentially unstable materials in hillside areas where development may require substantial grading.
Who: Developers/Public Works Department.
What: Verify that grading and design will remove unstable materials.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Mitigation Measure 3.6/4.0: Design Requirements for Hillside Fills

Why: To use engineering techniques and improvements, such as retention structures, drainage improvements, properly designed keyways, and adequate compaction to improve the stability of fill areas and reduce seismically induce fill settlement.
Who: Developers/Public Works Department.
What: Require engineered retention structures, surface and subsurface drainage improvements.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Mitigation Measure 3.6/5.0: Design Requirements for Fill Settlement

Why: To use engineering techniques and improvements, such as retention structures, drainage improvements, properly designed keyways, and adequate compaction to improve the stability of fill areas and reduce seismically induce fill settlement.
Who: Developers/Public Works Department.
What: Require engineered retention structures, surface and subsurface drainage improvements.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Mitigation Measure 3.6/6.0: Design Requirements (roads, structural foundations and underground utilities) for Fill Settlement

Why: To design roads, structural foundations, and underground utilities to accommodate estimated settlement without failure, especially across transitions between fills and cuts, and to remove or reconstruct potentially unstable stock pond embankments in development areas.
Who: Developers/Public Works Department.
What: Verify the effectiveness of improvements to ensure the stability of proposed roads, structural foundations and underground utilities.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.

Verification: Public Works Department.

Mitigation Measure 3.6/7.0: Design-Level Geotechnical Investigations

Why: To require all development projects in the Project area to perform design level geotechnical investigations prior to issuing any permits.
Who: Developers/Public Works Department.
What: Confirm receipt of geotechnical investigations (ie. stability analysis of significant slopes and displacement analysis of critical slopes) in conjunction with final design of improvements.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Mitigation Measure 3.6/8.0: Earthquake Preparedness Plans

Why: To provide for the development of earthquake preparedness plans and the dissemination of appropriate emergency measures to all Project residents and employees.
Who: City of Dublin Planning Department.
What: Develop earthquake preparedness plan, and prepare public information strategy.
When: Within two years of adoption of the Specific Plan/GPA.
Completion: Prior to substantial development in the Project Area.
Verification: Planning Department

Impact 3.6/D Substantial Alteration to Project Site Landforms

Mitigation Measure 3.6/9.0: Grading Plans to Reduce Landform Alteration

Why: To reduce alteration to existing landforms through the preparation of grading plans that adapt improvements to natural land forms and implementation of such techniques as partial pads and retaining structures.
Who: Developers/Public Works Department.
What: Review grading plans to ensure that they do not result in unnecessary or avoidable alterations to existing landforms.
When: Condition of tentative map approval.
Completion: Prior to issuance of grading permit.
Verification: Public Works Department.

Mitigation Measure 3.6/10.0: Siting of Improvements

Why: To reduce landform alteration by carefully siting individual improvements to avoid adverse conditions and thus the need for remedial grading.
Who: Developers/Public Works Department.
What: Review proponents geotechnical investigation to determine if improvements have been sited to reduce the need for grading.
When: Prior to submittal of tentative map.

Completion: Prior to issuance of grading permit.
Verification: Public Works Department.

Impact 3.6/F Groundwater Impacts
Impact 3.6/G Groundwater Impacts Associated with Irrigation

Mitigation Measure 3.6/11.0: Geotechnical Investigations to Locate and Characterize Groundwater Conditions

Why: To prepare detailed design level geotechnical investigations on development sites within the Project area, to locate and characterize groundwater conditions and formulate design criteria and measures to mitigate adverse conditions.
Who: Developers/Public Works Department.
What: Verify the preparation of geotechnical investigations to locate and characterize groundwater conditions.
When: One year prior to construction.
Completion: Prior to issuance of grading permit.
Verification: Public Works Department.

Mitigation Measure 3.6/12.0: Construction of Subdrain Systems

Why: To reduce groundwater impacts, subdrain systems including drainage pipe and permeable materials can be constructed.
Who: Developers/Public Works Department.
What: Construct subdrain systems to control groundwater impacts.
When: Condition of tentative map approval.
Completion: Prior to issuance of grading permit.
Verification: Public Works Department.

Mitigation Measure 3.6/13.0: Stock Ponds and Reservoirs

Why: To reduce groundwater impacts, stock pond embankments should be removed and reservoirs drained in development areas.
Who: Developers/Public Works Department.
What: Remove stock pond embankments and drain reservoirs within development areas.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Impact 3.6/H Shrinking and Swelling of Expansive Soils and Bedrock

Mitigation Measure 3.6/14.0: Geotechnical Investigation

Why: To prepare design level geotechnical investigations for development projects in the Project area to characterize site-specific soils and bedrock conditions, and to formulate appropriate design criteria.

Who: Developers/Public Works Department.
What: Confirm the preparation of geotechnical investigations to characterize site-specific soils and rock conditions, and the development of appropriate design solutions.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Mitigation Measure 3.6/15.0: Moisture Control Measures

Why: To reduce the potential for impact resulting from expansive soils and rock, by implementing measures to control moisture in the ground.
Who: Developers/Public Works Department.
What: Verify the appropriate application of moisture conditioning; construction of surface and subsurface drainage to control infiltration; lime treatment.
When: Condition of tentative map approval.
Completion: Prior to issuance of building permits.
Verification: Public Works Department.

Mitigation Measure 3.6/16.0: Foundation and Pavement Design

Why: To reduce the potential effects of expansive soil and rock through appropriate foundation and pavement design.
Who: Developers/Public Works Department.
What: Verify that structural foundations have been located below the zone of seasonal moisture change; the use structurally supported floors; the use of non-expansive fill beneath structure slabs and asphaltic concrete.
When: Prior to submittal of tentative map.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Impact 3.6/I Natural Slope Stability

Mitigation Measure 3.6/17.0: Geotechnical Investigations

Why: To characterize site-specific slope stability conditions and to formulate appropriate design criteria, development within the Project area should prepare design level geotechnical investigations.
Who: Developers/Public Works Department.
What: Confirm the preparation of geotechnical investigations to characterize slope stability conditions and identify appropriate design solutions.
When: Condition of tentative map approval.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Mitigation Measure 3.6/18.0: Siting of Improvements

Why: To avoid impacts from unstable slopes by siting development away from

unstable landforms and from slopes greater than 30%, and providing lower density development in steep, unstable areas.

Who: Developers/Public Works Department.
What: Confirm that plans avoid siting improvements downslope or on unstable and potentially unstable landforms or on 30%+ slopes.
When: Condition of submittal of tentative map.
Completion: Prior to final map approval.
Verification: Public Works Department.

Mitigation Measure 3.6/19.0: Design Measures for Improvements on, below, or adjacent to Unstable Slopes

Why: To implement measures such as removing, reconstructing, or repairing unstable areas, or structural engineering, when unstable areas cannot be avoided.

Who: Developers/Public Works Department.
What: Review for appropriateness and safety the measures suggested to resolve areas with steep and/or unstable slopes.
When: Prior to approval of tentative map.
Completion: Prior to final improvement plan/grading plan approval.
Verification: Public Works Department.

Impact 3.6/J Cut-and-Fill Slope Stability

Mitigation Measure 3.6/20.0: Minimizing Grading

Why: To require grading plans for hillside areas, which plans minimize grading and required cuts and fills by adapting roads to natural landforms and stepping structures down steeper slopes.

Who: Developers/Public Works Department.
What: Review plans to determine if proposed development has attempted to minimize grading.
When: Condition of tentative map approval.
Completion: Prior to issuance of grading permit.
Verification: Public Works Department.

Mitigation Measure 3.6/21.0: Conformance of Grading Plans to UBC

Why: To require compliance with the minimum requirements of the Uniform Building Code and applicable County and City code requirements.

Who: Developers/Public Works Department.
What: Verify that grading plans conform to chapters 70 and 22 of the Uniform Building Code and to other applicable codes.
When: Condition of tentative map approval.
Completion: Prior to issuance of grading permit.
Verification: Public Works Department.

Mitigation Measure 3.6/22.0: Avoidance of Unretained Cut Slopes Greater Than 33%

Why: To require that unretained cut slopes should not exceed 3:1 unless detailed, site-specific geotechnical investigations indicate that steeper inclinations are appropriate and safe.

Who: Developers/Public Works Department.

What: Confirm that project avoids unretained cut slopes greater than 3:1; uses retaining structures to reduce grading on slopes greater than 3:1; and provides benches and subsurface drainage on cut slopes where applicable.

When: Condition of tentative map approval.

Completion: Prior to issuance of grading permit.

Verification: Public Works Department.

Mitigation Measure 3.6/23.0: Measures for Slopes Greater Than 20%

Why: To require that slopes steeper than 5:1 should be keyed and benched into competent material and provided with subdrainage, prior to placement of engineered fill.

Who: Developers/Public Works Department.

What: Confirm that appropriate measures have been taken in areas where slopes are greater than 20% are to be disturbed.

When: Condition of tentative map approval.

Completion: Prior to issuance of grading permit.

Verification: Public Works Department.

Mitigation Measure 3.6/24.0: Measures for Slopes Greater Than 50%

Why: To require that unreinforced fill slopes should be no steeper than 2:1 and provided with benches and surface drainage, as appropriate.

Who: Developers/Public Works Department.

What: confirm that appropriate measures have been incorporated where unreinforced fill slopes greater than 2:1 are involved.

When: Condition of tentative map approval.

Completion: Prior to issuance of grading permit.

Verification: Public Works Department.

Mitigation Measure 3.6/25.0: Compaction of Fill

Why: To require that fill be engineered (compacted) to at least 90 percent relative compaction.

Who: Developers/Public Works Department.

What: Ensure that fill will be compacted to at least 90 percent relative compaction

When: Condition of tentative map approval.

Completion: Prior to issuance of grading permit.

Verification: Public Works Department.

Mitigation Measure 3.6/26.0: Preparation and Submittal of Subsurface Drainage Inspection Plans

Why: To require that development projects prepare plans for the periodic inspection and maintenance of subsurface drainage features, and the removal and disposal of materials deposited in surface drains and catch basins.

Who: Developers/Public Works Department.

What: Confirm that plans have been prepared and submitted for the periodic inspection and maintenance of subsurface and surface drainage facilities.

When: Condition of tentative map approval.

Completion: Prior to issuance of grading permit.

Verification: Public Works Department.

Impact 3.6/K Erosion and Sedimentation: Construction-Related

Mitigation Measure 3.6/27.0: Timing of Grading Activities

Why: To require that grading activities be timed to avoid the rainy season as much as possible, and that interim control measures be implemented to control runoff and reduce erosion potential.

Who: Developers/Public Works Department.

What: Review interim control measures to prevent runoff, control runoff velocity and trap silt for effectiveness.

When: Prior to issuance of grading permit.

Completion: Prior to issuance of grading permit.

Verification: Public Works Department.

Impact 3.6/L Erosion and Sedimentation: Long-Term

Mitigation Measure 3.6/28.0: Long-Term Control Measures

Why: To reduce long-term erosion and sedimentation impacts through appropriate design, construction, and continued maintenance of surface and subsurface drainage.

Who: Developers/Public Works Department.

What: Review adequacy of long-term control measures based upon recommendations of geotechnical consultants.

When: Condition of tentative map approval.

Completion: Prior to issuance of grading permit.

Verification: Public Works Department.

SECTION 3.7: BIOLOGICAL RESOURCES

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

- IM 3.7/A Direct Habitat Loss
- IM 3.7/B Indirect Impacts of Vegetation Removal
- IM 3.7/C Loss or Degradation of Botanically Sensitive Habitat
- IM 3.7/D San Joaquin Kit Fox
- IM 3.7/F Red-Legged Frog
- IM 3.7/G California Tiger Salamander
- IM 3.7/H Western Pond Turtle
- IM 3.7/I Tri-Colored Blackbird
- IM 3.7/J Golden Eagle: Destruction of Nesting Site
- IM 3.7/K Golden Eagle: Elimination of Foraging Habitat
- IM 3.7/L Golden Eagle and Other Raptor Electrocutions
- IM 3.7/M Burrowing Owl
- IM 3.7/N American Badger
- IM 3.7/O Prairie Falcon, Northern Harrier, and Black-Shouldered Kite
- IM 3.7/P Sharp-Shinned Hawk and Cooper's Hawk
- IM 3.7/S Special Status Invertebrates

2. Mitigation Implementation and Monitoring Program

Impact 3.7/A Direct Habitat Loss

Mitigation Measure 3.7 /1.0: (Policy 6-21) Avoiding Disturbance/Removal of Vegetation

- Why:** To ensure that direct disturbance or removal of trees or native vegetation cover should be minimized and be restricted to those areas actually designated for the construction of improvements.
- Who:** Developers/Planning Department.
- What:** Review plans to verify that disturbance/removal of vegetation has been kept to a minimum.
- When:** Prior to approval of tentative map.
- Completion:** Prior to approval of final map.
- Verification:** Planning Department.

Mitigation Measure 3.7 /2.0: (Policy 6-23) Vegetation Management Plans

- Why:** To provide for the preparation of vegetation enhancement/management plans for all open space areas (whether held publicly or privately) with the intent to enhance the biologic potential of the area as wildlife habitat.
- Who:** Developers/Planning Department.
- What:** Ensure that vegetation management plans have been prepared for designated open space areas.
- When:** Prior to approval of tentative map.
- Completion:** Prior to approval of final map.
- Verification:** Planning Department.

Mitigation Measure 3.7/3.0: (Action Program 6O) Revegetation Plan

Why: To require a detailed revegetation/restoration plan to be developed for all disturbed areas that are to remain undeveloped.
Who: Developers/Planning Department.
What: Ensure that revegetation/restoration plans have been prepared for disturbed areas.
When: Prior to approval of final map.
Completion: Prior to approval of grading plans.
Verification: Planning Department.

Mitigation Measure 3.7/4.0: Grazing Management Plan

Why: To require the City to develop and implement grazing management plans to protect riparian and wetland areas, increase plant diversity, and encourage the recovery of native plants.
Who: Planning Department.
What: Prepare a Grazing Management Plan and develop a strategy for implementation.
When: Upon annexation.
Completion: As soon as possible after annexations.
Verification: Planning Department.

Impact 3.7/B Indirect Impacts of Vegetation Removal

Mitigation Measure 3.7/5.0: (Policy 6-22) Revegetation

Why: To ensure that all areas of disturbance are revegetated as quickly as possible to prevent erosion.
Who: Developers/Planning Department.
What: 1) Planning Department will ensure that revegetation plans include schedule for replanting.
2) Building Inspectors will ensure that revegetation occurs on schedule.
When: 1) Prior to approval of revegetation plans.
2) After site grading.
Completion: 1) Prior to approval of final grading plans.
2) Completion of revegetation.
Verification: Planning Department/Public Works.

Impact 3.7/C Loss or Degradation of Botanically Sensitive Habitat

Mitigation Measure 3.7/6.0: (Policy 6-9) Preservation of Hydrologic Features

Why: To require the preservation of natural stream corridors, ponds, springs, seeps, and wetland areas wherever possible.
Who: Applicants/Planning Department.
What: Ensure that California Department of Fish and Game and Army Corps of Engineers (COE) have been consulted to determine jurisdiction and provide recommendations.
When: During processing of rezoning and annexation applications.

Completion: Prior to approval of final map.
Verification: Planning Department.

Mitigation Measure 3.7/7.0: (Policy 6-10) Preservation of Riparian and Wetlands Areas

Why: To require the incorporation of riparian and wetland areas into project open space areas, and ensure that loss of riparian or wetland habitat will be mitigated per Department of Fish and Game/Corps of Engineers.

Who: Developers/Planning Department.

What: 1) Planning Department will ensure that riparian and wetland areas are incorporated into open space areas wherever feasible, and that revegetation plans provide appropriate mitigation for loss of riparian/wetlands habitat.
2) Planning Department in conjunction with appropriate agency will ensure that mitigation occurs as planned.

When: 1) Prior to approval of revegetation plans.
2) After site grading.

Completion: 1) Prior to approval of final grading plans.
2) Completion of revegetation.

Verification: Planning Department.

Mitigation Measure 3.7/8.0: (Policy 6-11) Vegetation of Stream Corridors

Why: To require that all stream corridors be revegetated with native plant species to enhance their natural appearance and improve habitat values.

Who: Developers/Planning Department.

What: 1) Planning Department will ensure that revegetation plans provide for the revegetation of stream corridors.
2) Planning Department in conjunction with appropriate agency will ensure that revegetation occurs as planned.

When: 1) Prior to approval of revegetation plans.
2) After site grading.

Completion: 1) Prior to approval of final grading plans.
2) Completion of revegetation.

Verification: Planning Department.

Mitigation Measure 3.7/9.0: (Policy 6-12) Engineering for Storm Runoff

Why: To ensure that storm runoff is carried in natural stream channels wherever possible, rather than replacing with underground drainage systems.

Who: Applicants/Public Works Department.

What: Ensure that storm runoff plans preserve/utilize natural stream channels as effectively as possible.

When: Prior to tentative map approval.

Completion: Final map approval.

Verification: Public Works Department.

Mitigation Measure 3.7/10.0: (Policy 6-13) Open Space Corridor System

Why: To establish a stream corridor system that provides multi-purpose open space corridors capable of accommodating wildlife and pedestrian circulation.

Who: Developers/Planning Department.

What: Planning Department, with consultation from CDFG, will ensure that plans provide for the effective preservation/enhancement of stream corridors as multi-purpose corridors.

When: Prior to approval of tentative map.

Completion: Prior to approval of final grading plans.

Verification: Planning Department.

Mitigation Measure 3.7/11.0: (Program 6E) Submittal of Wetlands Delineation

Why: To require all project applicants to submit a multi-parameter wetlands delineation to the COE for verification and jurisdictional establishment, and submit plans for proposed alteration to any watercourse to the DFG for their review and approval.

Who: Applicants/Planning Department.

What: Verify submittal of multi-parameter wetlands delineation to the Corps of Engineers, and submittal of plans streamcourse alteration plans to the Department of Fish and Game.

When: Condition of approval for tentative map.

Completion: Final map approval.

Verification: Planning Department.

Mitigation Measure 3.7/12.0 (Program 6F) Comprehensive Stream Corridor Restoration Program

Why: To provide for the development of a comprehensive stream corridor restoration program that identifies a detailed set of criteria for grading, stabilization and revegetation of planning area stream channels.

Who: Planning Department/Public Works/Zone 7/Department of Fish and Game

What: Develop a comprehensive stream corridor restoration program.

When: During processing of rezoning and annexation applications.

Completion: Prior to tentative map approval.

Verification: Planning Department.

Mitigation Measure 3.7/13.0: (Program 6G) Dedication of Land and Improvements

Why: To provide for the dedication of land and improvements (i.e., trails, revegetation, etc.) along both sides of stream corridors as a condition of project approval.

Who: Developers/Planning Department.

What: Require dedication of land and improvements along both sides of stream corridors.

When: Condition of tentative map approval.

Completion: Prior to Final map approval.

Verification: Planning Department.

Mitigation Measure 3.7/14.0: (Program 6H) Sedimentation Control Ordinance

Why: To provide for the enactment of an erosion and sedimentation control ordinance establishing performance standards to ensure maintenance of water quality and protection of stream channels.
Who: Public Works Department.
What: Enactment and enforcement of a sedimentation control ordinance.
When: During processing of rezoning and annexation applications.
Completion: Prior to tentative map approval of the Project site.
Verification: Public Works Department.

Mitigation Measure 3.7/15.0: (Program 6K) Liaison with Resource Management Agencies

Why: To establish a liaison between the City and resource management agencies for the purpose of monitoring compliance with Specific Plan policies.
Who: Planning Department.
What: Establish and maintain a liaison with resource management agencies. Set up a meeting with agency representatives to review with them the adopted plan and points at which their input will be important.
When: As soon as possible after adoption of the Specific Plan/GPA.
Completion: On-going.
Verification: Planning Department.

Mitigation Measure 3.7/16.0: Protection of Existing Sensitive Habitats

Why: To require that sensitive habitat areas will be avoided and protected wherever feasible.
Who: Developers/Planning Department.
What: Verify that land use proposals avoid and protect existing sensitive habitat areas.
When: Upon submittal of tentative map.
Completion: Condition of final project approval.
Verification: Planning Department.

Mitigation Measure 3.7/17.0: Construction Near Drainages During the Dry Season

Why: To require construction near drainages to take place during the dry season.
Who: Developers/Public Works Department.
What: Require that construction near drainages take place only during the dry season.
When: Upon submittal of tentative map.
Completion: Condition of approval of building permit or grading permit.
Verification: Public Works Department.

Impact 3.7/D San Joaquin Kit Fox

Mitigation Measure 3.7/18.0: USFWS Section 7 Consultation / CDFG Section 2053 Consultation

Why: To require all development in the Project area to comply with the Eastern Dublin San Joaquin Kit Fox Protection Plan.
Who: Developers/Planning Department.
What: Verify that development plans are consistent with the provisions and procedures set forth in the Eastern Dublin San Joaquin Kit Fox Protection Plan.
When: Condition of tentative map approval.
Completion: Final map approval.
Verification: Planning Department.

Mitigation Measure 3.7/18.1: Kit Fox Habitat Management Plan

Why: To provide for cooperation between the City and other appropriate agencies in the preparation of a Kit Fox Habitat Management Plan.
Who: Planning Department.
What: Contact Department of Fish and Game about the City's interest in participating in the establishment of a habitat management plan with other jurisdictions in the region.
When: Upon adoption of the Specific Plan/GPA.
Completion: Ongoing.
Verification: Planning Department.

Mitigation Measure 3.7/19.0: (Program 6N) Restriction on use of Rodenticides / Herbicides

Why: To restrict the use of rodenticides and herbicides within the Project area in order to reduce potential impacts to wildlife.
Who: Public Works/Alameda County Department of Agriculture.
What: Monitor use of rodenticides/herbicides on Project site. Require any poisoning programs to be done in cooperation with and under supervision of the County Department of Agriculture.
When: Ongoing as a condition of project approval.
Completion: On-going.
Verification: Public Works Department.

Impact 3.7/F Red-Legged Frog

Impact 3.7/G California Tiger Salamander

Impact 3.7/H Western Pond Turtle

Impact 3.7/I Tri-Colored Blackbird

Mitigation Measure 3.7/20.0: (Program 6L) Pre-Construction Survey

Why: To require developers to conduct a pre-construction survey within 60 days prior to habitat modification to verify the presence of sensitive species.
Who: Developers/Planning Department
What: Review results of pre-construction surveys.

When: 60 days prior to habitat modification.
Completion: Prior to grading plan approval.
Verification: Planning Department.

Mitigation Measure 3.7/21.0: Habitat Protection

Why: To ensure the protection and enhancement of sensitive species habitat areas.
Who: Developers/Planning Department.
What: Review plans to ensure compliance with Mitigation Measures 3.7/2.0, 3.7/3.0, and 3.7/6.0-3.7/18/0 inclusive.
When: Prior to tentative map approval.
Completion: Prior to grading plan approval.
Verification: Planning Department.

Mitigation Measure 3.7/22.0: Buffer Zones

Why: To require the maintenance of a buffer around breeding sites of the red-legged frog, California tiger salamander, and the Western pond turtle.
Who: Developers/Public Works.
What: Maintenance of minimum buffer around breeding sites identified during the pre-construction surveys.
When: Condition of grading plan approval.
Completion: End of construction.
Verification: Public Works Department.

Impact 3.7/J Golden Eagle: Destruction of Nesting Site

Mitigation Measure 3.7/23.0: (Policy 6-20) Golden Eagle Protection Zone

Why: To ensure that a natural open space zone (Golden Eagle Protection Zone) is maintained around the golden eagle nest located in the northeast corner of the planning area.
Who: Developers/Planning Department.
What: Review development plans to ensure that a protection zone is maintained around the golden eagle nest.
When: Condition of tentative map approval.
Completion: Final map approval.
Verification: Planning Department.

Mitigation Measure 3.7/24.0: Golden Eagle Protection Zone: Additional Temporal Buffer

Why: To require that during the golden eagle reproductive period, an additional temporal buffer will be established within 250 feet of the Golden Eagle Protection Zone.
Who: Developers/Public Works Department.
What: Monitor construction activities to ensure that the temporal buffer around golden eagle protection zone is maintained during the period between July and January.

When: During construction near the golden eagle protection zone.
Completion: Following reproductive period or end of construction, whichever occurs first.
Verification: Public Works Department.

Impact 3.7/K Golden Eagle: Elimination of Foraging Habitat

Mitigation Measure 3.7/25.0: Preservation of Foraging Habitat

Why: To provide suitable forage for the golden eagles, the Project maintains substantial rural residential/agricultural acreage.
Who: Planning Department.
What: Ensure that future plans do not reduce habitat area.
When: Condition of tentative map approval.
Completion: Final map approval.
Verification: Planning Department.

Impact 3.7/L Golden Eagle and Other Raptor Electrocutions

Mitigation Measure 3.7/26.0: (Program 6M) Undergrounding of Transmission Lines

Why: To require the placement of all transmission lines underground whenever feasible, to avoid the potential for raptor electrocutions.
Who: Public Works Department.
What: Undergrounding of transmission lines.
When: Condition of approval for Public Improvements Plan.
Completion: Final Improvements Plan approval.
Verification: Public Works Department.

**Impact 3.7/M Burrowing Owl
Impact 3.7/N American Badger**

Mitigation Measure 3.7/27.0: Buffer Zones

Why: To require a minimum buffer be maintained around nesting sites of the burrowing owl and breeding sites of the American badger during the breeding season to avoid direct loss of individuals.
Who: Developers/Public Works Department.
What: Maintenance of a minimum buffer (at least 300 feet) around nesting sites (either known or those identified in the pre-construction surveys)
When: During construction.
Completion: Following reproductive period or end of construction, whichever occurs first.
Verification: Public Works Department.

Impact 3.7/O Prairie Falcon, Northern Harrier, and Black-Shouldered Kite

Mitigation Measure 3.7/25.0 mitigates impacts to these species. Refer to monitoring of that

mitigation measure.

Impact 3.7/P Sharp-Shinned Hawk and Cooper's Hawk

Mitigation Measures 3.7/6.0-3.7/17.0 and 3.7/21.0 are applicable. Refer to monitoring of those mitigation measures.

Impact 3.7/S Special Status Invertebrates

Mitigation Measure 3.7/28.0: Pre-construction Surveys

Why: To require developers to conduct a pre-construction survey within 60 days prior to habitat modification to verify the presence of sensitive species.
Who: Developers/Planning Department
What: Review results of pre-construction surveys.
When: 60 days prior to habitat modification.
Completion: Prior to grading plan approval.
Verification: Planning Department.

SECTION 3.8: VISUAL RESOURCES

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

- IM 3.8/A Standardized "Tract" Development
- IM 3.8/B Alteration of Rural/Open Space Visual Character
- IM 3.8/C Obscuring Distinctive Natural Features
- IM 3.8/D Alteration of Visual Quality of Hillsides
- IM 3.8/E Alteration of Visual Quality of Ridges
- IM 3.8/F Alteration of Visual Quality of Flatlands
- IM 3.8/G Alteration of Visual Quality of Watercourses
- IM 3.8/H Alteration of Dublin's Visual Identity as a Freestanding City
- IM 3.8/I Scenic Vistas
- IM 3.8/J Scenic Routes

2. Mitigation Implementation and Monitoring Program

Impact 3.8/A Standardized "Tract" Development

Mitigation Measure 3.8/1.0: Visually Distinctive Community

Why: To establish a visually distinctive community which preserves the character of the natural landscape by protecting key visual elements and maintaining views from major travel corridors and public spaces.
Who: Planning Department/Developers.
What: Ensure development proposals comply with design guidelines set forth in

When: Chapter 7: Community Design of the specific Plan.
Prior to approval of rezoning.
Completion: Final map approval.
Verification: Planning Department.

Impact 3.8/B Alteration of Rural/Open Space Visual Character

Mitigation Measure 3.8/2.0: Implementation of Land Use Plan

Why: To ensure implementation of the Specific Plan/GPA land use plan, which was developed to retain predominant natural features and a sense of openness.
Who: Applicants/Planning Department.
What: Ensure that development proposals emphasize retention of predominant natural features and preservation of a sense of openness.
When: Prior to approval of rezoning.
Completion: Final map approval.
Verification: Planning Department.

Impact 3.8/C Obscuring Distinctive Natural Features

Mitigation Measure 3.8/3.0: (Policy 6-28) Preservation of natural features

Why: To require the preservation of the natural open beauty of the hills and other important visual resources.
Who: Applicants/Planning Department.
What: Ensure that development proposals preserve the natural open beauty of the hills and other important visual resources on the site.
When: Prior to approval of rezoning.
Completion: Final map approval.
Verification: Planning Department.

Impact 3.8/D Alteration of Visual Quality of Hillsides

Mitigation Measure 3.8/4.0: (Policy 6-32) Reduction of visual impacts due to extensive grading

Why: To reduce the visual impact of extensive grading through sensitive engineering design that uses gradual transitions from graded areas to natural slopes and revegetation.
Who: Developers/Planning Department.
What: Review plans to ensure implementation of sensitive engineering design and revegetation.
When: Prior to approval of rezoning.
Completion: Prior to final grading plan approval.
Verification: Planning Department.

Mitigation Measure 3.8/4.1: (Policy 6-34) Minimization of Contours Alteration

Why: To minimize alterations to existing natural contours.
Who: Developers/Planning Department.
What: Review plans to see that they minimize alteration of natural contours.
When: Prior to approval of rezoning.
Completion: Before final grading plan approval.
Verification: Planning Department.

Mitigation Measure 3.8/4.2: (Policy 6-35) Avoidance of Flat Grading

Why: To avoid extensive areas of flat development.
Who: Developers/Planning Department.
What: Review plans for success at employing alternatives to flat grading including individual grading, stepped grading, and design in response to topographical and geotechnical conditions.
When: Prior to approval of rezoning.
Completion: Before final grading plan approval.
Verification: Planning Department.

Mitigation Measure 3.8/4.3: (Policy 6-36) Building Design

Why: To encourage building design to conform to natural land form as much as possible.
Who: Developers/Planning Department.
What: Review plans for success at using building design that conforms to the natural landforms of the Project site.
When: Prior to approval of rezoning.
Completion: Before building permit is approved.
Verification: Planning Department.

Mitigation Measure 3.8/4.4: (Policy 6-37) Recontouring of Graded Slopes

Why: To require graded slopes to be re-contoured to resemble existing landforms in the immediate area.
Who: Developers/Planning Department.
What: Review plans to ensure that graded slopes will be recontoured to blend into existing landforms in the immediate area.
When: Prior to approval of rezoning.
Completion: Final grading plan approval.
Verification: Public Works Department.

Mitigation Measure 3.8/4.5: (Policy 6-38) Minimization of the Height of Cut and Fill Slopes

Why: To minimize the height of cut and fill slopes as much as possible.
Who: Developers/Public Works Department.
What: Require that the height of cut and fill slopes be minimized.
When: Prior to approval of rezoning.

Completion: Prior to issuance of grading permit.
Verification: Public Works Department.

Impact 3.8/E Alteration of Visual Quality of Ridges

Mitigation Measure 3.8/5.0: (Policy 6-29) Prohibition Against Development on Main Ridgeline

Why: To minimize visual impacts by prohibiting development on the main ridgeline, and ensuring that development on foreground hills meets certain standards.
Who: Planning Department/Applicants.
What: Review plans to ensure that no development is located on main ridgeline of Specific Plan area, and that development on foreground hills maintains a backdrop of natural ridgelines.
When: Prior to approval of rezoning.
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.8/5.1: (Policy 6-30) General Maintenance of Scenic Views

Why: To control the location and design of structures so they generally maintain scenic views or appear to extend above an identified scenic backdrop when viewed from a designated scenic route.
Who: Planning Department/Applicants.
What: Ensure that proposed development minimizes obstruction of scenic views.
When: Prior to approval of rezoning.
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.8/5.2: (General Plan Amendment Guiding Policy E) Structures on Ridgelines

Why: To restrict structures on the hillsides that appear to project above major ridgelines.
Who: Planning Department/Applicants.
What: Ensure that proposed development minimizes obstruction of scenic views.
When: Prior to approval of rezoning.
Completion: Prior to final map approval.
Verification: Planning Department.

Impact 3.8/G Alteration of the Visual Character of Watercourses

Mitigation Measure 3.3/6.0: (Policy 6-39) Protection of the Visual Character of Watercourses

Why: To protect the visual character of the stream corridors, unnecessary alteration or disturbance should be avoided and visual access to the stream corridors should be maintained from adjoining development.
Who: Planning Department/Applicants
What: Review plans to ensure that watercourses are protected from unnecessary

alteration or disturbance, and that visual access to the stream corridors is maintained.

When: Prior to approval of rezoning.
Completion: Prior to final map approval.
Verification: Planning Department.

Impact 3.8/I Scenic Vistas

Mitigation Measure 3.8/7.0: (Policy 6-5) Preserve Views of Designated Open Space Areas

Why: To preserve views of designated open space areas.
Who: Planning Department/Applicants.
What: Review plans to ensure that view corridors are maintained between developed and open space areas.
When: Prior to approval of rezoning.
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.8/7.1: Visual Survey of the Project Site

Why: To provide for the preparation of a visual survey of the Project area to identify and map viewsheds of scenic vistas.
Who: Planning Department.
What: Identify and map viewsheds of scenic vistas.
When: During processing of rezoning
Completion: Prior to any development east of Tassajara Road.
Verification: Planning Department.

IM 3.8/J Scenic Routes

Mitigation Measure 3.8/8.0: (Action Program 6O) Designation of Scenic Routes

Why: To provide for the designation of scenic corridors, and the adoption of scenic corridor policies and review procedures for projects within a scenic corridor viewshed.
Who: Planning Department.
What: Designate Tassajara Road, I-580 and Fallon Road as scenic corridors; draft and adopt scenic corridor policies and review procedures and standards for projects within the scenic corridor viewshed.
When: During processing of rezoning.
Completion: Prior to annexation of new areas into the City.
Verification: Planning Department.

Mitigation Measure 3.8/8.1: (Action Program 6R) Visual Analysis of Projects

Why: To require projects with potential impacts on scenic corridors to submit detailed visual analysis with development project application.
Who: Developers/Planning Department.
What: Review visual analysis of projects with potential impacts on scenic corridors

to ensure project conformance with visual quality objectives.
When: During processing of rezoning.
Completion: Prior to final map approval.
Verification: Planning Department.

SECTION 3.9: CULTURAL RESOURCES

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

IM 3.9/A Disruption or Destruction of Identified Prehistoric Resources
IM 3.9/B Disruption or Destruction of Unidentified Prehistoric Resources
IM 3.9/C Disruption or Destruction of Identified Historic Resources
IM 3.9/D Disruption or Destruction of Unidentified Historic Resources

2. Mitigation Implementation and Monitoring Program

Impact 3.9/A Disruption of Identified Prehistoric Resources

Mitigation Measure 3.9/1.0: Subsurface Testing

Why: To require mechanical and/or hand subsurface testing on all location of prehistoric resources to determine the presence or absence of midden deposits.
Who: Applicants/Planning Department.
What: Require submittal of findings of subsurface testing (mechanical or hand) to determine the presence or absence of midden deposits.
When: Condition of tentative map approval.
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.9/2.0: Recording of Archaeological Materials

Why: To require all locations containing either midden components or concentrations of cultural materials located on the surface to be recorded on State of California site survey forms.
Who: Applicants/Planning Department.
What: Record midden components or concentrations of cultural materials on State of California site survey forms.
When: Condition of tentative map approval.
Completion: Prior to grading plan approval.
Verification: Planning Department.

Mitigation Measure 3.9/3.0: Evaluative Testing

Why: To require evaluative testing if proposed development would directly or indirectly impact recorded and mapped locations of resources.
Who: Applicants/Planning Department.
What: Review the findings of evaluative testing required for recorded and mapped locations that may be impacted by future construction or access.
When: Condition of tentative map approval.
Completion: Prior to grading plan approval.
Verification: Planning Department.

Mitigation Measure 3.9/4.0: Protection Program for Prehistoric Sites

Why: To require a qualified archaeologist to develop a protection program for "significant" resources whose condition will be altered by proposed development.
Who: Applicants/Planning Department.
What: Review protection program prepared for prehistoric sites which contain either a surface or subsurface deposit of cultural materials, and incorporate recommended mitigation into the conditions of approval for the project.
When: Condition of tentative map approval.
Completion: Prior to grading plan approval.
Verification: Planning Department.

Impact 3.9/B Disruption or Destruction of Unidentified Prehistoric Resources

Mitigation Measure 3.9/5.0: (Policy 6-25) Discovery of Historic/Prehistoric Remains

Why: To require grading and construction to cease in the event that historic or prehistoric remains are discovered during such activities.
Who: Developers/Planning Department.
What: Cease grading/construction activities when historic or prehistoric resources are discovered. Retain a certified archaeologist to ascertain the significance of the remains.
When: During grading/construction.
Completion: Before grading/construction resume.
Verification: Planning Department.

Mitigation Measure 3.9/6.0: (Action Program 6P) Additional Actions Related to Prehistoric Resources

Why: To require as part of the development application process that steps be taken to ensure that cultural resources are not impacted.
Who: Applicants/Planning Department.
What: Prepare site sensitivity determination. If determined to be sensitive, require detailed research and field reconnaissance, and development of a mitigation plan as necessary.
When: Condition of tentative map approval.
Completion: Prior to issuance of grading permit.

Verification: Planning Department.

Impact 3.9/C Disruption or Destruction of Identified Historic Resources

Mitigation Measure 3.9/7.0: (Policy 6-26) Archival Research

Why: To require all properties with historic resources which may be impacted by development to be subjected to in-depth archival research.
Who: Applicants/Planning Department.
What: Review findings of in-depth archival research on any historic resources potentially impacted by future development.
When: Prior to tentative map approval.
Completion: Prior to issuance of grading permit.
Verification: Planning Department.

Mitigation Measure 3.9/8.0: (Policy 6-27) Adaptive Reuse or Restoration of Historic Resources

Why: To encourage the adaptive re-use or restoration of historic structures whenever feasible.
Who: Developers/Planning Department.
What: Review development proposals to determine if reasonable consideration has been given to the potential to reuse or restore historic structures.
When: Prior to tentative map approval.
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.9/9.0: Evaluation of Structural Remains

Why: To require an architectural historian to assess the significance of all standing structures and other indicators of historic occupation and/or use of the area.
Who: Applicants/Planning Department.
What: Review professional evaluation of structural remains to determine significance pursuant to CEQA, and incorporate mitigation recommendations, as needed, as conditions of project approval.
When: Prior to tentative map approval.
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.9/10.0: Research of Standing Structure Locations and Other Indicators of Historic Occupation

Why: To require archival research and oral interviews to determine the local or regional significance of structures or locations (identified in the 1988 report) by their association with important persons or events.
Who: Applicants/Planning Department.
What: Review professional evaluation of structural remains to determine significance pursuant to CEQA, and incorporate mitigation

recommendations, as needed, as conditions of project approval.
When: Prior to tentative map approval.
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.9/11.0: Record of All Historic Locations in 1988 Report

Why: To require that all previously noted locations (in 1988 report) be recorded on official State of California Historical Site Inventory forms.
Who: Applicants/Planning Department.
What: Verify that all locations noted in 1988 report have been recorded on State of California Historical Site Inventory forms.
When: Prior to tentative map approval.
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.9/12.0: Preservation Program for Historic Sites

Why: To require the preparation of a preservation program for historic sites which qualify under CEQA Guidelines as historically significant.
Who: Applicants/Planning Department.
What: Review the preservation program prepared for any historic sites, and incorporate any recommended mitigations as a condition of project approval.
When: Prior to tentative map approval.
Completion: Prior to final map approval.
Verification: Planning Department.

SECTION 3.10 NOISE

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

- IM 3.10/A Exposure of Proposed Housing to Future Roadway Noise
- IM 3.10/B Exposure of Existing Residences to Future Roadway Noise
- IM 3.10/D Exposure of Proposed Residential Development to Noise from Future Military Training Activities at Parks Reserve Forces Training Area (Camp Parks RFTA) and the County Jail
- IM 3.10/E Exposure of Existing and Proposed Residences to Construction Noise
- IM 3.10/F Noise Conflicts due to the Adjacency of Diverse Land Uses Permitted by Plan Policies Supporting Mixed-Use Development

2. Mitigation Implementation and Monitoring Program

Impact 3.10/A Exposure of Proposed Housing to Future Roadway Noise

Mitigation Measure 3.10/1.0: Acoustical Study Within Future CNEL 60 Contour

Why:	To require acoustical studies for all residential development projects within the future CNEL 60 contour to show how interior noise levels will be reduced to 45 dB.
Who:	Applicants/Planning Department.
What:	Verify the preparation of an acoustical study for all residential projects located within the future CNEL 60 noise contour, and confirm the incorporation of mitigation measures into the proposed plan.
When:	Prior to tentative map approval.
Completion:	Prior to final map approval.
Verification:	Planning Department.

Impact 3.10/B Exposure of Existing Residences to Future Roadway Noise

Mitigation Measure 3.10/2.0: Provision of Noise Control Measures

Why:	To require that all development projects in the Project area provide noise barriers or berms near existing residences to control noise in outdoor use spaces.
Who:	Applicants/Planning Department.
What:	Verify that proposed plans provide noise abatement for existing residences or that such mitigation is not necessary.
When:	Prior to tentative map approval.
Completion:	Prior to Final map approval.
Verification:	Planning Department.

Mitigation Measure 3.10/7.0: Noise Mitigation Fee

Why:	To provide for the establishment of a noise mitigation fee to pay for on- and off-site noise mitigations, including but not limited to, noise barriers, earthen berms, or retrofitting structures with sound-rated windows.
Who:	Applicants/Planning Department.
What:	Prepare an ordinance permitting the levying of a noise mitigation fee.
When:	During processing of rezoning and annexation applications.
Completion:	Prior to tentative map approval for projects along Tassajara Road, Hacienda Road, or Fallon Road.
Verification:	Planning Department.

Impact 3.10/D Exposure of Proposed Residential Development to Noise from Future Military Training Activities at Parks Reserve Forces Training Area (Camp Parks RFTA) and the County Jail

Mitigation Measure 3.10/3.0: Perform Acoustical Studies

Why:	To require acoustical studies prior to future development in the Foothill
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Residential, Tassajara Village Center, County Center, and Hacienda Gateway subareas to determine whether future noise impacts from Camp Parks and the county jail will be within acceptable limits.

Who: Applicants/Planning Department.

What: Verify that acoustical studies have been prepared for projects proposed in identified subareas, and incorporate recommended mitigations as conditions of project approval.

When: Prior to tentative map approval.

Completion: Prior to final map approval.

Verification: Planning Department.

Impact 3.10/E Exposure of Existing and Proposed Residences to Construction Noise

Mitigation Measure 3.10/4.0: Construction Noise Management Program

Why: To require development projects in the Project area to submit a Construction Noise Management Program that identifies measures proposed to minimize construction noise impacts on existing residents.

Who: Applicants/Planning Department.

What: Review Construction Noise Management Program to ensure that adequate measures have been taken to protect existing residents.

When: Prior to tentative map approval.

Completion: Prior to final map approval.

Verification: Planning Department.

Mitigation Measure 3.10/5.0: Compliance with Local Noise Standards

Why: To minimize construction noise impacts, all operations should comply with local noise standards and be limited to normal daytime hours, and stationary equipment should be adequately muffled and located away from sensitive receptors.

Who: Applicants/Planning Department.

What: Ensure that noise mitigation measures have been included as conditions of project approval.

When: During construction.

Completion: Following construction.

Verification: Planning Department.

Impact 3.10/F Noise Conflicts due to the Adjacency of Diverse Land uses Permitted by Plan Policies Supporting Mixed-Use Development

Mitigation Measure 3.10/6.0: Noise Management Plans

Why: To require the preparation of noise management plans for all mixed-use projects in which residential units would be combined with commercial, office, or other urban non-residential uses.

Who: Applicants/Planning Department.

What: Verify the preparation of a noise management plan for mixed-used projects, and review plans for mitigation that should be incorporated as a condition

of approval.
When: Prior to tentative map approval.
Completion: Prior to final map approval.
Verification: Planning Department.

SECTION 3.11 AIR QUALITY

1. Impacts Requiring Mitigation

This section identifies the following impacts requiring mitigation:

IM 3.11/A Dust Deposition Soiling Nuisance From Construction Activity
IM 3.11/B Construction Equipment/Vehicle Emissions
IM 3.11/C Mobile Source Emissions: ROG or NOx
IM 3.11/D Mobile Source Emissions: CO
IM 3.11/E Stationary Source Emissions

2. Mitigation Implementation and Monitoring Program

Impact 3.11/A Dust Deposition Soiling Nuisance From Construction Activity

Mitigation Measure 3.11/1.0: Construction-Related Dust Abatement Measures

Why: To require development projects to implement dust control measures to reduce project dust deposition to acceptable levels.
Who: Developers/Public Works Department.
What: 1) Require dust abatement measures to be outlined as conditions in the grading plan.
2) Monitor implementation of measures during construction.
When: 1) Ensure inclusion of abatement measures in grading plan.
2) Monitor implementation of measures during grading and early phases of construction.
Completion: Following construction.
Verification: Planning Department/Public Works Department.

Impact 3.11/B Construction Equipment/Vehicle Emissions

Mitigation Measure 3.11/2.0: Minimization of Interference of Construction Traffic with Regional Non-Project Traffic Movement

Why: To minimize construction interference with regional non-project traffic movement.
Who: Developers/Public Works Department.
What: Routing and scheduling of construction-related traffic to avoid interference with non-project traffic movement.
When: Prior to approval of building and/or grading permits.
Completion: Following completion of construction.

Verification: Public Works.

Mitigation Measure 3.11/3.0: Emissions Control

Why: To require emissions control from on-site equipment through a routine mandatory program of low-emissions tune-ups.
Who: Developers/Planning Department/Public Works Department.
What: 1) Verify the incorporation of this emissions control measure in the conditions of approval.
2) Monitor construction to verify implementation of control measure.
When: 1) Prior to final map approval.
2) During construction.
Completion: Following completion of construction.
Verification: Planning Department/Public Works Department.

Mitigation Measure 3.11/4.0: Construction Impact Reduction Plan

Why: To require preparation of a construction impact reduction plan that incorporates all proposed air quality mitigation strategies.
Who: Planning Department/Public Works Department/Applicants.
What: Ensure that the construction impact reduction plan incorporate all proposed air quality mitigation strategies, and clearly defines responsibilities for implementation and supervision.
When: 1) Preparation of plan prior to development review approval.
2) Monitoring of implementation during construction.
Completion: Following completion of construction.
Verification: Planning Department/Public Works Department.

Impact 3.11/C Mobile Source Emissions:ROG or NOx

Mitigation Measure 3.11/5.0: Regional Interagency Cooperation

Why: To encourage cooperation to integrate air quality planning efforts on a regional basis.
Who: Planning Department/Tri-Valley and Regional Agencies.
What: Coordinate interagency cooperation to integrate air quality planning with transportation, transit and other infrastructure plans.
When: Establish liaisons and begin coordination concurrent with plan adoption.
Completion: On-going.
Verification: Planning Department.

Mitigation Measure 3.11/6.0: Planning Consistency

Why: To maintain consistency among specific development plans and regional transportation and growth management plans.
Who: Planning Department/Tri-Valley and Regional Agencies.
What: Review plans to ensure consistency between specific development plans for the Project site and regional transportation and growth management plans.

When: Prior to approval of tentative map .
Completion: Prior to final map approval.
Verification: Planning Department.

Mitigation Measure 3.11/7.0: Transportation Demand Management (TDM)

Why: To implement transportation demand management techniques to reduce mobile source emissions.
Who: Public Works Department.
What: Review plans for inclusion of TDM techniques to reduce mobile source emissions.
When: Prior to tentative map approval.
Completion: Prior to final map approval.
Verification: Public Works.

Mitigation Measure 3.11/8.0: Optimization of Existing Transportation System

Why: To optimize the existing transportation system to reduce congestion and shift travel to non-peak travel periods.
Who: Planning Department/Public Works Department.
What: Work with LAVTA to development public information programs to encourage use of public transit, and encourage large employers to implement measures to shift travel to non-peak travel periods.
When: Ongoing.
Completion: On-going.
Verification: Planning Department/Public Works Department.

Mitigation Measure 3.11/9.0: Coordination of Development with Roadway Improvements

Why: To coordinate levels of growth with roadway transportation facilities improvements to accommodate travel demand without inducing demand by providing excess system capacity.
Who: Public Works Department.
What: Phase roadway improvements so that they accommodate growth, but avoid "over-building" facility improvements.
When: Review schedule of roadway improvements concurrent with submittal of tentative map.
Completion: Prior to final map approval.
Verification: Public Works Department.

Mitigation Measure 3.11/10.0: Mixed-Use Development

Why: To encourage mixed-use development that provides housing, jobs, goods and services in close proximity.
Who: Planning Department.
What: Encourage developers to consider mixed-use development in their projects as a means to reduce discretionary vehicle trips.
When: During pre-application discussions and application process.

Completion: Tentative map approval.
Verification: Planning Department.

Mitigation Measure 3.11/11.0: Jobs/Housing Linkage

Why: To require linkage between growth of housing and job opportunities consistent with a positive sub-regional contribution to jobs/housing ratio balances.
Who: Planning Department.
What: Keep Planning Commission and City Council aware of sub-regional jobs/housing status and the implications of project approvals on that balance.
When: Ongoing as part of individual development review process.
Completion: Ongoing.
Verification: Planning Department.

Impact 3.11/E Stationary Source Emissions

Mitigation Measure 3.11/12.0: Conservation Target Level for Stationary Source Emissions

Why: To minimize stationary source emissions associated with Project development wherever feasible.
Who: Planning Department.
What: 1) Establish and implement a conservation target level for stationary source emissions at 10 percent above the Title 24 standards.
2) Review individual projects to verify attempts to meet conservation target.
When: 1) Prior to rezoning and annexation approval.
2) Prior to final map approval.
Completion: Final project approval.
Verification: Planning Department.

Mitigation Measure 3.11/13.0: Solid Waste Recycling

Why: To incorporate solid waste re-cycling in all development planning.
Who: Planning Department.
What: Develop a strategy for integrating solid waste recycling into planning for all new development, and work with developers to implement this strategy.
When: Prior to rezoning and annexation approval.
Completion: Ongoing.
Verification: Planning Department.

SECTION 3.12: FISCAL CONSIDERATIONS

1. Impacts Requiring Mitigation

This section identifies the following impact requiring mitigation:

IM 3.12/B Fiscal Impacts Related to the Cost and Provision of Project-Related Infrastructure Improvements

2. Mitigation Implementation and Monitoring Program

Impacts 3.12/B Impacts Related to the Cost and Provision of Project-Related Infrastructure Improvements

Mitigation Measure 3.12/1.0: Development Agreements

Why: To provide for the preparation and adoption of a development agreement for each project that spells out the precise financial responsibilities of the developer.

Who: City Manager's Office/Developers.

What: Prepare and adopt a development agreement or the appropriate agreements for each development project that sets forth the precise financial responsibilities of the applicants.

When: Prior to rezoning and annexation approval.

Completion: Condition of final project approval.

Verification: City Manager.

Mitigation Measure 3.12/2.0: Area of Benefit Ordinance

Why: To adopt an Area of Benefit Ordinance and form an Area of Benefit for those properties benefiting from construction of public improvements described in the Specific Plan.

Who: City Manager's Office.

What: Prepare and adopt an Area of Benefit Ordinance, and define the Area(s) of Benefit.

When: Prior to rezoning and annexation approval.

Completion: Prior to final approval of any development in the Project area.

Verification: City Manager.

Mitigation Measure 3.12/3.0: Special Assessment District or Mello-Roos CFD

Why: To create one or more Mello-Roos CFD or Special Assessment Districts to finance construction of the infrastructure to serve the Area of Benefit.

Who: City Manager's Office.

What: Prepare and adopt one or more Mello-Roos CFD or Special Assessment Districts to finance infrastructure for Areas of Benefit.

When: Prior to rezoning and annexation approval.

Completion: Prior to any final project approval.

Verification: City Manager.

Mitigation Measure 3.12/4.0: Marks-Roos Bond Pooling

Why: To have bond counsel evaluate the benefit to the City, in terms of savings of money and avoidance of undue risk, of pooling bonds under the Marks-Roos Bond Pooling Act.
Who: City Manager's Office.
What: Evaluate options related to bond pooling for Eastern Dublin pursuant to the provisions of the Marks-Roos Bond Pooling Act.
When: Prior to rezoning and annexation approval.
Completion: Prior to any final project approval.
Verification: City Manager.

Mitigation Measure 3.12/5.0: City-Wide Developer and Builder Impact Fee Systems

Why: To analyze city-wide infrastructure needs to assess the usefulness of implementing an impact fee program, in compliance with AB 1600, that could draw some funding from new development when final map or building permits are issued.
Who: City Manager's Office.
What: Evaluate efficacy of implementing of an impact fee system, as provided by AB 1600. If found to be useful, draft and adopt an ordinance to implement.
When: Prior to rezoning and annexation approval.
Completion: Prior to any final project approval.
Verification: City Manager.

Mitigation Measure 3.12/6.0: School Impact Fees

Why: To coordinate City and School District efforts to fund necessary school facilities and collect payable fees.
Who: City Manager/DUSD/LVJUSD.
What: Meet with school district(s) to coordinate efforts to fund school facilities.
When: Prior to rezoning and annexation approval.
Completion: Prior to any final project approval.
Verification: City Manager.

Mitigation Measure 3.12/7.0: Highway Interchange Funding

Why: To coordinate City and Caltrans efforts to fund necessary freeway improvements and collect developers' share of costs.
Who: City Manager's Office/Public Works/Caltrans.
What: Meet with Caltrans to coordinate efforts to fund freeway improvements and collect proportionate share of costs from developers.
When: Prior to rezoning and annexation approval.
Completion: Prior to any final project approval.
Verification: City Manager.

Mitigation Measure 3.12/8.0: Utilities Impact Fees

Why: To coordinate City and DSRSD efforts to fund utilities services and collect developers' share of costs.

Who: City Manager's Office/Public Works/DSRSD.

What: Meet with DSRSD to coordinate efforts to fund utilities services and collect proportionate share of costs from developers.

When: Prior to rezoning and annexation approval.

Completion: Prior to any final project approval.

Verification: City Manager.

REVISIONS TO DEIR TEXT ON PAGES 3.3-19 TO 3.3-28**IMPACTS AND MITIGATION MEASURES: DAILY TRAFFIC VOLUMES (YEAR 2010 WITHOUT PROJECT)**

Daily traffic volumes on various freeway and street segments were projected for Year 2010 conditions without and with the Project, and for cumulative buildout conditions with the Project (Figure 3.3-E). These volumes were compared to estimated daily capacities of each type of roadway, as described in Table 3.3-1. The resultant levels of service were estimated based on the daily traffic volumes (Table 3.3-9).

IM 3.3/A I-580 Freeway, Tassajara-Fallon

Year 2010 growth without the Project would cause freeway volumes to exceed level of service E on I-580 between Tassajara Road and Fallon Road. This is a significant cumulative impact.

Mitigation Measure of the EIR

MM 3.3/1.0' Caltrans, in cooperation with local jurisdictions, could construct auxiliary lanes on I-580 between Tassajara Road and Fallon Road to provide a total of 10 lanes in that section, consistent with the Caltrans Route Concept Report for I-580.

Implementation of MM 3.3/1.0 would provide LOS D operations and reduce the impact to a level of insignificance.

IMPACTS AND MITIGATION MEASURES: DAILY TRAFFIC VOLUMES (YEAR 2010 WITH PROJECT)

IM 3.3/B I-580 Freeway, I-680-Hacienda

Year 2010 growth with the Project would cause I-580 between I-680 and Hacienda Drive to exceed level of service E. This freeway section has been widened to its maximum practical capacity within Caltrans' right-of-way. This is a significant impact.

This impact is also a significant cumulative impact and an unavoidable adverse impact as discussed in Chapter 5.

Mitigation Measure of the Specific Plan

MM 3.3/2.0 (Policy 5-21) Require all non-residential projects with 50 or more employees within the Eastern Dublin General Plan Amendment and Specific Plan area to participate in a Transportation Systems Management (TSM) program. A TSM program would include strategies to reduce the use of single-occupant vehicles such as on-site distribution of transit information and passes, provision of shuttle services to and from BART stations, participation in regional ridesharing services, preferential parking for vanpools and carpools, and flexible or staggered work hours.

Mitigation Measure of the EIR

MM 3.3/2.1 The Project shall contribute a proportionate amount to regional transportation mitigation programs as determined by *regional transportation studies such as* the current study by the Tri-Valley Transportation Council. Regional mitigation measures may include implementation of enhanced rail and feeder bus transit services, construction or upgrading of alternative road corridors to relieve demand on the I-580 and I-680 freeways.

MM's 3.3/2.0-3.3/2.1 are applicable to the total Project site. Implementation of these mitigation measures would reduce the impact, but the impact would remain significant.

IM 3.3/C I-580 Freeway, Tassajara-Fallon-Airway

Year 2010 growth with the Project would cause freeway volumes to exceed level of service E on I-580 between Tassajara Road and Airway Boulevard. This is a significant impact.

This impact is also a significant cumulative impact as discussed in Chapter 5.

Mitigation Measure of the EIR

MM 3.3/3.0 *The City of Dublin shall coordinate with Caltrans and the City of Pleasanton to construct ~~Project shall contribute to the construction of~~ auxiliary lanes on I-580 between Tassajara Road and Airway Boulevard. ~~The auxiliary lanes would provide a total of 10 lanes on this section (8 through lanes and 2 auxiliary lanes), consistent with the Caltrans Route Concept Report for I-580. The Project shall contribute a proportionate amount to the cost of improvements, as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council.~~ The auxiliary lanes would provide LOS E operations between Tassajara Road and Fallon Road, and LOS D operations between Fallon Road and Airway Boulevard.*

MM 3.3/3.0 is applicable to the total Project site. Implementation of this mitigation measure would reduce the impact to a level of insignificance ~~on the Fallon Airway segment but LOS on the Tassajara Fallon Road segment would remain potentially significant.~~

[NOTE: MM 3.3/3.0 would provide LOS E operations between Tassajara and Fallon, which is considered acceptable according to the Alameda County Congestion Management Program. The mitigation measure would reduce IM 3.3/C to a level of insignificance.]

IM 3.3/D I-680 Freeway, North of I-580

Year 2010 growth with the Project would cause freeway volumes to exceed level of service E on I-680 north of the I-580 interchange. This is a significant impact.

This impact is also a significant cumulative impact as discussed in Chapter 5.

Mitigation Measure of the EIR

MM 3.3/4.0 The Project ~~should~~ *shall* contribute a proportionate share to planned *ultimate* improvements at the I-580/I-680 interchange *as implemented by Caltrans*. *The assessed costs of freeway interchange improvements shall include the costs of revised freeway ramp connections to Dublin (such as hook ramps) and the associated mitigation on local streets. The proportionate share of costs attributable to the Project shall be determined through a regional transportation study such as the current study by the Tri-Valley Transportation Council.* The improvements would provide additional capacity on I-680 north of I-580 and would provide LOS D operations.

MM 3.3/4.0 is applicable to the total Project site. Implementation of this mitigation measure would reduce the impact to a level of insignificance.

IMPACTS AND MITIGATION MEASURES: DAILY TRAFFIC VOLUMES (CUMULATIVE BUILDOUT WITH PROJECT)

IM 3.3/E Cumulative Freeway Impacts

Cumulative Buildout with the Project would cause additional freeway sections to exceed level of service E compared to Year 2010 With Project, including I-580 west of I-680 (from E to F), and I-580 east of Airway Boulevard (from E to F). This is a significant cumulative impact and an unavoidable adverse impact as discussed in Chapter 5.

[NOTE: Caltrans has indicated in their comments on the DEIR that I-580 west of I-680 can be evaluated as a ten-lane section due to the two auxiliary merging/weaving lanes which supplement the eight through lanes. Therefore, the LOS on I-580 would not exceed the LOS E standard.]

Mitigation Measure of the EIR

MM 3.3/5.0 *The Project shall contribute a proportionate amount to the construction of auxiliary lanes on I-580 east of Airway Boulevard, as implemented by Caltrans. The improvement would provide ten lanes on I-580, consistent with the Caltrans Route Concept Report for I-580. The City of Dublin shall coordinate with other Local jurisdictions shall to require that all future developments participate in regional transportation mitigation programs as determined by regional transportation studies such as the current study by the Tri-Valley Transportation Council.*

Implementation of MM 3.3/5.0 would reduce the impact to a level of insignificance, but the impact would remain significant.

[NOTE: Widening of I-580 east of Airway Boulevard, within the City of Livermore, is not currently programmed for construction by Caltrans. Widening to ten lanes is consistent with the Route Concept Report.]

IMPACTS AND MITIGATION MEASURES: PEAK HOUR INTERSECTION OPERATION

Detailed P.M. peak hour turn movement traffic volumes were projected at intersections which would be significantly impacted by Project traffic (Figure 3.3-F). Levels of service were evaluated at these intersections (Table 3.3-10) and mitigation measures were identified for each intersection which is projected to exceed the LOS D standard. (Projected intersection turn volumes and capacity calculations are on file at the City of Dublin Department of Public Works.)

**IMPACTS AND MITIGATION MEASURES: PEAK HOUR INTERSECTION OPERATION
(YEAR 2010 WITH PROJECT)****IM 3.3/F Dougherty Road & Dublin Boulevard**

Year 2010 development with the Project would cause level of service F operations at the intersection of Dougherty Road with Dublin Boulevard. This is a significant impact.

Mitigation Measure of the EIR**MM 3.3/6.0**

The City of Dublin shall ~~coordinate~~ *monitor traffic conditions at this intersection and implement* construction of additional lanes on all approaches at the intersection *when required to maintain LOS D operations*. The required lanes on the northbound approach on Dougherty Road include two left-turn lanes, three through lanes (one more than existing) and one right-turn lane (one more than existing). The required lanes on the southbound approach on Dougherty Road include two left-turn lanes (one more than existing), three through lanes (one more than existing) and one right-turn lane. The required lanes on the eastbound approach on Dublin Boulevard include one left-turn lane, three through lanes (one more than existing) and one right-turn lane. The required lanes on the westbound approach on Dublin Boulevard include two left-turn lanes, three through lanes and one right-turn lane. The Project shall contribute a proportionate share of the improvement costs *as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council*. These improvements would provide LOS D operations.

MM 3.3/6.0 is applicable to the total Project site. Implementation of this mitigation measure would reduce the impact to a level of insignificance.

IM 3.3/G Hacienda Drive & I-580 Eastbound Ramps

Year 2010 development with the Project would cause level of service F operations at the intersection of Hacienda Drive with the I-580 eastbound ramps. This is a significant impact.

Mitigation Measure of the EIR

MM 3.3/7.0 The City of Dublin shall *implement improvements in coordination* ~~coordinate~~ with the City of Pleasanton and Caltrans to ~~restripe~~ *widen* the I-580 eastbound off-ramp to provide two left-turn lanes and ~~one~~ *two* right-turn lanes (existing lanes are one left-turn lane and two right-turn lanes). The Project shall contribute a proportionate share of the improvement costs *as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council*. The improvements would provide LOS C operations.

MM 3.3/7.0 is applicable to the total Project site. Implementation of this mitigation measure would reduce the impact to a level of insignificance.

IM 3.3/H Tassajara Road & I-580 Westbound Ramps

Year 2010 development with the Project would cause level of service F operations at the intersection of Tassajara Road with the I-580 westbound ramps. This is a significant impact.

Mitigation Measure of the EIR

MM 3.3/8.0 The City of Dublin shall *implement improvements in coordination* ~~coordinate~~ with Caltrans to widen the I-580 westbound off-ramp to provide two left-turn lanes and two right-turn lanes, and to modify the northbound approach to provide three through lanes. The Project shall contribute a proportionate share of the improvement costs *as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council*. The improvements would provide LOS B operations.

MM 3.3/8.0 is applicable to the total Project site. Implementation of this mitigation measure would reduce the impact to a level of insignificance.

IM 3.3/1 Santa Rita Road & I-580 Eastbound Ramps

Year 2010 development with the Project would cause level of service F operations at the intersection of Santa Rita Road with the I-580 eastbound ramps. This is a significant impact.

This impact is also an unavoidable adverse impact as discussed in Chapter 5.

Mitigation Measure of the EIR

MM 3.3/9.0

The City of Dublin shall *implement improvements in coordination* ~~coordinate~~ with the City of Pleasanton and Caltrans to widen the I-580 eastbound off-ramp to provide two left-turn lanes, *one through lane and one two* right-turn lanes. These improvements would provide LOS E operations. ~~Further improvement to the level of service could be provided by prohibiting left turns from southbound Santa Rita Road to eastbound Pimlico Drive during peak periods. This left turn prohibition would require out of direction travel for drivers wishing to access Pimlico Drive, but would provide level of service D operations.~~ The Project shall be required to contribute a proportionate share of the improvement costs *as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council. The City of Dublin shall continue to work with the City of Pleasanton to monitor level of service at this intersection and participate in implementing improvements which may be identified in the future to improve traffic operations.*

[NOTE: Further improvement to the level of service could be provided by prohibiting left turns from southbound Santa Rita Road to eastbound Pimlico Drive during the P.M. peak period (4:00 to 6:00 P.M.). This left-turn prohibition would require out-of-direction travel for drivers wishing to access Pimlico Drive during the P.M. peak period, but would provide level of service D operations. The City of Pleasanton has indicated that such a left-turn prohibition would not be acceptable.]

MM 3.3/9.0 is applicable to the total Project site. Implementation of this mitigation measure will reduce the impact but ~~will introduce out of direction travel for certain drivers, thereby resulting in a potentially significant impact~~ *the impact will remain significant.*

IM 3.3/J Airway Boulevard & Dublin Boulevard

Year 2010 development with the Project would cause level of service E operations at the intersection of Airway Boulevard with Dublin Boulevard/North Canyons Parkway. This is a significant impact.

Mitigation Measure of the EIR

MM 3.3/10.0 The City of Dublin shall *implement improvements in coordination* ~~coordinate~~ with the City of Livermore to modify the intersection to provide three through lanes and a right-turn lane eastbound, and two left-turn lanes and two through lanes westbound. The Project shall contribute a proportionate share of the improvement costs *as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council*. These improvements would provide LOS C operations.

MM 3.3/10.0 is applicable to the total Project site. Implementation of this mitigation measure would reduce the impact to a level of insignificance.

IM 3.3/K Airway Boulevard & I-580 Westbound Ramps

Year 2010 development with the Project would cause level of service F operations at the intersection of Airway Boulevard with the I-580 westbound ramps. This is a significant impact.

Mitigation Measure of the EIR

MM 3.3/11.0 The City of Dublin shall *implement improvements in coordination* ~~coordinate~~ with the City of Livermore and Caltrans to *replace or* widen the Airway Boulevard overcrossing of I-580 by 12 feet to provide adequate storage for northbound left-turns, and widen ~~of~~ the off-ramp to provide one left and one left-right lane. The Project shall contribute a proportionate share toward the cost of these improvements *as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council*. The improvements would provide LOS D operations.

MM 3.3/11.0 is applicable to the total Project site. Implementation of this mitigation measure would reduce the impact to a level of insignificance.

IM 3.3/L El Charro Road

Project traffic could introduce stops and delays for loaded trucks from the quarries on El Charro Road south of I-580. This is a potentially significant impact ~~and an unavoidable adverse impact as discussed in Chapter 5.~~

[NOTE: This impact can be mitigated to a level of insignificance through proper design of the interchange improvements. Alternative interchange designs prepared by Bissell and Karn Engineers are currently under review.]

Mitigation Measure of the EIR

MM 3.3/12.0 The City of Dublin shall *implement improvements in coordination* ~~coordinate~~ with Caltrans, *the City of Pleasanton and Alameda County* to ensure that modifications to the I-580 interchange at Fallon Road/El Charro Road include provisions for unimpeded truck movements to and from El Charro Road. The Project shall contribute a proportionate share of improvement costs *as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council and additional studies of relative costs and benefits associated with the special design of this interchange.*

Implementation of MM 3.3/12.0 would reduce the impact to a level of insignificance.

IMPACTS AND MITIGATION MEASURES: PEAK HOUR INTERSECTION OPERATIONS (CUMULATIVE BUILDOUT WITH PROJECT)

IM 3.3/M Cumulative Impacts on Dublin Boulevard

Cumulative buildout with the Project would cause level of service F operations at the intersection of Hacienda Drive with Dublin Boulevard and level of service E operations at the intersection of Tassajara Road with Dublin Boulevard. *No further widening of these intersections would be feasible.* This is a significant cumulative impact.

Mitigation Measure of the EIR

MM 3.3/13.0 *The City of Dublin shall continue to participate in regional studies of future transportation requirements, improvement alternatives and funding programs, such as the current study by the Tri-Valley Transportation Council. No further widening of these intersections would be feasible. Buildout of proposed non-Project related development (i.e. outside Eastern Dublin) beyond Year 2010 levels would require the construction of grade-separated interchanges on Dublin Boulevard and/or establishment of alternative routes to redistribute traffic flow. The Project shall participate in the implementation and funding of, and participation in regional transportation improvement programs as determined by the ongoing Tri-Valley Transportation Council these regional studies.*

Implementation of MM 3.3/13.0 would reduce the impact, but the impact would remain significant.

IM 3.3/N Cumulative Impacts on Tassajara Road

Cumulative buildout with the Project would cause level of service F operations at the intersections of Tassajara Road with Fallon Road, Gleason Road and the Transit Spine. These impacts would be caused primarily by traffic from the Tassajara connection to Dougherty Valley, and full buildout of the Tassajara Valley. This is a significant cumulative impact ~~and an unavoidable adverse impact~~ as discussed in Chapter 5.

Mitigation Measure of the EIR

- MM 3.3/14.0 Buildout of proposed non-Project related development (i.e. outside Eastern Dublin) beyond Year 2010 levels would require the widening of Tassajara Road to six lanes between Dublin Boulevard and the Contra Costa County line. *The City of Dublin shall reserve right-of-way for up to six lanes on Tassajara Road between Dublin Boulevard and the Contra Costa County line. The City of Dublin shall monitor traffic conditions at key intersections and segments on Tassajara Road, and implement widening projects as required to maintain the LOS D standard. The Project shall contribute a proportionate amount to the costs of improvements on Tassajara Road, as determined by a regional transportation study such as the current study by the Tri-Valley Transportation Council.* ~~Widening of Tassajara Road would mitigate the projected traffic impact, but would not be compatible with planned land uses in the Eastern Dublin General Plan Amendment and Specific Plan, particularly in the Town Center area between Dublin Boulevard and Gleason Road.~~

[NOTE: The Eastern Dublin Specific Plan will be modified to ensure that right-of-way is reserved for six lanes on Tassajara Road between Dublin Boulevard and the Contra Costa County line. The Specific Plan will also ensure that pedestrian and vehicle access can be provided to proposed commercial development on Tassajara Road in the Town Center area between Dublin Boulevard and Gleason Road in the event that this section is widened to six lanes.]

[NOTE: The Specific Plan provides for Project implementation of road improvements including four lanes on Tassajara Road. Regional calculations of funding shares for the potential widening of Tassajara Road to six lanes should consider any prior contributions of Eastern Dublin developments towards the costs of the four lane roadway.]

Implementation of MM 3.3/14.0 would reduce the impact, ~~but would not be compatible with planned land uses, resulting in a potentially significant impact to a level of insignificance.~~

**EASTERN DUBLIN GENERAL PLAN AMENDMENT/SPECIFIC PLAN EIR
CIRCULATION
Table 3.3-9
FREEWAY OPERATIONS**

Location	Lanes	1992 Existing		2010 Without Project		2010 With Project		Cumulative Buildout with Project	
		Volume	LOS	Volume	LOS	Volume	LOS	Volume	LOS
INTERSTATE 580									
West of I-680	10	147,000	D	155,000	D	157,000	D	167,000	D
I-680 - Dougherty	10*	152,000	D	178,000	E	199,000	F	209,000	F
Dougherty - Hacienda	8(10)**	142,000	D	164,000	D	191,000	F	194,000	F
Hacienda - Tassajara	10	142,000	C	166,000	D	184,000	E	189,000	E
Tassajara - Fallon	8 (10)	131,000	D	165,000	F (D)	185,000	F (E)	187,000	F (E)
Fallon - Airway	8 (10)	128,000	D	153,000	E	163,000	F (D)	184,000	F (E)
East of Airway	8 (10)	127,000	D	141,000	D	155,000	E	179,000	F (E)
INTERSTATE 680									
North of I-580	8 (10)	111,000	D	157,000	E	168,000	F (D)	177,000	F (E)
South of I-580	6	89,000	C	95,000	D	113,000	E	115,000	E

Notes:

LOS = Level of service.

() = Potential lanes and LOS with widening.

* = Level of service for 10-lane sections considers capacity of 9th and 10th auxiliary lanes at 75% of standard freeway lane capacities.

** = Widening of I-580 between Dougherty and Hacienda from 8 to 10 lanes will be completed prior to 2010 as part of the current BART extension project.

1002

Response to Letter 12: Gary F. Adams, Caltrans District 4

- 12-1 **Comment: Methodology for Analysis of Traffic Impacts.** This report does not analyze the proposed project's impact to traffic on freeway corridors and ramp intersections in an acceptable manner. AM peak hour and PM peak hour traffic volumes should be used as a basis in analysis rather than daily traffic volumes.

Response to Comment 12-1: Peak hour traffic volumes (P.M.) were used in the analysis of all freeway ramp intersections (see Table 3.3-10, page 3.3-24).

As shown in Table 3.3-7 on page 3.3-14, 47 percent of the Project's trip generation would be attributable to retail land uses. Retail land uses generate little of their traffic during the A.M. peak hour, about 25 percent of the traffic they generate during the P.M. peak hour. Therefore, the overall Project trip generation would be about 30 percent lower during the A.M. peak hour compared to the P.M. peak hour. It was determined that the P.M. peak hour would be the most critical period for traffic analysis.

Freeway volumes were evaluated on a daily basis, consistent with the daily traffic volume data published by Caltrans. Directional peak hour traffic volumes have not been published by Caltrans for the freeway segments adjacent to the Eastern Dublin Project.

- 12-2 **Comment: I-580 Improvements.** The fifth auxiliary lane between Dougherty/Hopyard Road in each direction of I-580 has not been added as of today. These auxiliary lanes will be included in BART's roadway reconstruction which is scheduled to begin in mid-1993.

Response to Comment 12-2: The fifth auxiliary lane will be added prior to the 2010 analysis year. The analysis of project impacts in Table 3.3-9 assumed the correct number of lanes. The analysis of existing conditions for the segment of I-580 between Dougherty Road/Hopyard Road and Hacienda Drive is incorrect. The existing level of service on this freeway segment would be "D" rather than "C". Corresponding revisions to text and tables are included as an attachment to this Final EIR.

- 12-3 **Comment: Road Segments.** In Table 3.3-2: 1992 Existing Freeway Operations, the number of lanes west of Hacienda Drive should be eight, not ten.

Response to Comment 12-3: See response to Comment 12-2.

- 12-4 **Comment: Freeway Operations.** In Table 3.3-9: Freeway Operations, the number of lanes just west of I-680 (between San Ramon/Foothill Road) should be ten. West of Hacienda, the number of lanes should be eight.

Response to Comment 12-4: As noted in the comment, a fifth auxiliary lane for merging and weaving is now provided in each direction on I-580 west of I-680 between Foothill/San Ramon and I-680, for a total of ten lanes (eight through lanes, two auxiliary lanes). Corresponding revisions to Table 3.3-9 are included as an attachment to this Final EIR. The revised number of lanes on I-580 west of I-680 would not cause a change in Project impacts or mitigations.

As noted in the comment, there are currently eight lanes on I-580 west of Hacienda between Dougherty/Hopyard and Hacienda Drive. Corresponding revisions to Table 3.3-9 for the existing conditions are included as an attachment to this Final EIR. This section of I-580 has been programmed for construction to provide a total of ten lanes (eight through lanes, two

auxiliary lanes) as part of the current BART extension construction project. These lanes will be completed prior to 2010. The analysis of Project and Cumulative impacts on this section of I-580 assumed the correct number of lanes which will exist at that time.

- 12-5 **Comment: Proportionate Share.** The EIR recommends (MM 3.3/4.0) "the project should contribute a proportionate share to planned improvements at the I-580/I-680 interchange...". Please explain what the proportionate share would be based on, and also describe the procedure which would ensure that the Project will contribute its share.

Response to Comment 12-5: The proportions of improvement costs to be paid by various jurisdictions and developments should be based on a regional study of improvement needs, such as the current study by the Tri-Valley Transportation Council. The shares of improvement costs should also consider prior contributions to regional road improvements. The City of Dublin is participating in regional studies of future transportation requirements (Tri-Valley, Alameda County) and would establish a fee structure to ensure future development pays for the appropriate share of regional road improvements based on those regional studies.

- 12-6 **Comment: Impact of the Project on Existing Intersections.** The level of service and average vehicle delay of PM peak hour intersection operations are listed without mitigation. Because this proposed development is mainly residential, the impact of projected traffic on existing intersections caused by the morning commute (AM peak) should also be considered. Any intersection in which the LOS will become unacceptable during the AM peak will need mitigation.

Response to Comment 12-6: See the response to Comment 12-1. As noted, nearly half of the Project's daily trip generation would be attributable to retail land uses, which generate about 75 percent fewer trips during the A.M. peak hour compared to the P.M. peak hour. Therefore, the overall Project traffic generation would be about 30 percent lower during the A.M. peak hour compared to the P.M. peak hour. It was determined that the P.M. peak hour would be more critical for traffic analysis than the A.M. peak hour. However, recommended road improvements propose balanced lanes in each direction to ensure that reverse direction traffic flows can be accommodated during other time periods.

- 12-7 **Comment: Ramp Metering.** The operation of at least five interchanges on I-580 and two interchanges on I-680 will be affected by the Project. It is recommended that ramp metering be considered for all the on-ramps within the Project limits. The proposed on-ramp improvements should provide adequate storage to accommodate the ramp metering operation. The improvement of local streets needs to be considered to accommodate the ramp metering.

Response to Comment 12-7: Ramp metering would control vehicles entering the freeway on on-ramps, to ensure that traffic on the mainline freeway operates smoothly during peak periods. Ramp metering reduces delay on the mainline freeway, but increases delay for drivers on local streets wishing to access the freeway. If designed properly, ramp metering can reduce the total overall delay for all drivers. The City of Dublin will coordinate with Caltrans on all interchange improvements to ensure that ramp metering can be accommodated.

- 12-8 **Comment: Coordination of Signalization of Ramps and Intersections.** There are several signalized ramp intersections and local street intersections within the project limits. Usually, the signals on local streets are designed and operated independently by local authorization. However, in order to operate the interchanges which will be affected by this project more efficiently, the signal interconnection between ramp intersections and local street intersections is essential. The coordination between the State and local authorization to design and operate

Memorandum

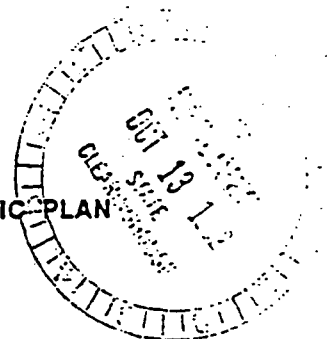
TO: MR. MIKE CHIRIATTI
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, Ca 95814

10/13
E

Date: October 9, 1992
File: ALA000079
SCH: 91103064
P.M.: 0.0

FROM: DEPARTMENT OF TRANSPORTATION
Transportation Planning Branch-District 4

SUBJECT: EASTERN DUBLIN GENERAL PLAN AMENDMENT/SPECIFIC PLAN



The California Department of Transportation (Caltrans) has reviewed the above-referenced document and forwards the following comments:

This report does not analyze the proposed project's impact to traffic on freeway corridors and ramp intersections in an acceptable manner. AM peak hour and PM peak hour traffic volumes should be used as a basis in analysis rather than daily traffic volumes.

12-1

3.3 TRAFFIC AND CIRCULATION

EXISTING ROADS
Freeways

The fifth auxiliary lane between Dougherty/Hopyard Road in each direction of I-580 has not been added as of today. These auxiliary lanes will be included in BART's roadway reconstruction which is scheduled to begin in mid 1993.

12-2

EXISTING TRAFFIC OPERATIONS
Road Segments

Table 3.3-2 - 1992 EXISTING FREEWAY OPERATIONS - The number of Lanes West of Hacienda Drive should be 8 not 10.

12-3

Table 3.3-9 - FREEWAY OPERATIONS

The number of lanes just west of I-680 (between San Ramon/Foothill Road) should be 10, and west of Hacienda should be 8.

12-4

IMPACTS AND MITIGATION

MM3.3/4.0

The EIR recommends "the project should contribute a proportionate share to planned improvements at the I-580/I-680 interchange and" Please explain what the proportion would be based on, and also describe the procedure which would ensure that the project will contribute its share.

12-5

Table 3.3-10

The level of service and average vehicle delay of PM peak hour intersection operations are listed without mitigation. Because this proposed development is mainly residential, the impact of projected traffic on existing intersections caused by morning commute (am peak) from this new development should also be considered. Any intersection, in which the level of service will become unacceptable during the am peak, will need mitigation.

12-6

The operation of at least five interchanges on Route 580 and two interchanges on Route 680 will be affected by this proposed project. It is recommended that ramp metering be considered for all the on-ramps within the project limits. The proposed on-ramp improvements should provide adequate storage to accommodate the ramp metering operation. The improvement of local streets need to be considered to accommodate the ramp metering.

12-7

There are several signalized ramp intersections and local street intersections within the project limits. Usually, the signals on local streets are designed and operated independently by local authorization. However, in order to operate the interchanges which will be affected by this project more efficiently, the signal interconnection between ramp

12-8

intersections and local street intersections is essential. The coordination between the State and local authorization to design and operate these signals should be arranged.

12-8
contd.

MAPS AND FIGURES

Figure 3.3-B. Future Road Improvements

Existing number of lanes between Dougherty/Hopyard Road and Hacienda Drive should show 8 not 10.

12-9

Figure 3.3-F. Proposed Intersection Lanes

As a mitigation for the project, it is proposed to restripe the existing two right turn lanes and one left turn lane at the Eastbound Hacienda Drive off-ramp to two left turn lanes and one right turn lane. Justify how the estimated traffic at year 2010 with the project can be accommodated by only one right turn lane (reduced from two lanes to one).

12-10

The proposed improvement at eastbound Route 580 at Airway Boulevard should be included on the Figure 3.3-F. Use estimated peak hour traffic volume at these interchange off-ramps to check if the warrant for installation of signals is satisfied. Some of the information shown on figure 3.3-F is not accurate. Revise the lane numbers on the existing intersection to reflect the actual situation.

12-11

We appreciate the opportunity to comment on this project. If you have any questions regarding these comments, please feel free to contact Alice Jackson of my staff at (510) 286-5587.

Gary F. Adams
FOR: GARY F. ADAMS
District CEQA Coordinator

cc: Sally Germain, ABAG
Susan Pultz, MTC

Response to Letter 13: Nolan Sharp, President, Tassajara Valley Property Owners Association.

- 13-1 Comment: Interjurisdictional Cooperation. East Dublin, Dougherty Valley and Tassajara Valley share a common location, a common need for expansion of infrastructure, and a common time frame for development. Because of these common traits, the planning agencies should work together to coordinate expansion of public services and facilities, and to find solutions to common problems.

Response to Comment 13-1: Comment acknowledged.

- 13-2 Comment: Coordinated Subregional Transit Plan. TVPOA suggests that eastern Dublin developers be required to cooperate with adjacent property owners (TVPOA and Dougherty Valley) as well as adjacent business parks (Hacienda and Bishop Ranch) and the nearby regional shopping mall (Stoneridge) to explore the feasibility of a sub-regional transit system to serve the area. This effort should be done in cooperation with the Central Contra Costa Transit Authority, Livermore-Amador Transit Authority, and BART. It may be that such an effort can be accomplished in conjunction with the TVTC planning study.

Response to Comment 13-2: Comment acknowledged. Mitigation measures MM 3.3/15.0 through MM 3.3/15.3, page 3.3-28 of the DEIR, recommend that the City of Dublin coordinate with transit service agencies and that the Project contribute a proportionate share to the cost of transit service extensions. The City of Dublin is also participating in the Tri Valley Transportation Council study, which will recommend transportation improvements on a regional basis.

- 13-3 Comment: Land Use Assumptions for Tassajara Valley. The Final EIR should reflect current projections for total buildout and timing of development in Tassajara Valley. Current plans call for 6,100 dwelling units and 350,000 square feet of commercial/office space which would yield 700 employees. This update may require modifications to the cumulative traffic analysis in those areas most impacted by trips generated by Tassajara Valley development, i.e., Tassajara Road.

Response to Comment 13-3: The analysis of Project traffic impacts in the DEIR was based on ABAG Projections of land use for the Bay Area. These 2010 projections of overall land use in each census tract are based on an assessment of regional growth and absorption potential of new land uses, and would not change significantly as a result of changes in the ultimate projected buildout of each individual development project such as Tassajara Valley. The Cumulative Buildout analysis in the DEIR assumed development levels in Tassajara Valley consistent with the application for a General Plan Amendment submitted to Contra Costa County, the most current publicly available document at the time of the analysis for the DEIR. Future traffic studies conducted for the Tassajara Valley development should address the traffic impacts of changes in potential development levels in Tassajara Valley compared to the initial GPA application.

- 13-4 Comment: Cumulative Traffic Impact on Tassajara Road. The Draft EIR concludes that development outside Eastern Dublin, primarily in Dougherty and Tassajara Valleys, will cause level of service F operations at three Tassajara Road intersections in the Eastern Dublin planning area. The Draft EIR determines that this impact can be mitigated by widening Tassajara Road (MM 3.3/14.0, page 3.3-28). Yet, the Draft EIR falls short of recommending this mitigation measure. Instead, the Draft EIR leaves open the possibility that Tassajara road will remain four lanes despite concluding that to do so would result in a significant impact. Attempting to maintain Tassajara Road as a four lane road would seem to be inconsistent with

a regional vision of the problem.

Response to Comment 13-4: See Response to Comment 5-2. The City of Dublin is considering recommending a revision to the Specific Plan to reserve right-of-way for six lanes on Tassajara Road between Dublin Boulevard and Gleason Road.

- 13-5 Comment: Extension of Hacienda Drive to Dougherty Valley.** One solution to the traffic congestion problems projected for Tassajara Road is the extension of Hacienda Drive north into the Dougherty Valley.

Dougherty Road is incapable of handling the entire vehicle traffic volume from new development in Dougherty Valley. To help solve this problem, Windemere Parkway is extended from the east side of Dougherty Valley east to Camino Tassajara in Tassajara Valley. This route will provide a primary, yet indirect, access to I-580 via Tassajara Road, but will also increase the volume of traffic on Tassajara Road and at the I-580 interchange almost to a breaking point assuming development in Tassajara Valley and East Dublin.

An extension of Hacienda Drive north into Dougherty Valley would provide direct access routes to I-580 for the west and east sides of Dougherty Valley and Tassajara Valley, and thus would balance the traffic loads at the I-580 interchanges and through Dublin and East Dublin. Also, a Hacienda Drive extension provides a direct link for the entire Dougherty Valley to the following: 1) the new BART station planned near Hacienda Drive and I-580; 2) the heart of Hacienda Business Park in Pleasanton, and 3) the new commercial and office uses planned for the County property in the East Dublin Specific Plan.

Extending Hacienda Drive into Dougherty Valley is a positive step that will alleviate problems on Tassajara Road. This alternative should be reviewed further in the EIR.

Response to Comment 13-5: Comment acknowledged. The circulation plan for the Eastern Dublin Specific Plan does not preclude the potential extension of Hacienda Drive north to Dougherty Valley. An extension of Hacienda Drive north is a possibility that has been explored by both the Dougherty Valley proponents and by the Eastern Dublin planning consultants. The U.S. Army has indicated that such an extension through Camp Parks would be inconsistent with the Army's plan for the base, and therefore would not be permitted.

- 13-6 Comment: Coordination with the 680/580 Association.** The Eastern Dublin Specific Plan should include provisions to require property owners and developers to coordinate with the 680/580 Corridor Transportation Association and, if appropriate, to develop remote telecommute centers within the Project area. Also, consideration might be given to the development of so-called "smart houses" in the study area to facilitate at-home and/or neighborhood telecommuting. These concepts could be evaluated to determine the potential to reduce peak hour and/or total Daily Vehicle Trips.

Response to Comment 13-6: Telecommuting could help to reduce future traffic volumes, and should be included as one of the potential components of the Transportation Systems Management programs included as Mitigation Measure MM 3.3/2.0. Since there is inadequate existing data available to quantify the potential traffic reductions due to increased telecommuting, the DEIR conservatively assumed no reduction in traffic.

- 13-7 Comment: Consistency of EIR with Regional Traffic Models.** The Final EIR should point out the similarities and differences of the Draft EIR land use assumptions and trip distribution model with regional traffic models developed by the Contra Costa Transportation Authority, the Tri-Valley Transportation Council, and the Alameda County Congestion Management

Agency, if available.

Response to Comment 13-7: The traffic model used in the Draft EIR uses the standard methodology for traffic forecasting, as do the other travel demand models currently being used for Tri-Valley studies.

The Eastern Dublin analysis uses essentially the same ABAG Projections '90 2010 land use forecasts for the Tri-Valley area as the current studies by the Contra Costa Transportation Authority and the Tri-Valley Transportation Council. The Alameda County model also uses ABAG Projections '90, but currently uses an earlier disaggregation of land use data to individual traffic analysis zones. The earlier disaggregation did not consider the most recent development proposals. The Eastern Dublin analysis quantifies non-residential land uses in terms of square footage, while the other models use employment, so there may be some differences in the reported employment numbers by jurisdiction because of assumptions used in the conversion between employment and square footage.

The Eastern Dublin analysis determines traffic generation by relating vehicle trips directly to land uses. The other models use a standard procedure to estimate the number of person trips (people coming in and out of each building rather than cars), and then the persons are allocated to travel modes such as auto driver, auto passenger, or transit passenger. The resulting number of vehicle trips should be the same using either process.

All of the models use a standard trip distribution process based on data from the Metropolitan Transportation Commission (MTC). The Eastern Dublin analysis assumes trip distribution based on unconstrained travel conditions. The other models assume that future trip distribution will be balanced based on congestion; in other words, in the future, people may choose to work and shop closer to home because congestion has increased. This procedure may result in a more realistic analysis of future travel patterns, but is somewhat less conservative since it will tend to indicate more future trips remaining internal to each development. The Eastern Dublin analysis also assumes unconstrained growth of traffic demand over the Altamont Pass to San Joaquin County, while the other models assume some type of constraint on traffic demand over the Altamont Pass. Again, the procedures for trip distribution used in the Eastern Dublin DEIR will tend to provide a more conservative analysis of future traffic impacts.

- 13-8** **Comment: IM 3.7/B: Indirect Impacts of Vegetation Removal.** The Draft EIR mitigates for vegetation removal and possible erosion by calling for revegetation with native vegetation (MM 3.7/5.0). TVPOA suggests expansion of this mitigation in the Final EIR by requiring verification of physical and biological feasibility of planting locations, including topography, aspect, soils, hydrologic condition, and potential competition. Also, the native shrubs, herbs, and grasses should also be local to the Tri-Valley and the plant communities of eastern Dublin.

Response to Comment 13-8: Comment acknowledged. The following text has been added to MM 3.7/5.0, on page 3.7-10:

All areas of disturbance should be revegetated as quickly as possible to prevent erosion. Native trees (preferably those species already on site), shrubs, herbs and grasses should be used for revegetation of areas to remain as natural open space. The introduction of non-native plant species should be avoided. Specific physical characteristics of proposed revegetation areas will be determined to evaluate the long term feasibility of the proposed mitigation and to identify potential conflicts at the site. Characteristics would include but not be limited to ground and flow hydrology,

Appendix 8.5
Dublin City Council Resolution No. 40-02
(2002 Supplemental EIR)

RESOLUTION NO. 40 - 02

**A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF DUBLIN**

**CERTIFYING A SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT AND
ADOPTING RELATED MITIGATION FINDINGS, FINDINGS REGARDING ALTERNATIVES,
A STATEMENT OF OVERRIDING CONSIDERATIONS AND
A MITIGATION MONITORING PROGRAM FOR THE EASTERN DUBLIN PROPERTIES
ANNEXATION AND PREZONING PROJECT PA 00-025**

WHEREAS, the Eastern Dublin Property Owners submitted applications for annexation of approximately 1,120 acres of land to Dublin, for rezoning to the Planned Development zoning district including approval of a Stage 1 Development Plan, and related approvals, collectively known as the "Project"; and

WHEREAS, the Project area is within the Eastern Extended Planning Area of the Dublin General Plan as amended by the Eastern Dublin General Plan Amendment, approved in 1993. Portions of the Project area are also within the Eastern Dublin Specific Plan area as approved in 1993. The Eastern Dublin General Plan Amendment and Specific Plan are collectively referred to as the GPA/SP Project; and

WHEREAS, on May 10, 1993, the City Council certified a program Environmental Impact Report ("EIR") for the GPA/SP Project and an addendum thereto, dated May 4, 1993 (SCH 91103064). On August 22, 1994, the City Council approved another addendum to update plans to provide sewer service. The May 10, 1993 program EIR, the May 4, 1993 addendum and the August 22, 1994 addendum are collectively referred to as the Eastern Dublin EIR; and

WHEREAS, upon approval of the GPA/SP Project, the City Council adopted mitigation findings, a statement of overriding considerations, and a mitigation monitoring program as set forth in Resolution 53-93, included in the Revised Draft Supplemental EIR referenced below; and

WHEREAS, the Project is consistent with the type, location and density of land uses approved through the GPA/SP Project for future urbanization in Eastern Dublin. All mitigation measures adopted for the GPA/SP Project continue to apply to implementing projects such as the current annexation and rezoning Project; and all applicable City development ordinances and standards apply to the Project except as otherwise approved through the Project rezoning and related Stage 1 Development Plan; and

WHEREAS, the City completed an Initial Study for the Project consistent with CEQA Guidelines sections 15162 and 15163 and determined that a Supplement to the Eastern Dublin EIR ("Supplemental EIR") was required in order to analyze substantial changes in circumstances and new information since certification of the Eastern Dublin EIR. A Notice of Preparation dated May 25, 2001 was circulated with the Initial Study to public agencies and interested parties for consultation on the scope of the Supplemental EIR; and

WHEREAS, based on the Initial Study and responses to the Notice of Preparation, the City prepared a Draft Supplemental EIR, followed and superseded by a Revised Draft Supplemental EIR dated January 2002 and consisting of two bound volumes. Volume 1 contains the Revised Draft Supplemental

EIR text; Volume 2 contains appendices, including the Notice of Preparation and Initial Study. The 2-volume Revised Draft Supplemental EIR (SCH 2001052114) is incorporated herein by reference; and

WHEREAS, the Revised Draft Supplemental EIR was circulated for the required 45 day public review period, from January 15, 2002 to March 1, 2002; and

WHEREAS, the City received 13 comment letters during the public review period. City staff reviewed all of the comments and prepared written responses to all significant environmental issues raised therein. Through the responses, the City reviewed objections and suggestions from the commentors. Where the City accepted the suggestions, appropriate revisions to the Revised Draft Supplemental EIR were included in the responses. Where the City did not accept the suggestions, the responses explain the City's position in light of the objections. In all cases, the responses clarify and amplify the information contained in the Revised Draft Supplemental EIR and provide the City's good faith, reasoned analysis on the environmental issues raised by the comments. The written responses to comments and revisions to the Revised Draft Supplemental EIR are contained in a separately bound Final Supplemental Environmental Impact Report ("Final Supplemental EIR") dated March 2002 and incorporated herein by reference; and

WHEREAS, the City reviewed all written responses to comments and all revisions to the Revised Draft Supplemental EIR and determined that none of the responses and/or revisions included significant new information requiring recirculation of the Revised Draft Supplemental EIR; and

WHEREAS, a Staff report, dated March 26, 2002, and incorporated herein by reference, described and analyzed the Revised Draft Supplemental EIR, the Revised Final Supplemental EIR and the Project for the Planning Commission; and

WHEREAS, on March 26, 2002, the Planning Commission held a noticed public hearing on the Project at which time the Commission considered the staff report, the Revised Draft Supplemental EIR, the comments and associated responses in the Revised Final Supplemental EIR, and all other oral and written comments presented to them, and based on this evidence, recommended certification of the Supplemental EIR and approval of the Project in Resolutions 02-17, 02-18, and 02-19, dated March 26, 2002, incorporated herein by reference; and

WHEREAS, the Project would have significant effects on the environment, most of which can be substantially reduced through mitigation measures; therefore, approval of the Project must include mitigation findings as set forth in attached Exhibit A; and

WHEREAS, some of the significant effects cannot be lessened to a level of less than significant; therefore, approval of the Project must include findings regarding alternatives as set forth in attached Exhibit B, and must include a Statement of Overriding Considerations as set forth in attached Exhibit C; and

WHEREAS, a Mitigation Monitoring Plan, as required by CEQA, is contained in attached Exhibit D; and

WHEREAS, the Revised Draft Supplemental EIR together with the Revised Final Supplemental EIR constitute the final Supplemental EIR for the Project; and

WHEREAS, on April 2, 2002, the City Council held a noticed public hearing to certify the Supplemental EIR and consider the Project. The Council considered a Staff report dated April 2, 2002,

the Revised Draft Supplemental EIR and the Revised Final Supplemental EIR, and all other oral and written comments presented to them.

NOW, THEREFORE, BE IT RESOLVED that the foregoing recitals are true and correct and made a part of this resolution.

BE IT FURTHER RESOLVED that the Dublin City Council certifies as follows:

- A. That the Supplemental EIR for the Eastern Dublin Properties annexation and rezoning Project has been completed in compliance with CEQA, the CEQA Guidelines and the City of Dublin Environmental Guidelines.
- B. That the Supplemental EIR was presented to the City Council who reviewed and considered the information contained in the Supplemental EIR prior to approving the Project.
- C. That the Supplemental EIR reflects the City's independent judgment and analysis on the potential for environmental effects of the annexation and rezoning Project beyond the effects identified and analyzed in the Eastern Dublin EIR.
- D. That the custodian of the documents and other materials which constitute the record of proceedings for the Eastern Dublin Properties Project is the City of Dublin Community Development Department, 100 Civic Plaza, Dublin, CA 94568, Attn: Andy Byde, Senior Planner.

BE IT FURTHER RESOLVED that the Dublin City Council adopts the mitigation findings set forth in Exhibit A, the findings regarding alternatives set forth in Exhibit B, the Statement of Overriding Considerations set forth in Exhibit C, and the Mitigation Monitoring Program set forth in Exhibit D.

PASSED, APPROVED, AND ADOPTED this 2nd day of April, 2002, by the following vote:

AYES: Councilmembers McCormick, Oravetz, Sbranti and Zika and Mayor Lockhart

NOES: None

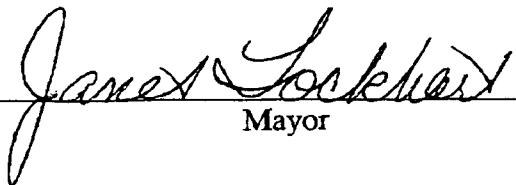
ABSENT: None

ABSTAIN: None

ATTEST:



City Clerk



Mayor

K?/G/4-2-02/reso-eir.doc (Item 6.4)

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EXHIBIT A

FINDINGS CONCERNING SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Pursuant to Public Resources Code section 21081 and CEQA Guidelines sections 15091 and 15163(e), the City Council hereby makes the following findings with respect to the potential for significant supplemental environmental impacts and means for mitigating those impacts. The impacts identified below are supplemental impacts, that is, significant or potentially significant impacts based on changed conditions or new information since the Eastern Dublin EIR that were not addressed in that EIR, pursuant to CEQA Guidelines section 15162 and 15163, and as further set forth in the Project Initial Study and Revised Draft Supplemental EIR ("RDSEIR"). Mitigation measures identified in the Eastern Dublin EIR and adopted upon approval of the Eastern Dublin General Plan Amendment and Specific Plan in 1993 continue to apply to implementing projects. As such, they are assumed to be within the annexation and rezoning Project and are not summarized specifically below. Supplemental mitigations ("SM") identified in the Revised Draft Supplemental EIR are described below. Many of the supplemental impacts and mitigation measures in the following findings are summarized rather than set forth in full. The text of the Revised Draft and Final Supplemental EIRs should be consulted for a complete description of the impacts and mitigations. Findings pursuant to section 21081(c) relating to Project alternatives are made in Exhibit B.

Section 3.2 Air Quality

Supplemental Impact AQ 1. Mobile Source Emissions: Reactive Organics, Nitrogen Oxide, Particulate Matter. Automobile trips generated by the Project will create emissions that will exceed BAAQMD thresholds for pollutants that are precursors to ozone formation, and would result in the formation of substantial quantities of ozone, which already exceed both state and federal standards. This is also a significant cumulative impact. RDSEIR pp. 3.2-4, -5.

SM-TRAFFIC-6, -7, -8. These supplemental mitigations include City monitoring of peak hour volumes at key intersections along Dublin Boulevard. They also require implementation of transportation demand management measures such as ridesharing, increased transit use, and staggered work hours in future development projects RDSEIR pp. 3.2-5; 3.6-17 to -20.

Finding. Changes or alterations have been required in, or incorporated into the Project. However, even with these changes, the impact might not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Exhibit A to Attachment 1

Rationale for Finding. The supplemental mitigation measures will reduce potential Project emissions by reducing traffic congestion which is the major source of precursor pollutants. The supplemental mitigations will not only reduce vehicle trips but also reduce single car occupancy, thereby reducing the number of automobiles on City and regional roadways.

Section 3.3 Biological Resources

Supplemental Impact BIO 1: Direct and Indirect Habitat Loss. Seasonal wetlands and intermittent streams are sensitive habitat types identified as likely to occur within the Project area. New and/or additional sensitive plant and wildlife species have been identified as occurring or likely to occur in the Project area. These habitats and species were not previously identified or analyzed for the Project area. This is also a potentially significant cumulative impact. RDSEIR pp. 3.3-13, -14.

SM-BIO-1. The Project proponents shall prepare a comprehensive Resource Management Plan (RMP) for the entire Project area. The RMP shall reflect all City resource protection programs (e.g., Stream Restoration Program), all applicable mitigation measures from the Eastern Dublin EIR, and all applicable habitat and species mitigations from the Supplemental EIR, including any offsite mitigation lands. The first priority of the RMP shall be avoidance of impacts to and preservation of biological resources in the Project area. The RMP shall be approved prior to or concurrently with any subsequent implementing application, such as Stage 2 Development Plans and tentative maps; and all such implementing applications shall be consistent with the approved RMP. RDSEIR pp. 3.3-14, -15; RFSEIR p. 263.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The Eastern Dublin EIR acknowledged that loss of existing vegetation would reduce the habitat and range for sensitive species; adopted mitigation measures required the city to implement management programs to protect riparian and wetland resource areas, plant diversity, native plant recovery and hillside vegetation. (Impacts 3.7/A, B). These requirements would also apply to the newly identified habitats and species. The RMP refines the adopted mitigations to incorporate all applicable management programs, as well as previously adopted and currently proposed habitat and species mitigations, in one resource program. Through this comprehensive approach, the RMP will minimize direct disturbance of habitat areas and restore disturbed areas to minimize the amount of habitat lost from future development of the Project area.

Supplemental Impact BIO 2. Loss of Special Status Plant Species. No special status plant species were identified in the Eastern Dublin EIR. At least five special status plants have since been identified as occurring or potentially occurring on the Project site. This is also a potentially significant cumulative impact. RDSEIR p. 3.3-15.

SM-BIO-2. Conduct seasonal plant surveys per resource agency protocols and include results in subsequent development applications. RDSEIR p. 3.3-15, -16.

SM-BIO-3. Areas where special status plant species are identified should be avoided. RFSEIR p. 263.

SM-BIO-4. If special status plant species cannot be avoided, ensure 1:1 replacement by reserving other on- or off-site acreage that contains the plant or by harvesting and relocating the plants or seeds from the plants to another suitable area on- or off-site to be preserved in perpetuity. RDSEIR p. 3.3-16.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The mitigation measures ensure that subsequent development projects will identify special status plants onsite and incorporate protective measures in the development application. The measures will further ensure that special status plants are preserved either on- or off-site thereby avoiding the loss of the plant species.

Supplemental Impact BIO 3. Loss or Degradation of Botanically Sensitive Habitats. The Eastern Dublin EIR identified direct loss and degradation of the area's unique Arroyo Willow Riparian Woodland and Freshwater Marsh habitats as significant and unavoidable (Impact 3.7/C). Both of these habitats are present in the Project area. Newly identified seasonal wetlands and intermittent stream habitats are additional botanically sensitive habitats that could be affected directly and indirectly by future development of the Project. This is also a potentially significant cumulative impact. RDSEIR p. 3.3-16, -17.

SM-BIO-5. Design and construct future implementing projects to avoid and minimize impacts on wetlands. Examples of design and construction features include reducing the size of the Project or implementing projects, establishing wetland or upland vegetated buffers to protect streams and other open waters, avoiding the Arroyo Willow Riparian Woodland and red-legged frog habitat in the Fallon Road drainage to the maximum extent feasible or limiting impacts in that area to bridge crossings. RDSEIR p. 3.3-16, -17.

SM-BIO-6. If avoidance and minimization are not feasible, wetlands impacts shall be mitigated at a 2:1 ratio onsite through creation, restoration or enhancement of wetlands or other waters. RDSEIR p. 3.3-17.

SM-BIO-7. If mitigation onsite is not feasible, wetlands impacts shall be mitigated at a 2:1 ratio at an offsite location acceptable to the City. RDSEIR p. 3.3-17.

SM-BIO-8. Mitigations for botanically sensitive habitats shall be included in the RMP required by SM-BIO-1. RDSEIR p. 3.3-17.

Finding. Changes or alterations have been required in, or incorporated into the Project. These changes will avoid or substantially lessen the Project-related significant effects identified in the Supplemental EIR. However, these changes will not avoid the cumulative effects of additional lost or degraded biologically sensitive habitat represented by the seasonal wetlands and intermittent streams. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. The supplemental measures provide a series of mitigations, phased by preference, i.e., the first preference is for avoidance of sensitive botanical habitat areas represented by wetlands and other water areas. If avoidance is not feasible, the second preference is for replacement or enhancement of wetlands at a different location onsite. If onsite mitigation is not feasible through either of the first two preferences, offsite mitigation shall be required. Through the RMP, the mitigation for botanically sensitive areas, including wetlands, must be established for the entire Project area before any individual development projects are considered. This provides increased opportunities for onsite mitigation than would otherwise be possible on individual development sites, for example, by maintaining stream corridors, which cross several properties. Through on- or off-site mitigation at the specified ratios, this Project will ensure that the amount of habitat will remain constant. Even with these protections for biologically sensitive habitats including the additional wetlands and intermittent streams, the cumulative impact cannot be fully mitigated.

Supplemental Impact BIO 4: San Joaquin Kit Fox. No new impacts were identified in the Supplemental EIR; kit fox impacts remain as described in the Eastern Dublin EIR. However, supplemental mitigation measures update the previously adopted Eastern Dublin San Joaquin Kit Fox Protection Plan to reflect updated survey and protection measures for kit fox and other special status grassland species. RDSEIR p. 3.3-17.

BIO-SM-9. Future development of the Project shall comply with the amended Eastern Dublin San Joaquin Kit Fox Protection Plan contained in Exhibit E of the Revised Draft SEIR. RDSEIR p. 3.3-17.

BIO-SM-10. San Joaquin kit fox habitat shall be included in the RMP required by SM-BIO-1. RDSEIR p. 3.3-18.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The original kit fox protection plan provided a comprehensive protection plan addressing a multi-phase approach, from avoidance of potential dens to maintenance of habitat. The supplemental mitigations ensure that the latest protocols and standards of the resources agencies are included in the protection plan. The supplemental mitigations also ensure that off-site mitigation sites will be selected to maximize protection of kit fox. Through the amended plan, the Project will continue to avoid most direct and indirect adverse effects on any kit fox that might be present in the Project area.

Supplemental Impact BIO 5: California Red-legged Frog (CRLF). Since the Eastern Dublin EIR, the USFWS has published a draft Recovery Plan and has adopted critical habitat for the CRLF. Related studies have shown that upland areas adjacent to water and riparian features are potential aestivation and dispersal habitat for CRLF. Future development of the Project on the newly identified potential upland habitat could represent a broader impact than previously analyzed. RDSEIR p.3.3-18.

SM-BIO-11. Focused surveys following USFWS survey protocols shall be conducted in habitat suitable for CRLF which has not already been surveyed. RDSEIR D- 3.3-18.

SM-BIO-12. CRLF habitat areas, including the drainage upstream and east of the current Fallon Road alignment, shall be included in the RMP required by SM-BIO-1. RDSEIR p. 3.3-18, -19.

SM-BIO-13. Future development of the Project area shall, to the extent feasible, avoid CRLF aquatic and dispersal habitat by providing a 300 to 500-foot buffer on either side of any stream that provides CRLF habitat. Limited minor development, such as a trail, bridge crossing, or grading activities along the edge of the buffer zone, may occur within the buffer zone so long as it will have only minor impacts on the habitat. RDSEIR p. 3.3-19.

SM-BIO-14, -15. If avoidance is infeasible, mitigation lands at a 3:1 ratio or other suitable ratio determined by the USFWS shall be set aside in perpetuity. This mitigation shall be proposed in a mitigation and monitoring plan prior to submittal of development applications. Selection of off-site mitigation lands shall give preference to large blocks of land, linkage to open space or other high-quality habitat, and shall exclude or limit public uses. If mitigation lands are approved by the City, mitigation guidelines as detailed in SM-BIO-15 shall be implemented prior to and during construction of any development projects. The guidelines include such requirements as fencing wetland areas, controlling removal of vegetation from the fenced areas, preconstruction surveys, and monitoring by the Project Biologist. RDSEIR p. 3.3-19, -20.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The supplemental mitigation measures refine previously adopted mitigation measures for CRLF to provide open space protection, revegetation, restoration planning, as well as wetland and riparian area protection to minimize impacts to the riparian habitat necessary for CRLF, in accordance with the most current protocols. The expanded stream buffer will extend this protection to the newly identified upland habitat areas. The supplemental mitigations also ensure that off-site mitigation sites will be selected to maximize protection of CRLF. Through mitigation at the specified ratios, the Project will ensure that the amount of habitat will remain constant.

Supplemental Impact BIO 6: Special Status Invertebrates. Future development of the Project could disturb potential wetland habitat of two additional special status invertebrate species not identified in the previous EIR. RDSEIR p. 3.3-20.

SM-BIO-16. Special status invertebrate habitat shall be included in the RMP required by SM-BIO-1. RDSEIR p. 3.3-20.

SM-BIO-17. Vernal pool habitat shall be surveyed. If suitable habitat is identified, the mitigation guidelines as detailed in the Revised Draft SEIR for preservation or creation of habitat shall be implemented. These guidelines address details such as habitat preservation ratios, habitat creation ratios, habitat monitoring and training of construction personnel. RDSEIR p. 3.3-20, -21.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The RMP and detailed mitigation guidelines will ensure that future development will be planned to avoid wetland and vernal pool habitat for special status invertebrates. Through mitigation at the specified ratios, the Project will ensure that the amount of habitat will remain constant.

Supplemental Impact BIO 7: California Tiger Salamander (CTS). Water impoundments and stream courses were previously identified as potential habitat for CTS. Since the previous EIR, upland areas have been recognized as potential aestivation habitat. CTS have been confirmed in the southern portion of the Project area and suitable habitat is present throughout the Project area. Future development of the Project could result in direct and indirect loss of individuals. RDSEIR p. 3.3-21.

SM-BIO-18. California Tiger Salamander habitat shall be included in the RMP required by SM-BIO-1. RDSEIR p. 3.3-21.

SM-BIO-19. If avoidance of habitat is infeasible, mitigation lands providing aquatic and upland habitat at a 1:1 ratio or other suitable ratio determined by the CDFG shall be set aside in perpetuity, and following the guidelines detailed in the Revised Draft SEIR. This mitigation shall be proposed in a mitigation and monitoring plan prior to submittal of development applications. Selection of off-site mitigation lands shall give preference to large blocks of habitat, linkage to open space or other high-quality habitat, and shall exclude or limit public uses. RDSEIR p. 3.3-21.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The supplemental mitigation measures refine previously adopted mitigation measures for CTS to provide open space protection, revegetation, and restoration planning for both aquatic and upland habitat. The supplemental mitigations also ensure that off-site mitigation sites will be selected to maximize protection of CTS.

Through mitigation at the specified ratios, the Project will ensure that the amount of habitat will remain constant.

Supplemental Impact BIO 8: Nesting Raptors. An additional special status raptor species, the short-eared owl, has been identified as potentially nesting within the Project area since the previous EIR. RDSEIR p. 3.3-21, -22.

SM-BIO-20. A qualified biologist shall conduct pre-construction surveys for nesting raptors. If an active nest is found, SM-BIO-21 to -25 shall be implemented. RDSEIR p. 3.3-22

SM-BIO-21. If construction must occur during nesting season, all potential nesting trees in the development footprint should be removed prior to the nesting season. RDSEIR p. 3.3-22

SM-BIO-22. Construction should occur between August 1 and February 1 to avoid disturbance of owls during the nesting season. RDSEIR p. 3.3-22

SM-BIO-23. If removal of nesting trees is infeasible and construction must occur in the breeding season, a nesting raptor survey shall be performed by a qualified biologist prior to tree disturbance. RDSEIR p. 3.3-22

SM-BIO-24. All active nests shall be identified and a buffer zone of at least 200 feet established around the nesting tree. RDSEIR p. 3.3-22

SM-BIO-25. If construction is scheduled when young birds have not yet fledged, an exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged as determined by a qualified biologist. RDSEIR p. 3.3-22

SM-BIO-26. Nesting raptor habitat shall be included in the RMP required by SM-BIO-1. RDSEIR p. 3.3-22

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The mitigation measures ensure that surveys will be conducted to identify active nests before any construction is undertaken. If active nests are identified, the mitigation measures ensure that occupied nests will not be disturbed during nesting season.

Supplemental Impact BIO 9: Golden Eagle – Elimination of Foraging Habitat. The Eastern Dublin EIR identified impacts from reduction of the amount and quality of foraging habitat for golden eagles. Since the previous EIR, studies have determined that a breeding pair of eagles uses the northern portion of the Project area for foraging. This area is designated for Rural Residential/Agricultural uses. RDSEIR p. 3.3-22

SM-BIO-27. The territory of the golden eagle nesting pair shall be included in the RMP required by SM-BIO-1. Development standards for the Rural Residential/Agricultural uses in this area, and other portions of the Project area within the viewshed of nest sites used by the pair, shall include preservation of foraging habitat by locating homesites in valley bottoms near existing or planned development, by limiting agricultural uses to grazing, and by prohibiting rodent control. RDSEIR p. 3.3-22, -23

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The mitigation measures ensure that the Rural Residential/Agricultural area and other areas used for foraging will maintain effective foraging habitat and that the territory of the nesting pair and the integrity of the nesting site is protected.

Supplemental Impact BIO 10: Burrowing Owl. No new impacts were identified in the Supplemental EIR; burrowing owl impacts remain as described in the Eastern Dublin EIR. However, supplemental mitigation measures identify new burrowing owl mitigation guidelines from CDFG since the previous EIR. RDSEIR p. 3.3-23

SM-BIO-28. If construction is scheduled during the nesting season (February 1 -August 31), pre-construction surveys should be conducted on the entire Project area and within 150 meters (500 feet) of the Project area prior to any ground disturbance. To avoid take of over-wintering birds, all burrows should be surveyed 30 days prior to ground disturbance between the months of September 1 and January 31. If ground disturbance is delayed or suspended for more than 30 days after the pre-construction survey, the site should be resurveyed. RDSEIR pp. 3.3-23.

SM-BIO-29. If over-wintering birds are present no disturbance should occur within 150 feet of occupied burrows. If owls must be moved away from the disturbance area, passive relocation techniques, following CDFG 1995 guidelines, should be used rather than trapping. If no over-wintering birds are observed, burrows may be removed prior to the nesting season. RDSEIR p. 3.3-23.

SM-BIO-30. Maintain a minimum buffer (at least 250 feet) around active burrowing owl nesting sites identified by pre-construction surveys during the breeding season to avoid direct loss of individuals (February 1- September 1). RDSEIR p. 3.3-23.

SM-BIO-31. If removal of unoccupied potential nesting burrows prior to the nesting season is infeasible and construction must occur within the breeding season, a nesting burrowing owl survey shall be performed by a qualified biologist within 30 days prior to construction. Owls present on site after February 1 will be assumed to be nesting on site or adjacent to the site. All active burrows shall be identified. RDSEIR p. 3.3-23.

SM-BIO-32. All active nesting burrows shall have an established 250-foot exclusion zone around the burrow. RDSEIR p. 3.3-23

SM-BIO-33. If construction is scheduled during summer, when young are not yet fledged, a 250-foot exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged, typically by August 31. RDSEIR p. 3.3-23

SM-BIO-34. When destruction of occupied burrows is unavoidable, existing unsuitable burrows should be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a 2:1 ratio on protected lands, as provided for below. RDSEIR p. 3.3-23.

SM-BIO-35. A minimum of 6.5 acres of foraging habitat per pair or unpaired resident bird, shall be acquired and permanently protected: The protected lands shall be adjacent to occupied burrowing owl habitat and at a location acceptable to CDFG. RDSEIR p. 3.3-23.

SM-BIO-36. The project proponent shall provide funding for long-term management and monitoring of the protected lands. The monitoring plan should include success criteria, remedial measures, and an annual report to CDFG. RDSEIR p. 3.3-2.

SM-BIO-37. Burrowing owl habitat shall be included in the RMP as required in Mitigation Measure SM-BIO-1. RDSEIR p. 3.3-24.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The pre-construction surveys and required buffer zone around known nesting and breeding sites will preserve owl burrows by allowing them to be avoided during the construction and development process. The measures will also ensure that any unavoidable disturbance will be mitigated in coordination with CDFG.

Supplemental Impact BIO 11: Nesting Passerines. The Project area provides potentially suitable nesting habitat, including grassland, arroyo willow riparian woodland, and freshwater marsh habitat, for two additional nesting passerines, the loggerhead shrike and the California horned lark, which were not identified in the Eastern Dublin EIR. Future development of the Project could destroy nesting habitats or disturb these species. RDSEIR pp. 3.3-24.

SM-BIO-38. If construction is scheduled to occur during the nesting season (February 1 - August 15), all potential nesting sites and structures (i.e., shrubs and tules) within the footprint of development should be removed prior to the beginning of the nesting season. However, because the removal of grassland habitat is infeasible, mitigation for impacts to California horned lark are addressed more particularly in Mitigation Measures SM-BIO-39 to SM-BIO-41, below. RDSEIR p. 3.3-24.

SM-BIO-39. If removal of nesting trees and shrubs within the footprint of development is infeasible and construction must occur within the breeding season, a nesting bird

survey should be performed by a qualified biologist within 30 days prior to construction. These surveys shall cover grassland habitat for potential nesting California horned lark. Birds present on site after February 1 will be assumed to be nesting onsite or adjacent to the site. RDSEIR p. 3.3-24.

SM-BIO-40. All active nests shall be identified by flagging and a buffer zone, depending on the species, shall be established around the nest site. Buffer zones can range between 75 feet to 100 feet. RDSEIR p. 3.3-24.

SM-BIO-41. If construction is scheduled during summer, when young have not yet fledged, an exclusion zone around the nest shall be established or construction shall be delayed until after the young have fledged, typically by July 15. RDSEIR p. 3.3-24.

SM-BIO-42. Habitat for nesting passerines shall be included in the RMP as required in SM-BIO-1. RDSEIR p. 3.3-24.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The pre-construction surveys and required buffer zone around known nesting sites will preserve passerine nests and protect young birds by allowing the sites to be avoided during the construction and development process. Including habitat in the RMP ensures that the integrity of the nesting sites is protected.

Supplemental Impact BIO 12: Bat Species. Future development of the Project could destroy roosting habitat for special status bat species potentially occurring on the Project site and identified since the previous EIR. RDSEIR p. 3.3-24

SM-BIO-43. A qualified bat biologist shall conduct occupancy surveys of the Project area to determine whether any mature trees, snags or suitable buildings that would be removed during future project construction provide hibernacula or nursery colony roosting habitat. RDSEIR pp. 3.3-25.

SM-BIO-44. If presence is observed, removal of roost habitat should be conducted at specific times of the year. Winter roosts are generally occupied between October 15 through January 30 and maternity colonies are generally occupied between February 15 and July 30. If bats are using roost sites that need to be removed, the roosting season of the colony shall be determined and the removal shall be conducted when the colony is using an alternate roost. RDSEIR p. 3.3-25.

SM-BIO-45. Habitat for these bat species shall be included in the RMP required by SM-BIO-1. RDSEIR p. 3.3-25

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The occupancy surveys and limitations on removing roost habitat or roost sites ensure that occupied bat roosts will be avoided during the construction and development process.

Section 3.4 Noise

Supplemental Impact NOISE 1: Exposure of proposed and existing housing to noise levels in excess of standards established in the General Plan. As noted in the Revised Draft SEIR traffic analysis, traffic levels on Project area roadways are expected to increase due to regional increases in traffic along I-580. This increased traffic could also increase traffic noise along those roadways, as reflected in revised noise contours for Project buildout. (RDSEIR Figure 3.4-B). Some land uses within the Project area would be exposed to noise levels that would be considered conditionally acceptable under the City of Dublin's Noise Element. Residential development along Central Parkway, Fallon Road and internal loop roads would be exposed to a CNEL of over 65dBA, exceeding the City's residential noise standard of 60dBA. Existing residences would also be exposed to the increased traffic noise. RDSEIR p. 3.4-3.

Supplemental Mitigation Measures. None. Adopted Mitigation Measures 3.10/1.0 and 2.0 of the Eastern Dublin EIR require acoustical studies for new residential development within the 60 dBA CNEL noise contour and require mitigation for outdoor living areas of existing residences. These mitigations will continue to apply within the 60 dBA contour as adjusted and will reduce increased traffic noise impacts on new housing to less than significant. No supplemental mitigation measures are recommended. RDSEIR p. 3.4-3.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR with respect to future housing. However, even with these changes, the increased traffic noise impacts on existing residences will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Acoustical mitigation will be identified and incorporated into future new residential development in the Project area and will ensure that applicable noise standards are met. Noise barriers or berms may not be feasible for existing residences due to existing site constraints. The supplemental impact is significant and unavoidable for existing residences.

Supplemental Impact NOISE 2: Exposure of future commercial, office and industrial uses to noise levels in excess of standards established in the General Plan. As reflected in the noise contours for I-580 and Project area roadways, the general commercial and industrial commercial land uses proposed between Dublin Boulevard and Interstate 580 would be exposed to a CNEL of up to 75 dBA, which is considered conditionally acceptable for these land uses under the guidelines of the Noise Element of the General Plan. RDSEIR p. 3.4-3.

SM-NOISE-1. A noise insulation plan shall be prepared for general commercial (including any proposed office-type uses) and industrial development projects located within the future CNEL 70 dBA contour, showing how interior noise levels would be controlled to acceptable levels through means such as sound-rated windows in windows closest to the streets and the freeway. RDSEIR p. 3.4-3.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. The required noise insulation plan allows the developer and City to anticipate noise levels and to propose specific measures to address potentially excessive noise at an early stage in the development process. The insulation measures will be included in future development applications, and will allow projects to make use of a variety of techniques to reduce noise levels.

Supplemental Impact NOISE 3: Exposure of people to or generation of excessive ground borne vibration or ground borne noise levels. Increased traffic on I-580 and Project area roadways also could increase ground borne vibrations caused by the passage of heavy trucks or equipment along nearby streets. The discussion of increased noise levels in Supplemental Impact Noise 1 above applies generally to ground borne noise, since both are generated by vehicular traffic, the main source of current and future noise on and within the Project area. Therefore, no additional supplemental impact or mitigation measures are required for ground-borne noise. RDSEIR p. 3.4-4.

SM-NOISE-2. Except for local deliveries, restrict heavy truck traffic to designated arterial roadways and truck routes within the Project area and limit the hours of local deliveries to daytime hours as established by the City. RDSEIR p. 3.4-4.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. Restrictions on routes and hours of delivery will ensure that ground borne vibration impacts are avoided during the quieter times of the day so they will be less noticeable, especially in residential areas.

Section 3.6 Traffic and Circulation

Supplemental Impact TRAFFIC 1: Unacceptable LOS at Hacienda Drive/I-580 eastbound ramps. The intersection of Hacienda Drive/I-580 eastbound ramps would operate at unacceptable levels of LOS E in the AM Peak Hour under the Dublin Baseline Model with or without the Project. RDSEIR p. 3.6-14.

SM-TRAFFIC-1. Project developers shall contribute a pro-rata share to the widening of the I-580 eastbound off-ramp approach at Hacienda Drive to add a third eastbound left turn lane. The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic

impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects. RDSEIR p. 3.6-15.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. Widening the I-580 ramp and adding a left-turn lane will provide sufficient capacity for this intersection to operate at an acceptable level of service.

Supplemental Impact TRAFFIC 2: Unacceptable LOS at Hacienda Drive/I-580 westbound ramps. The intersection of Hacienda Drive/I-580 westbound ramps would operate at an unacceptable LOS F in the AM Peak Hour under the Dublin Baseline Model with or without the Project. RDSEIR p. 3.6-15

SM-TRAFFIC-2. Project developers shall contribute a pro-rata share to the widening of the northbound Hacienda Drive overcrossing from 3 lanes to 4 lanes including three through lanes and one auxiliary lane that leads exclusively to the I-580 westbound loop on-ramp. The westbound loop on-ramp shall be modified as necessary to meet Caltrans' standards and design criteria. Project developers also shall contribute to widening the westbound off ramp approach to add a third westbound left-turn lane. The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects. RDSEIR p. 3.6-15.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. Widening the overcrossing and modifying the loop on-ramp will provide sufficient capacity for this intersection to operate at acceptable levels of service.

Supplemental Impact TRAFFIC 3: Unacceptable LOS at Santa Rita Road/I-580 eastbound ramps. The intersection of Santa Rita Road/I-580 eastbound ramps will operate at an unacceptable LOS E in the AM and PM peak hours. RDSEIR Page 3.6-15

SM-TRAFFIC-3. Project developers shall contribute a pro-rata share to construction, which converts the eastbound Santa Rita off-ramp through lane to a shared left turn/through lane. Project developers also shall contribute to a traffic signal upgrade that includes a westbound right-turn overlap from Pimlico Drive. The City of Dublin shall implement this mitigation measure in coordination with the City of Pleasanton and Caltrans. This improvement shall occur when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects. RDSEIR p. 3.6-15.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. Converting the off-ramp to include a shared left turn lane and upgrading the traffic signal will improve intersection operation to acceptable levels of service.

Supplemental Impact TRAFFIC 4: New Project Intersection of Dublin Boulevard/Street D. The new Dublin Boulevard/Street D intersection would operate at an unacceptable level of service during the PM peak hour (LOS F) with one-way STOP sign control under the Dublin Model Baseline and TVTM Model, with Project. RDSEIR p. 3.6-15, -16.

SM-TRAFFIC-4. The project developers shall install a traffic signal at the Dublin Boulevard/Street D intersection at the time development occurs in this area utilizing this intersection. Project developers shall implement this mitigation measure when the traffic signal installation at Dublin Boulevard/Street D becomes warranted based on the estimated additional trips from individual projects, as determined by traffic impact studies of the individual projects. RDSEIR p. 3.6-16.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. Installing the traffic signal will result in the intersection operating at an acceptable level of service.

Supplemental Impact TRAFFIC 5: New Project Intersection of Fallon Road/Project Road. The new Fallon Road/Project Road intersection would operate at unacceptable levels of service during the AM and PM peak hours (LOS F) with one-way STOP sign control. This is a significant impact under the Dublin Model Baseline and TVTM Model, with Project. RDSEIR p. 3.6-16.

SM-TRAFFIC-5: The Project developers shall install a traffic signal at the Fallon Road/Project Road intersection at the time development occurs in this area utilizing this intersection. Project developers shall implement this mitigation measure when the traffic signal installation at Fallon Road/Project Road becomes warranted based on the estimated additional trips from individual projects, as determined by traffic impact studies of the individual projects. RDSEIR p. 3.6-16.

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the SEIR.

Rationale for Finding. Installing the traffic signal will result in the intersection operating at an acceptable level of service.

Supplemental Impact TRAFFIC 6: Year 2025 Cumulative Buildout with Project Scenario, Dougherty Road/Dublin Boulevard Intersection. The Dougherty Road/Dublin Boulevard intersection would operate at LOS E (0.93) in the AM peak hour and LOS F (1.03) in the PM peak hour. This intersection operates at LOS E in the AM

and PM peak hours even without the Project and is a significant cumulative impact. Development of the Project creates only a 0.03 impact at this intersection during the PM peak hour and improves the intersection very slightly in the AM peak hour. RDSEIR p. 3.6-16, -17

SM-TRAFFIC-6. Through payment of the Eastern Dublin Traffic Impact Fee, Project developers shall contribute a pro-rata share to configure the eastbound and westbound Dublin Boulevard approaches, the northbound and southbound Dougherty Road approaches and to widen the I-580 westbound diagonal on-ramp from Dougherty Road, as described in the Revised Draft SEIR (p. 3.6-17). The City will implement these improvements.

In addition, the City will monitor the intersection for peak hour volumes on a periodic basis, and will apply conditions of approval to implementing development projects to improve levels of service. Such conditions may include transportation demand programs, ride-sharing, transit passes, staggered work hours, vanpools and other trip reduction programs.

Current and future phases of the I-580 Smart Corridor Project involve systems deployment and regional traffic coordination among Tri-Valley cities, the county and Caltrans. RDSEIR p. 3.6-17.

Finding. Changes or alterations have been in, or incorporated into the Project. Some of the measures will be implemented by developers and the City of Dublin. Other measures involve the cooperative efforts of Dublin, Livermore, Pleasanton, the county and Caltrans in the Smart Corridor Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Additional improvements to reduce the intersection impacts to an acceptable LOS would require adding a fourth northbound left turn lane and other improvements that raise major safety concerns. Nor would these additional improvements be feasible given the physical constraints at the Dougherty Road/Dublin Boulevard intersection where adjacent properties to the intersection are already built out. Monitoring the intersection to obtain updated volume forecasts for future horizon years (i.e., Year 2025) can more effectively implement transportation measures to improve levels of service and reduce single car occupancy through future development projects. These City and Project efforts will complement current and future phases of the I-580 Smart Corridor Project and would likely relieve some congestion at the Dougherty Road/Dublin Boulevard intersection through ITS (Intelligent Transportation Systems) measures to discourage traffic from diverting off the freeway due to congestion or incidents.

Supplemental Impact TRAFFIC 7: Year 2025 Cumulative Buildout with Project scenario, Hacienda Drive/Dublin Boulevard intersection. The Hacienda Drive/Dublin Boulevard intersection was identified in the Eastern Dublin EIR as exceeding the applicable LOS under the cumulative buildout with Project analysis (Impact 3.3M).

Mitigation Measure 3.3/13.0 remains applicable. The SEIR analyzed this intersection and found it still to operate at an unacceptable level in the cumulative analysis. The Hacienda Drive/Dublin Boulevard intersection would operate at LOS E (1.00) during the PM peak hour with the Project and would operate at LOS E (0.97) during the PM peak hour even without the Project. These LOS are a significant cumulative impact. RDSEIR p. 3.6-18.

SM-TRAFFIC-A¹. The City will monitor the intersection for peak hour volumes on a periodic basis, and will apply conditions of approval to implementing development projects to improve levels of service. Such conditions may include transportation demand programs, ride-sharing, transit passes, staggered work hours, vanpools and other trip reduction programs. Current and future phases of the I-580 Smart Corridor Project involve coordination among Tri-Valley cities, the county and Caltrans to implement ITS measures. RDSEIR p. 3.6-18.

Finding. Changes or alterations have been in, or incorporated into the Project. However, even with these changes on the part of developers, the City and participants in the I-580 Smart Corridor Program, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted upon approval of the Project.

Rationale for Finding. Given the existing right-of-way and improvements at this intersection, there is no opportunity to provide additional mitigation beyond the existing intersection geometries. Additional improvements to reduce the intersection impacts to an acceptable LOS would require adding a fourth northbound left turn lane and other improvements that raise major safety concerns. Similar to the Dougherty Road/Dublin Boulevard intersection the Hacienda Drive/Dublin Boulevard intersection is nearly built out. Adjacent properties to the east of the intersection are already built out. As part of ITS deployment measures along the I-580 corridor, the City of Dublin will implement advanced traffic signal timing techniques (e.g., adaptive signal timing) along Dublin Boulevard and Hacienda Drive to improve the operation of this intersection by utilizing the intersections' throughput capacity more efficiently.

Supplemental Impact TRAFFIC 8: Year 2025 Cumulative Buildout with Project Scenario, Fallon Road/Dublin Boulevard Intersection. The Fallon Road/Dublin Boulevard intersection would operate at LOS F (1.11) in the PM peak hour with some increases in turning movements and traffic volumes at this intersection possibly attributable to Project and regional traffic utilizing Dublin Boulevard as an "escape" route from PM peak hour congestion on I-580. This LOS is a significant cumulative impact. RDSEIR pp. 3.6-19.

¹ The Revised Draft SEIR inadvertently omitted an "SM" mitigation measure number for the monitoring and Smart Corridor measures described in the text. For the purpose of these findings, these measures are identified as SM-TRAFFIC-A.

SM-TRAFFIC-7. The Project developers shall construct an additional through lane on northbound Fallon Road (for a total of four through lanes), construct an additional left-turn lane on westbound Dublin Boulevard (for a total of three left-turn lanes) and construct an additional through lane on southbound Fallon Road (for a total of four through lanes). In addition, the City will monitor the intersection for peak hour volumes on a periodic basis and will apply appropriate Project conditions based on the results of such monitoring. Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects. Construction of these additional lanes at the intersection would aid in moving vehicles through the intersection and will reduce the impacts to the intersection. However this mitigation cannot reduce the impacts to an acceptable level (LOS D), so this impact remains a significant cumulative impact. RDSEIR p. 3.6-19.

SM-TRAFFIC-8. In addition to the additional lane configurations in SM-TRAFFIC-7, the Project developers shall pay for studies to assess the feasibility of locating the Fallon Road/Dublin Boulevard intersection farther north to allow for a signalized Project intersection between the I-580 westbound ramps/Fallon Road intersection and the Fallon Road/Dublin Boulevard intersection (the "auxiliary intersection") with lane configurations as detailed in the Revised Draft SEIR (p. 3.6-19). If the studies show that a new Project auxiliary intersection in such location is feasible, the Project developers shall construct such intersection. Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects. Construction of this auxiliary intersection would require modifications to the planned Fallon Road and Dublin Boulevard alignments to provide the necessary 750 feet distance between intersections. Land uses and planned building locations on the west side of Fallon Road may have to be modified to accommodate this new intersection. This new intersection is anticipated to function at LOS B in the AM peak hour and LOS C in the PM peak hour. However, even with this new auxiliary intersection, the Fallon Road/Dublin Boulevard intersection would operate at LOS E (0.91) in the PM peak hour, just above the acceptable standard of LOS D (0.90). Therefore, this impact remains a significant cumulative impact.

The City will also periodically monitor peak hour volumes and apply transportation demand management measures to future development projects as appropriate. Measures include comprehensive transportation demand programs, and trip reduction programs such as ride-sharing, transit passes, staggered work hours, vanpools and other similar measures. RDSEIR pp. 3.6-19, -20; see also RFSEIR, Response 10.14.b.

Finding. Changes or alterations have been in, or incorporated into the Project. However, even with these changes, the impact will not be avoided or substantially lessened. Therefore, a Statement of Overriding Considerations must be adopted.

Rationale for Finding. As with other identified intersections along Dublin Boulevard, additional improvements to reduce the impacts at the Fallon Road/Dublin Boulevard

intersection to an acceptable LOS would require adding a fourth westbound left turn lane and would raise the same safety concerns. Monitoring the intersection to obtain updated volume forecasts for future horizon years (i.e., Year 2025) can more effectively implement transportation measures to improve levels of service and reduce single car occupancy through future development projects. These City and Project efforts will complement future phases of the I-580 Smart Corridor project, including advanced traffic signal timing techniques (e.g., adaptive signal timing) along Dublin Boulevard and Fallon Road to improve the operation of this intersection by utilizing the intersections' throughput capacity more efficiently.

Supplemental Impact TRAFFIC 9: Future Base with Project Scenario, Fallon Road. Based on the Dublin Model, ADTs due to Project traffic over future baseline traffic will substantially increase along Fallon Road and will overload planned interim lane configurations. Project traffic volumes would require that certain segments of Fallon Road be widened to accommodate expected average daily traffic volumes. This increase in ADT is considered a significant impact. Dublin Boulevard east of Fallon Road to Street D is expected to reach an ADT of 45,800 vpd and 34,100 vpd west of Fallon Road, based on the TVTM model with Project traffic. RDSEIR pp. 3.6-20, -21.

SM-TRAFFIC-9. The Project developers shall be responsible for widening Fallon Road between I-580 and Dublin Road to its ultimate eight lanes and shall be responsible for widening Fallon Road between Dublin Boulevard and Central Parkway to its ultimate six-lane width. The Project developers shall be responsible for widening Fallon Road between Central Parkway and Project Road to four lanes. The Project developers also shall be responsible for widening the Fallon Road overcrossing (between the eastbound and westbound I-580 ramps) from four lanes to six lanes. Project developers shall implement this mitigation measure when traffic impacts from individual projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects. RDSEIR p. 3.6-21

Finding. Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant effect identified in the SEIR.

Rationale for Finding. With the mitigation measures, Fallon Road would be wide enough to carry the expected traffic volumes at an acceptable level.

Supplemental Impact TRAFFIC 10: Future Base with Project Scenario, Central Parkway. Based on the Dublin Model, Central Parkway between Fallon Road and Tassajara Road is expected to carry an increase of 1,300 ADT due to Project traffic over future baseline traffic, for a total of 16,800 vpd. This increase in ADT is considered a significant impact. RDSEIR p. 3.6-21

SM-TRAFFIC-10. The Project developers shall be responsible for widening Central Parkway between Tassajara Road and Fallon Road from two lanes to four lanes. Project developers shall implement this mitigation measure when traffic impacts from individual

projects are determined to trigger the need for this improvement based on traffic impact studies of the individual projects. RDSEIR p. 3.6-21.

Finding. Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale for Finding. With the mitigation, Central Parkway would be wide enough to carry the expected traffic volumes at an acceptable level.

Supplemental Impact TRAFFIC 11: Year 2025 Cumulative Buildout with Project Scenario, Freeway Segments on I-580 and I-680 in the Project Area. Without Project traffic, mainline freeway volumes are deficient in AM and/or PM peak hours for certain segments. While addition of Project traffic would not change the levels of service, Project traffic would contribute to already deficient conditions. RDSEIR pp. 3.6-23, -24.

Mitigation Measure. No supplemental mitigation measures are identified. However, the Revised Draft SEIR refers to other adopted mitigations that will reduce cumulative freeway impacts. For example, freeway impacts were analyzed in the Eastern Dublin EIR and Mitigation Measures 3.3/3.0 and /5.0 were adopted to require coordination between the City of Dublin, Caltrans, the City of Pleasanton and Eastern Dublin developers to provide auxiliary lanes on I-580. In compliance with these mitigations, the City of Dublin adopted a Tri-Valley Transportation Development (TVTD) Fee in 1998 for future developments within the City of Dublin. TVTD Fees paid by Project developers pay for regional improvements to the freeway system. Efficiency improvements such as the I-580 Smart Corridor Program and transportation systems management programs are included in SM-TRAFFIC-6 and -7. No additional supplemental mitigations are identified for this cumulative freeway impact. RDSEIR pp. 3.6-24; 1, -22. (See also RFSEIR Responses 3.1, 3.2, 10.14.c regarding freeway impacts and RFSEIR p. 268 regarding text amendments to the significance standard.)

Finding. Mitigation measures adopted for other impacts, and through the Eastern Dublin EIR, will reduce freeway congestion but will not avoid cumulative freeway impacts. No supplemental mitigation measures are identified for supplemental freeway segment cumulative impacts, therefore the impacts remain significant and unavoidable and a Statement of Overriding Considerations must be adopted upon Project approval.

Rationale for Finding. Previously identified regional transportation mitigations are being implemented, e.g., through the TVTD fee. Previously identified improvements together with implementation of trip reduction strategies can reduce cumulative impacts through measures to decrease single occupant vehicle use and increase public transit use, but not enough to reduce I-580 and I-680 segments to acceptable levels of service.

Supplemental Impact UTS 1: Uncertain Energy Supply. California is experiencing an energy crisis that appears to be caused by a lack of sufficient electricity generation facilities. In addition, PG&E has declared bankruptcy because of billion of dollars of debt owed to generators of electricity for power purchased in California's deregulated

markets. Until PG&E emerges from bankruptcy some uncertainty concerning the provision of gas and electricity services to new and existing PG&E customers exists. RDSEIR p. 3.7-9

Supplemental Impact UTS 2: Local Electrical Distribution Constraints. Local electrical distribution constraints limit PG&E's ability to serve the Project area. PG&E has stated that it is able to adequately serve the Tri-Valley with existing facilities until approximately June 2002. PG&E proposes to increase electric service by adding substations in Dublin and North Livermore, expanding the Vineyard Substation in Pleasanton, and installing approximately 23.5 miles of 230 kilovolt (kV) transmission lines to serve the substations.

Until the Tri-Valley 202 Capacity Increase Project or a functional equivalent alternative is approved, the impact would be significant. With construction and operation of the Tri-Valley 2002 Capacity Increase Project or an equivalent alternative and project phasing as described in the supplemental mitigation below the proposed annexation and rezoning would result in a less than significant impact. RDSEIR p. 3.7-9, -10.

SM-UTS-1. Require discretionary City review prior to the installation and use of distributed generators, including emergency generators. RDSEIR p. 3.7-10

SM-UTS-2. Prior to approval of future subdivision maps or Site Development Review applications (as may be applicable) by the City of Dublin, project developers shall submit "will serve" letters from PG&E indicating that adequate electricity and natural gas services are available to serve the proposed development project. RDSEIR p. 3.7-10

Finding. Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in Supplemental Impacts UTS 1 and 2 in the Supplemental EIR.

Rationale for Finding. The mitigation measures will ensure that there is an available electrical supply for the Project prior to any development.

EXHIBIT B

FINDINGS REGARDING ALTERNATIVES

The Eastern Dublin EIR identified four alternatives: No Project, Reduced Planning Area, Reduced Land Use Intensities and No Development. The City Council found the No Project, Reduced Land Use Intensities and No Development alternatives infeasible and then approved a modification of the Reduced Planning Area alternative. The Supplemental EIR identified a new alternative, the Mitigated Traffic Alternative. It also updated the analysis of the No Project and No Development alternatives that were analyzed in the Eastern Dublin EIR. These findings are for the Mitigated Traffic Alternative and the No Project and No Development alternatives as revised by the Supplemental EIR. The alternatives analysis is presented in Chapter 4.0 of the Revised DSEIR (RDSEIR); see also Response 10.27 in the Revised FSEIR on the subject of alternatives.

The City Council hereby finds that the three alternatives identified and described in the Supplemental EIR were considered and finds them to be infeasible for the specific economic, social, or other considerations set forth below pursuant to CEQA section 21081(c).

MITIGATED TRAFFIC ALTERNATIVE. RDSEIR Pages 4-2 to 4-7.

Finding: Infeasible. This alternative reduces the number of residential units and commercial floor area by 25% but would occupy the same area and the same development "footprint" as the Project. The Mitigated Traffic alternative is found to be infeasible for the following reasons:

1. Unavoidable Impacts. Even with the reduced number of units, all of the unavoidable impacts for the Project would remain except for the unavoidable cumulative impact at the Fallon Road/Dublin Boulevard intersection. Therefore, there is no substantial benefit from adopting this alternative given the other benefits from the Project.
2. Jobs/Housing. This alternative would not improve the ratio of jobs to employed residents in the City and would provide a smaller share of the City's contribution to regional housing needs.
3. Fiscal Impacts. This alternative may have potentially significant fiscal impacts on the City budget's cost/revenue balance by reducing commercial development, which generally generates less service costs and more property tax revenues than housing.

NO PROJECT (ECAP) ALTERNATIVE. RDSEIR Pages 4-7 to 4-13.

Exhibit B to Attachment 1

Finding: Infeasible. This alternative assumes the Project as proposed would not be built on the site; instead, any development would be pursuant to the County of Alameda's General Plan and East County Area Plan (ECAP). Under this alternative, development of the portion of the Project Area subject to the East Dublin Specific Plan would be similar in terms of land uses and densities; but, with greater commercial development and the non-residential types of uses, it would generate more employment. Development of the areas within the Sphere of Influence but outside the Specific Plan area would be reduced to 6 residential units rather than the 1,286 units pursuant to the Project.

The No Project Alternative is infeasible because the City's General Plan has designated the entirety of the Project area for planned development as part of its long-range planning for the Eastern Dublin area. As to the portions of the Project area within Eastern Dublin Specific Plan, the No Project Alternative would partially fulfill the City's objectives. However, as to the portions within the Sphere of Influence but outside the Eastern Dublin Specific Plan, those objectives would not be fulfilled. In addition, the No Project Alternative would exacerbate the City's existing excess of jobs compared to employed residents. This alternative would not avoid identified significant unavoidable air quality, biology or traffic impacts, and would generate approximately 80% more traffic than the Project.

NO DEVELOPMENT ALTERNATIVE. RDSEIR Pages 4-13 to 4-15.

Finding: Infeasible. This alternative assumes no development of the Project area beyond existing conditions and assumes no annexation of the Project area. This alternative would avoid all of the Project's impacts, but is not feasible because the City's General Plan has designated the Project area for planned development as part of its long-range planning for the Eastern Dublin area; it therefore would not meet the City's objectives. In addition, the No Development Alternative fails to provide needed housing as set forth in the Housing Element of the City's General Plan and other plan documents.

ALTERNATIVES NOT SELECTED. RDSEIR Pages 4-16 to -17; RFSEIR Response 10.27.

Through the Eastern Dublin EIR as supplemented by the Eastern Dublin Properties Supplemental EIR, the City has identified and considered a range of reasonable alternative land uses for the Project site. The history of planning for Eastern Dublin reflects the City's commitment to identifying and analyzing alternatives as the current General Plan and Eastern Dublin Specific Plan land uses derive from Alternative 2 of the 1993 Eastern Dublin EIR. The current Project implements the City's approval of Alternative 2 as the established blueprint for urbanizing Eastern Dublin pursuant to the 1993 Eastern Dublin approvals. Other alternatives were identified during the current Supplemental EIR process, and are analyzed as noted in the above findings. Still other alternatives were identified during the environmental review process, but were not selected for further analysis for the reasons set forth in the Revised Draft and Final SEIR documents.

EXHIBIT C

STATEMENT OF OVERRIDING CONSIDERATIONS

1. General.

Pursuant to CEQA Guidelines section 15093, the City Council of the City of Dublin makes this Statement of Overriding Considerations for those supplemental impacts identified in the East Dublin Properties Supplemental EIR as significant and unavoidable. The City Council previously adopted a Statement of Overriding Considerations for the unmitigated adverse impacts identified in the Eastern Dublin EIR, which remains valid and applicable to the Project. This Statement of Overriding Considerations addresses the supplemental unavoidable adverse impacts identified in the Supplemental EIR.

The City Council has carefully considered each impact in reaching its decision to adopt the Project and to allow future urbanization of the Eastern Dublin Project area. Although the City Council believes that many of the unavoidable environmental effects identified in the Supplemental EIR will be substantially lessened by mitigation measures incorporated into the Project, and future development plans as well as future mitigation measures implemented with future approvals, it recognizes that the implementation of the Project carries with it unavoidable adverse environmental effects.

The City Council specifically finds that to the extent that the identified adverse or potentially adverse impacts have not been mitigated to acceptable levels, there are specific economic, social, environmental, land use, and other considerations that support approval of the Project.

2. Unavoidable Significant Adverse Impacts.

The following unavoidable significant environmental impacts are associated with the proposed Project as identified in the Supplemental EIR. The impacts cannot be fully mitigated by changes or alterations to the Project.

Supplemental Impact AQ1: Mobile Source Emissions: Reactive Organics (RO), Nitrogen Oxide (NOx) and Particulate Matter (PM-10). Even with mitigation, the Project and cumulative development would result in mobile source emissions that exceed applicable state and federal standards. No feasible mitigation measures are available to reduce this impact to a level of insignificance. The only Project alternative that could reduce this impact to a level of insignificance is the No Development Alternative, which was found to be infeasible (see Exhibit B). (RDSEIR p. 3.2-4).

Supplemental Impact BIO 3: Loss or Degradation of Botanically Sensitive Habitats. Even with mitigation, the future development of the Project would result in a cumulative loss of botanically sensitive habitat. This loss is cumulatively significant, given the loss of other botanically sensitive habitat in the area.

No feasible mitigation measures are available to reduce this cumulative impact to a level of insignificance. The

only Project alternative that could reduce this impact to a level of insignificance is the No Development Alternative, which was found to be infeasible (see Exhibit B). (RDSEIR pp. 3.3-16, -17).

Supplemental Impact Noise 1: Exposure of Existing Houses to Noise Levels In Excess of Standards Established in the General Plan. Even with mitigation, the Eastern Dublin EIR previously identified traffic noise impacts on existing residences as unavoidable and concluded there were no feasible mitigation measures that could reduce this impact to a level of insignificance. To the extent that increased traffic noise not anticipated in the Eastern Dublin EIR intensifies this impact, there are no feasible mitigation measures available to reduce this impact to a level of insignificance. The only Project alternative that could reduce this impact to a level of insignificance is the No Development Alternative, which was found to be infeasible (see Exhibit B). (RDSEIR p. 3.4-3).

Supplemental Impact Traffic 6: Year 2025 Cumulative Buildout with Project Scenario, Dougherty Road/Dublin Boulevard Intersection. Even with mitigation, the Level of Service at this intersection cannot be reduced to minimum acceptable level of service. No feasible mitigation measures are available to reduce this impact to a level of insignificance, since the configuration required to add another lane would cause major safety concerns, and physical constraints prevent the required configuration. The only Project alternative that could reduce this impact to a level of insignificance is the No Development Alternative, which was found to be infeasible (see Exhibit B). (RDSEIR pp. 3.6-16 to -18).

Supplemental Impact Traffic 7: Year 2025 Cumulative Buildout with Project Scenario, Hacienda Drive/Dublin Boulevard Intersection. Even with mitigation, the Level of Service at this intersection cannot be reduced to minimum acceptable level of service. No feasible mitigation measures are available to reduce this impact to a level of insignificance given the existing right-of-way and improvements at this intersection. The only Project alternative that could reduce this impact to a level of insignificance is the No Development Alternative, which was found to be infeasible (see Exhibit B). (RDSEIR pp. 3.6-18).

Supplemental Impact Traffic 8: Year 2025 Cumulative Buildout with Project Scenario, Fallon Road/Dublin Boulevard Intersection. Even with mitigation, the Level of Service at this intersection cannot be reduced to minimum acceptable level of service. No feasible mitigation measures are available to reduce this impact to a level of insignificance given the existing right-of-way and improvements at this intersection. The only Project alternatives that could reduce this impact to a level of insignificance are the No Development and the Mitigated Traffic Alternatives, both of which have been found to be infeasible (see Exhibit B). (RDSEIR pp. 3.6-19, 20).

Supplemental Impact Traffic 11: Year 2025 Cumulative Buildout with Project Scenario, Freeway Segments on I-580 and I-680 in the Project Area. Even with mitigation, the Level of Service on these freeway segments cannot be reduced to

minimum acceptable level of service. No feasible mitigation measures are available to reduce this impact to a level of insignificance. The only Project alternative that could reduce this impact to a level of insignificance is the No Development Alternative, which was found to be infeasible (see Exhibit B). (RDSEIR pp. 3.6-23 to -25).

3. Overriding Considerations

The City Council has balanced the benefits of the East Dublin Properties Project to the City of Dublin against the significant and potentially significant adverse impacts identified in the Supplemental EIR that have not been eliminated or mitigated to a level of insignificance. The City Council similarly weighed the benefits of the Eastern Dublin GPA/SP Project in 1993 against the unavoidable significant impacts of future development of Eastern Dublin and determined that the Eastern Dublin project should be approved. (Resolution 53-93, Section 4). To the extent that the Project would result in unavoidable significant impacts described in the previous statement of overriding considerations as well as impacts referenced above in the Supplemental EIR, the City Council hereby determines that such unavoidable impacts are outweighed by the benefits of Project as further set forth below. The City Council, acting pursuant to CEQA Guidelines Section 15093, hereby determines that unavoidable impacts of the Project are outweighed by the need for the City to implement and bring to fruition its long-range planning for the Eastern Dublin area. The City Council has considered the public record of proceedings on the proposed Project and had determined that approval of the Project would result in the implementation of the City's long-term programmatic planning goals, policies and programs for Eastern Dublin in general and the Project site in particular. The City of Dublin has carefully and systematically planned for its future, which efforts are reflected in its General Plan and other actions over the last several years. The City has planned for, sought and secured the planning and incremental annexation of those eastern lands within its sphere of influence and the Project completes the City's planning approach.

Upon consideration of the public record of proceedings on the proposed Project, the City Council hereby determines that approval and implementation of the Project would result in the following substantial public benefits.

Economic Considerations. Substantial evidence is included in the record demonstrating the economic benefits that the City would derive from implementation of the Project. Specifically, the Project will result in:

- a. Approximately 2,575 new jobs, as well as a substantial number of construction jobs.
- b. Potential commercial development that will result in increases in sales tax revenues for the City.
- c. Substantial increases in property tax revenues.

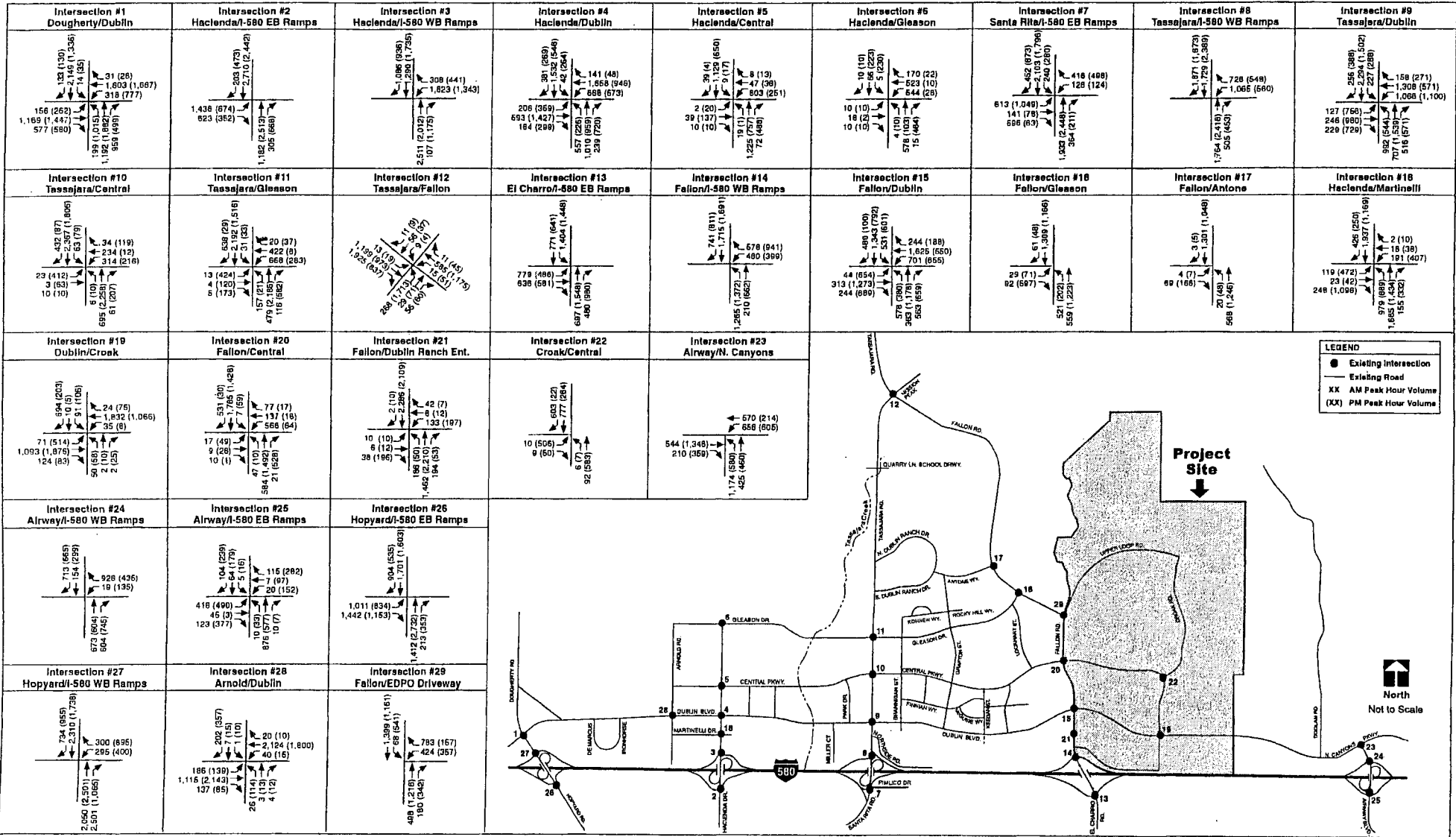
Social Considerations. Substantial evidence exists in the record demonstrating the social benefits that the City would derive from the implementation of the Project. Specifically, the Project will result in:

- a. Increases in housing opportunities in the City and in a region where housing is costly and in short supply.
- b. Increases in the amount of affordable housing in the community.
- c. Increased opportunities for the City to contribute its fair share of regional housing.
- d. Provision of diverse types and densities of housing opportunities including higher density housing, medium density and upper-end executive housing and rural residential areas.

Other Considerations. Substantial evidence exists in the record demonstrating other public benefits that the City would derive from implementation of the Project. They include:

- a. Comprehensive planning incorporating innovative and extensive environmental mitigation for the entire Project site to allow more opportunity to maintain continuity of onsite resources, including resource and open space corridors.
- b. Designating substantial areas of land for Open Space and low intensity Rural Residential uses, while also providing neighborhood and community parks for a variety of open space and recreation opportunities, for the Project, the City and the region.

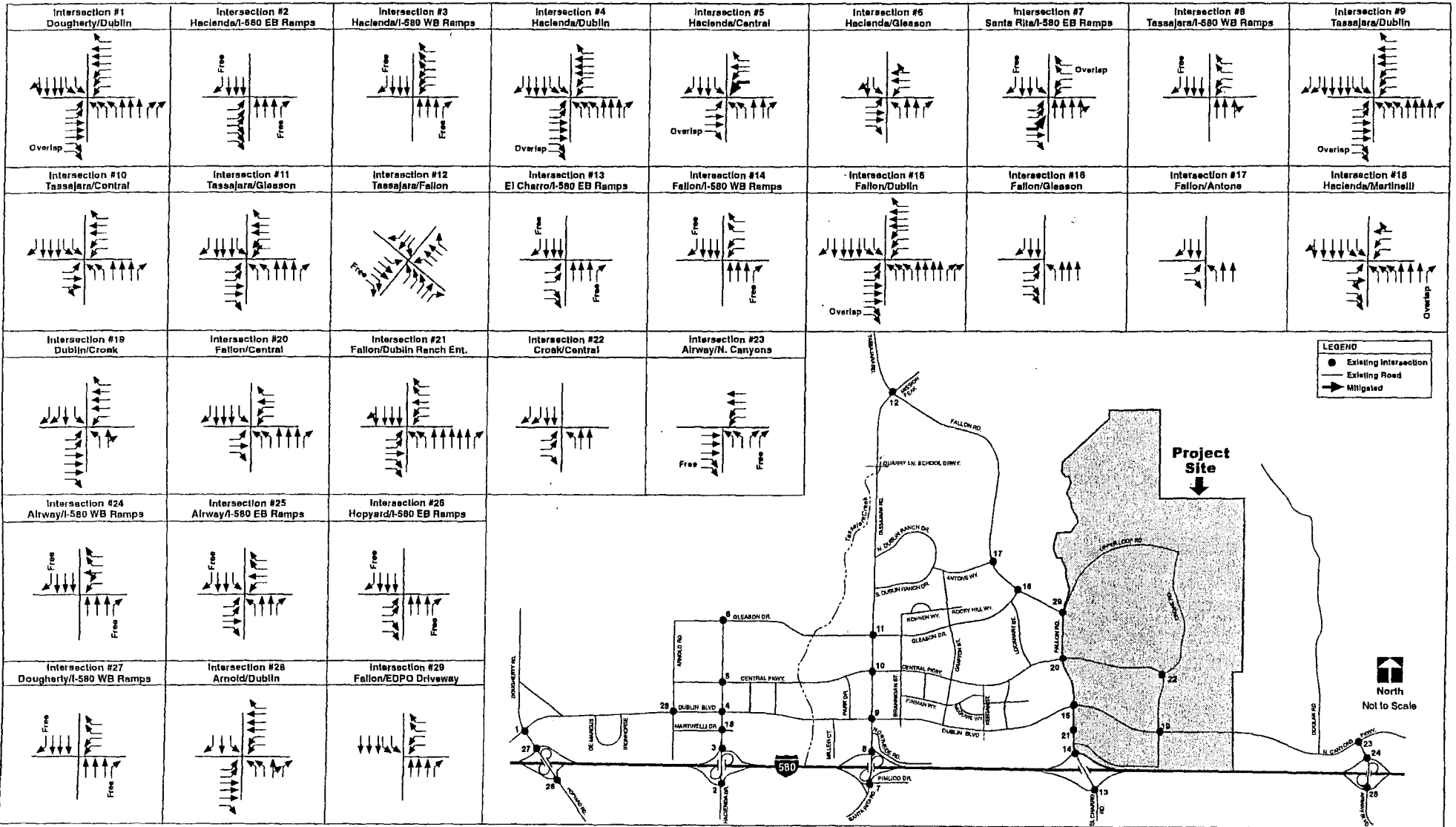
Appendix 8.6 Supplemental Traffic Information



City of Dublin
 Fallon Village
Buildout Turning Movement Volumes

Figure
6





City of Dublin
Fallon Village
Buildout/Buildout Plus Project Lane Geometry

DESCRIPTION OF INTERSECTION CAPACITY ANALYSIS CCTA SIGNALIZED METHODOLOGY

Background

The CCTA intersection capacity analysis methodology is described in detail in the Technical Procedures Manual of the CCTA, January, 1991. It is identical to the Circular 212 Planning methodology except that the lane capacity has been increased from 1500 vph to between 1650 to 1800 vph based on saturation flow measurements taken at four intersections in Contra Costa County. (See following Table 9 from the Technical Procedures Manual.)

On average, saturation flow rates for left-turn lanes were over ten percent lower than for through lanes. However, insufficient data was collected to provide statistical accuracy for the averages. Thus, saturation flow rates for through lanes are equal to those for turn lanes.

This methodology determines the critical movement for each phase of traffic. It then sums the critical volume-to-capacity ratio by phase to determine the intersection volume-to-capacity ratio. Circular 212, on the other hand, sums the critical movement volumes themselves and compares them to the total capacity of the intersection to determine, in effect, the volume-to-capacity ratio of the intersection as a whole.

Level of Service

The volume-to-capacity ratio is related to level of service (LOS). The following level of service for Signalized Intersections depicts the relationship between the volume-to-capacity ratio and level of service. An intersection operating at capacity would operate at LOS E. Level of Service F is not possible for existing conditions, but can be forecasted for future conditions when volume projections exceed existing capacities.

Input Data

The intersection capacity work sheets use a code to identify different lane configurations. This nomenclature is described on the following Description of Lane Configurations. Right turn on red adjustments are accounted for as well as unequal distribution of turn volumes in double turn lanes. For more information, see Circular 212 and the CCTA Technical Procedures Manual.

LEVEL OF SERVICE RANGES

LOS	VOLUME TO CAPACITY RATIO	MAXIMUM SUM OF CRITICAL VOLUMES		
		2-Phase	3-Phase	4+-Phase
A	≤ 0.60	1,080	1,030	990
B	0.61 - 0.70	1,260	1,200	1,160
C	0.71 - 0.80	1,440	1,380	1,320
D	0.81 - 0.90	1,620	1,550	1,490
E	0.91 - 1.00	1,800	1,720	1,650
F	-----Not Applicable-----			

Source: Contra Costa County Growth Management Program, Technical Procedures, Table 9.

PART A. TWO-WAY STOP-CONTROLLED INTERSECTIONS

I. INTRODUCTION - PART A

In this section a methodology for analyzing capacity and level of service of two-way stop-controlled (TWSC) intersections is presented.

II. METHODOLOGY - PART A

Capacity analysis at TWSC intersections depends on a clear description and understanding of the interaction of drivers on the minor or stop-controlled approach with drivers on the major street. Both gap acceptance and empirical models have been developed to describe this interaction. Procedures described in this chapter rely on a gap acceptance model developed and refined in Germany (1). The concepts from this model are described in Chapter 10. Exhibit 17-1 illustrates input to and the basic computation order of the method described in this chapter.

LEVEL-OF-SERVICE CRITERIA

Level of service (LOS) for a TWSC intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS is not defined for the intersection as a whole. LOS criteria are given in Exhibit 17-2.

Both theoretical and empirical approaches have been used to arrive at a methodology

LOS is not defined for the overall intersection

Highway Capacity Manual 2000

The LOS criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections primarily because different transportation facilities create different driver perceptions. The expectation is that a signalized intersection is designed to carry higher traffic volumes and experience greater delay than an unsignalized intersection.

LOS thresholds differ from those for signalized intersections to reflect different driver expectations

EXHIBIT 17-1. TWSC UNSIGNALIZED INTERSECTION METHODOLOGY

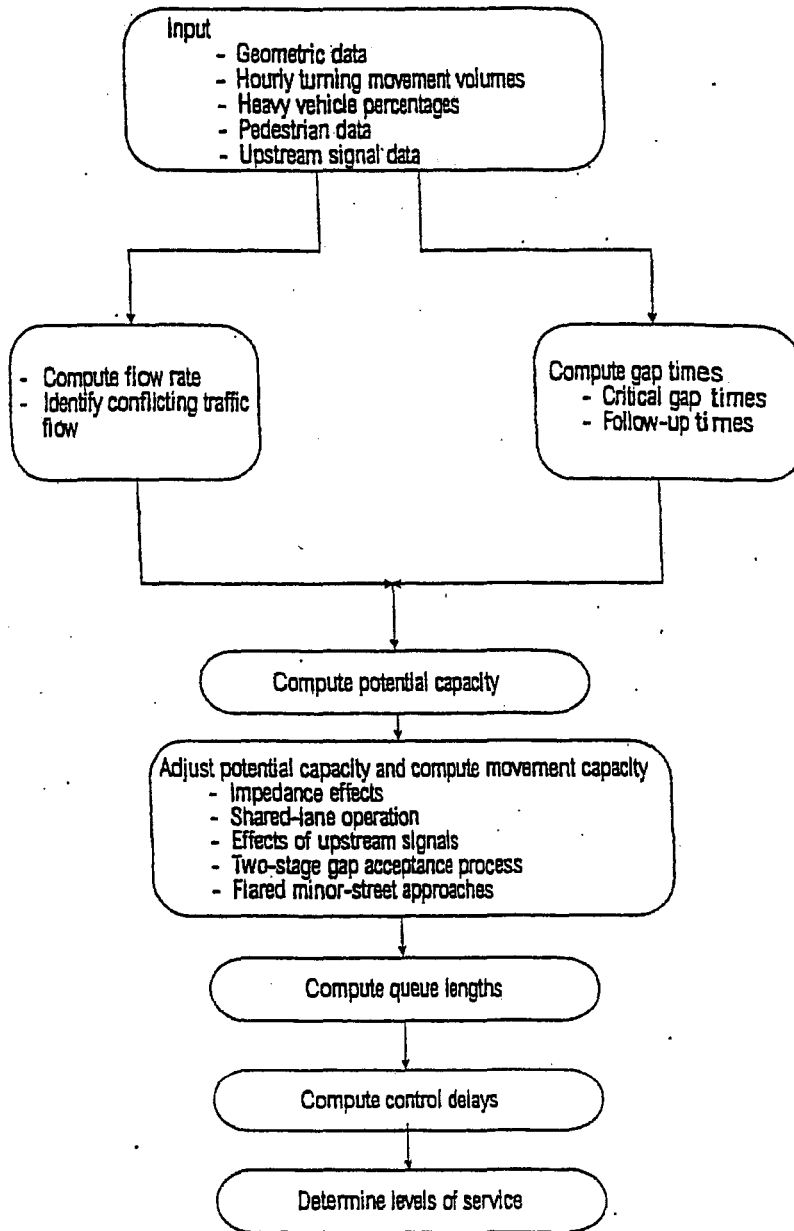


EXHIBIT 17-2. LEVEL-OF-SERVICE CRITERIA FOR TWSC INTERSECTIONS

Level of Service	Average Control Delay (s/veh)
A	0-10
B	> 10-15
C	> 15-25
D	> 25-35
E	> 35-50
F	> 50

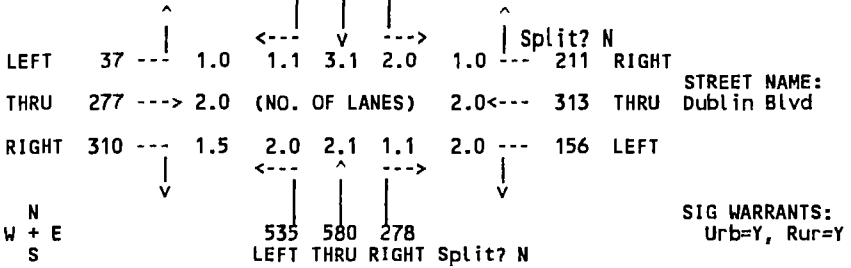
**APPENDIX B – LEVEL OF SERVICE WORKSHEETS: EXISTING
CONDITIONS**

LOS Software by TJKM Transportation Consultants

Condition: Existing-AM Peak 11/08/04

INTERSECTION 1 Dougherty Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
37 1128 389



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	278	278	1650	0.1685	
NB THRU (T)	580	580	3300	0.1758	
NB LEFT (L)	535	535	3000	0.1783	0.1783
NB T + R		858	3300	0.2600	
SB RIGHT (R)	37	37	1650	0.0224	
SB THRU (T)	1128	1128	4950	0.2279	
SB LEFT (L)	389	389	3000	0.1297	0.2354
SB T + R		1165	4950	0.2354	
EB RIGHT (R)	310	16 *	1650	0.0097	
EB THRU (T)	277	277	3300	0.0839	0.0839
EB LEFT (L)	37	37	1650	0.0224	
WB RIGHT (R)	211	0 *	1650	0.0000	
WB THRU (T)	313	313	3300	0.0948	
WB LEFT (L)	156	156	3000	0.0520	0.0520

TOTAL VOLUME-TO-CAPACITY RATIO: 0.55
INTERSECTION LEVEL OF SERVICE: A

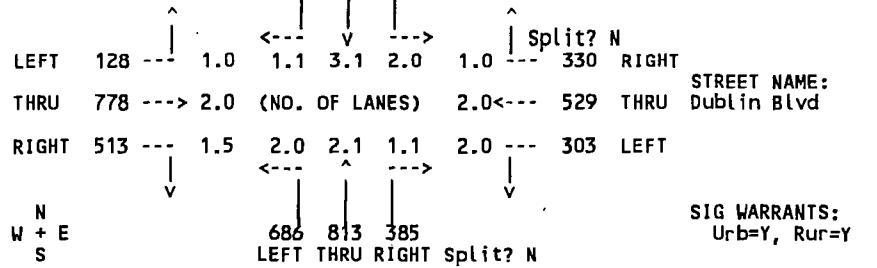
* ADJUSTED FOR RIGHT TURN ON RED
INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Existing-PM Peak 11/08/04

INTERSECTION 1 Dougherty Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
61 594 405



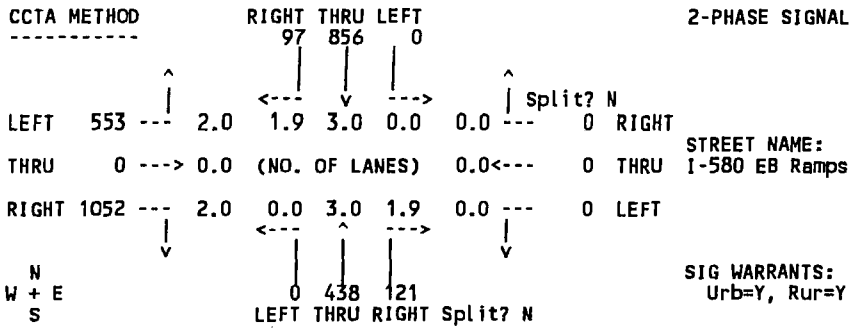
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	385	385	1650	0.2333	
NB THRU (T)	813	813	3300	0.2464	
NB LEFT (L)	686	686	3000	0.2287	
NB T + R		1198	3300	0.3630	0.3630
SB RIGHT (R)	61	61	1650	0.0370	
SB THRU (T)	594	594	4950	0.1200	
SB LEFT (L)	405	405	3000	0.1350	0.1350
SB T + R		655	4950	0.1323	
EB RIGHT (R)	513	136 *	1650	0.0824	
EB THRU (T)	778	778	3300	0.2358	0.2358
EB LEFT (L)	128	128	1650	0.0776	
WB RIGHT (R)	330	107 *	1650	0.0648	
WB THRU (T)	529	529	3300	0.1603	
WB LEFT (L)	303	303	3000	0.1010	0.1010

TOTAL VOLUME-TO-CAPACITY RATIO: 0.83
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak 11/08/04

INTERSECTION 2 Hacienda Dr/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr

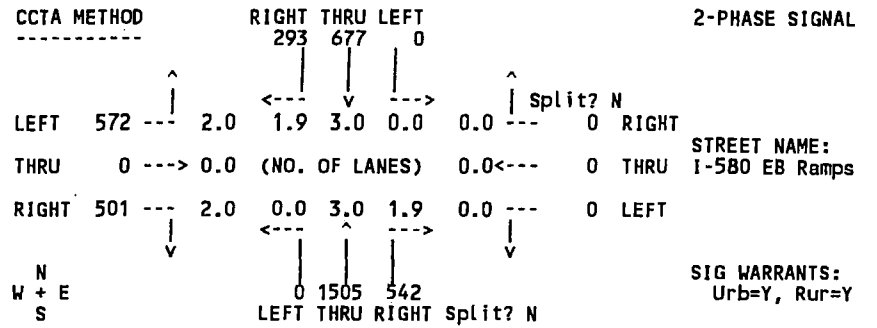
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R) THRU (T)	121 438	121 438	1800 5400	0.0672 0.0811	
SB RIGHT (R) THRU (T)	97 856	97 856	1800 5400	0.0539 0.1585	0.1585
EB RIGHT (R) LEFT (L)	1052 553	1052 553	3273 3273	0.3214 0.1690	0.3214

TOTAL VOLUME-TO-CAPACITY RATIO: 0.48
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/08/04

INTERSECTION 2 Hacienda Dr/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R) THRU (T)	542 1505	542 1505	1800 5400	0.3011 0.2787	0.2787
SB RIGHT (R) THRU (T)	293 677	293 677	1800 5400	0.1628 0.1254	
EB RIGHT (R) LEFT (L)	501 572	501 572	3273 3273	0.1531 0.1748	0.1748

TOTAL VOLUME-TO-CAPACITY RATIO: 0.45
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak 07/05/05

INTERSECTION	3 Hacienda Dr./I-580 WB Ramps	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	2-PHASE SIGNAL
	385 380 0	
LEFT	0.0 1.9 3.0 0.0	2.0 271 RIGHT
THRU	0.0 (NO. OF LANES)	0.0 0 THRU
RIGHT	0.0 0.0 2.0 1.9	2.0 598 LEFT
	0 724 307	LEFT THRU RIGHT Split? N
		SIG WARRANTS: Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	307	307	1800	0.1706	
THRU (T)	724	724	3600	0.2011	0.2011
SB RIGHT (R)	385	385	1800	0.2139	
THRU (T)	380	380	5400	0.0704	
WB RIGHT (R)	271	271	3273	0.0828	
LEFT (L)	598	598	3273	0.1827	0.1827
TOTAL VOLUME-TO-CAPACITY RATIO:				0.38	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 07/05/05

INTERSECTION	3 Hacienda Dr./I-580 WB Ramps	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	2-PHASE SIGNAL
	616 650 0	
LEFT	0.0 1.9 3.0 0.0	2.0 406 RIGHT
THRU	0.0 (NO. OF LANES)	0.0 0 THRU
RIGHT	0.0 0.0 2.0 1.9	2.0 286 LEFT
	0 1357 771	LEFT THRU RIGHT Split? N
		SIG WARRANTS: Urb=Y, Rur=Y

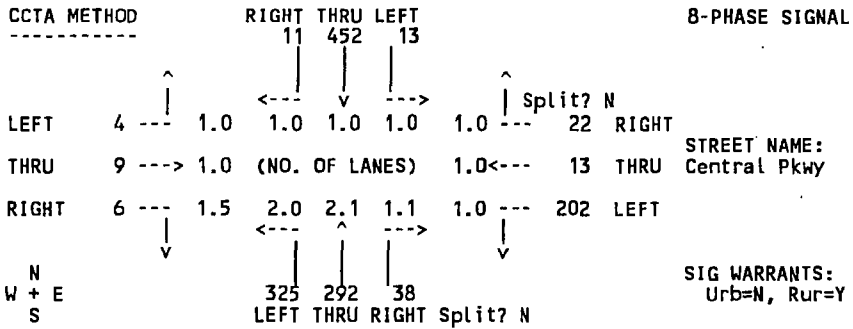
STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	771	771	1800	0.4283	
THRU (T)	1357	1357	3600	0.3769	0.3769
SB RIGHT (R)	616	616	1800	0.3422	
THRU (T)	650	650	5400	0.1204	
WB RIGHT (R)	406	406	3273	0.1240	0.1240
LEFT (L)	286	286	3273	0.0874	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.50	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak 11/08/04

INTERSECTION 5 Hacienda Dr/Central Pkwy City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr

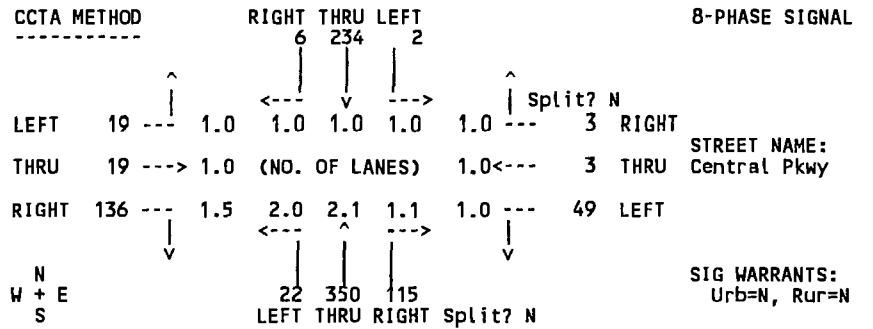
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	38	38	1650	0.0230	
THRU (T)	292	292	3300	0.0885	
LEFT (L)	325	325	3000	0.1083	0.1083
T + R	325	330	3300	0.1000	
SB RIGHT (R)	11	7 *	1650	0.0042	
THRU (T)	452	452	1650	0.2739	0.2739
LEFT (L)	13	13	1650	0.0079	
EB RIGHT (R)	6	0 *	1650	0.0000	
THRU (T)	9	9	1650	0.0055	0.0055
LEFT (L)	4	4	1650	0.0024	
WB RIGHT (R)	22	9 *	1650	0.0055	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	202	202	1650	0.1224	0.1224

TOTAL VOLUME-TO-CAPACITY RATIO: 0.51
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/08/04

INTERSECTION 5 Hacienda Dr/Central Pkwy City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr

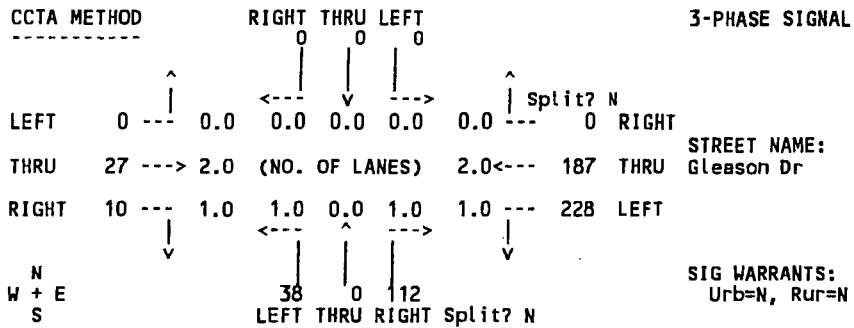
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	115	115	1650	0.0697	
THRU (T)	350	350	3300	0.1061	
LEFT (L)	22	22	3000	0.0073	0.0073
T + R	22	465	3300	0.1409	
SB RIGHT (R)	6	0 *	1650	0.0000	
THRU (T)	234	234	1650	0.1418	0.1418
LEFT (L)	2	2	1650	0.0012	
EB RIGHT (R)	136	124 *	1650	0.0752	0.0752
THRU (T)	19	19	1650	0.0115	
LEFT (L)	19	19	1650	0.0115	
WB RIGHT (R)	3	1 *	1650	0.0006	
THRU (T)	3	3	1650	0.0018	
LEFT (L)	49	49	1650	0.0297	0.0297

TOTAL VOLUME-TO-CAPACITY RATIO: 0.25
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak 11/08/04

INTERSECTION 6 Hacienda Dr/Gleason Dr City of Dublin
 Count Date Time Peak Hour



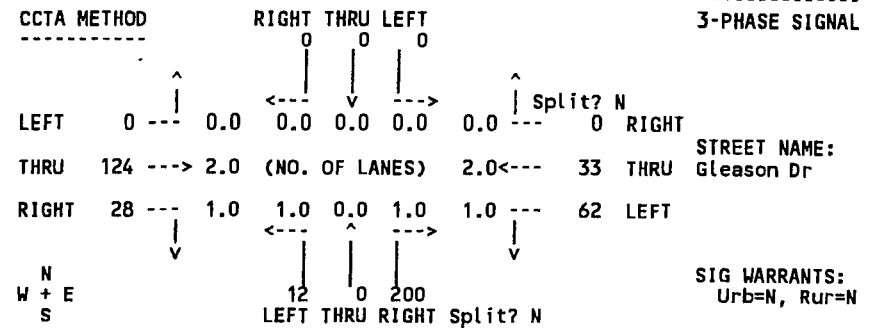
STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	112	0 *	1720	0.0000	
LEFT (L)	38	38	1720	0.0221	0.0221
EB RIGHT (R)	10	0 *	1720	0.0000	
THRU (T)	27	27	3440	0.0078	0.0078
WB THRU (T)	187	187	3440	0.0544	
LEFT (L)	228	228	1720	0.1326	0.1326
TOTAL VOLUME-TO-CAPACITY RATIO:				0.16	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/08/04

INTERSECTION 6 Hacienda Dr/Gleason Dr City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr

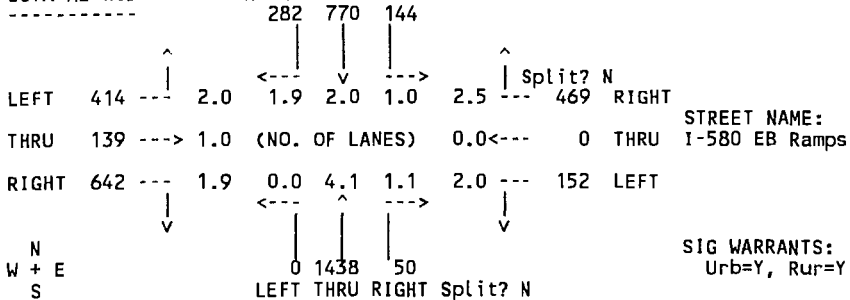
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	200	138 *	1720	0.0802	0.0802
LEFT (L)	12	12	1720	0.0070	
EB RIGHT (R)	28	16 *	1720	0.0093	
THRU (T)	124	124	3440	0.0360	0.0360
WB THRU (T)	33	33	3440	0.0096	
LEFT (L)	62	62	1720	0.0360	0.0360
TOTAL VOLUME-TO-CAPACITY RATIO:				0.15	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL



STREET NAME: Santa Rita Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	50	50	1650	0.0303	
THRU (T)	1438	1438	6600	0.2179	
T + R		1488	6600	0.2255	0.2255
SB RIGHT (R)	282	282	1650	0.1709	
THRU (T)	770	770	3300	0.2333	
LEFT (L)	144	144	1650	0.0873	0.0873
EB RIGHT (R)	642	642	1650	0.3891	
THRU (T)	139	139	1650	0.0842	
LEFT (L)	414	414	3000	0.1380	0.1380
WB RIGHT (R)	469	207 *	3000	0.0690	0.0690
LEFT (L)	152	152	3000	0.0507	

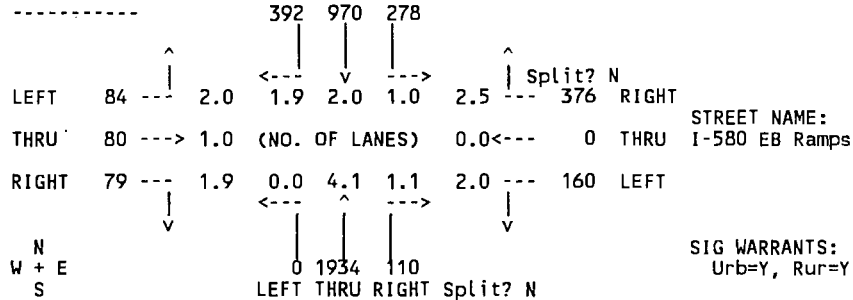
TOTAL VOLUME-TO-CAPACITY RATIO: 0.52
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL



STREET NAME: Santa Rita Rd

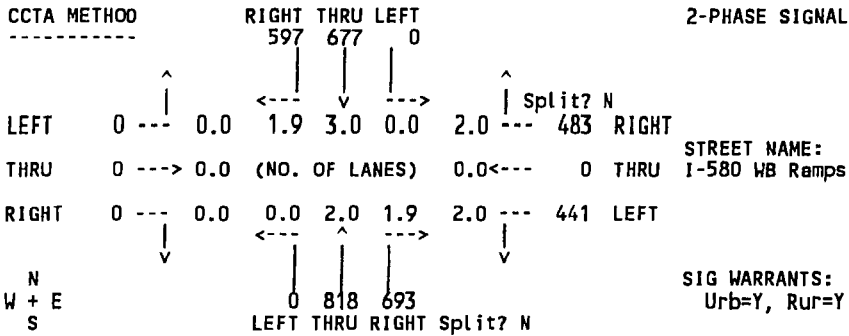
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	110	110	1650	0.0667	
THRU (T)	1934	1934	6600	0.2930	
T + R		2044	6600	0.3097	0.3097
SB RIGHT (R)	392	392	1650	0.2376	
THRU (T)	970	970	3300	0.2939	
LEFT (L)	278	278	1650	0.1685	0.1685
EB RIGHT (R)	79	79	1650	0.0479	
THRU (T)	80	80	1650	0.0485	0.0485
LEFT (L)	84	84	3000	0.0280	
WB RIGHT (R)	376	0 *	3000	0.0000	
LEFT (L)	160	160	3000	0.0533	0.0533

TOTAL VOLUME-TO-CAPACITY RATIO: 0.58
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED

Condition: Existing-AM Peak 11/08/04

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



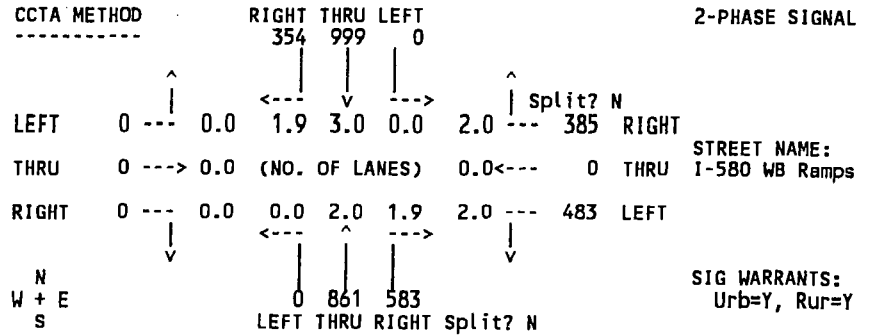
STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	693	693	1800	0.3850	
THRU (T)	818	818	3600	0.2272	0.2272
SB RIGHT (R)	597	597	1800	0.3317	
THRU (T)	677	677	5400	0.1254	
WB RIGHT (R)	483	483	3273	0.1476	0.1476
LEFT (L)	441	441	3273	0.1347	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.37	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/08/04

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd

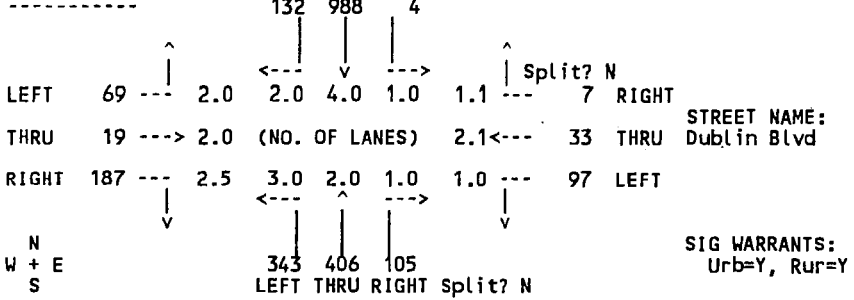
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	583	583	1800	0.3239	
THRU (T)	861	861	3600	0.2392	0.2392
SB RIGHT (R)	354	354	1800	0.1967	
THRU (T)	999	999	5400	0.1850	
WB RIGHT (R)	385	385	3273	0.1176	
LEFT (L)	483	483	3273	0.1476	0.1476
TOTAL VOLUME-TO-CAPACITY RATIO:				0.39	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak 11/08/04

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	105	8 *	1650	0.0048	
THRU (T)	406	406	3300	0.1230	
LEFT (L)	343	343	4304	0.0797	0.0797
SB RIGHT (R)	132	94 *	3000	0.0313	
THRU (T)	988	988	6600	0.1497	0.1497
LEFT (L)	4	4	1650	0.0024	
EB RIGHT (R)	187	0 *	3000	0.0000	
THRU (T)	19	19	3300	0.0058	0.0058
LEFT (L)	69	69	3000	0.0230	
WB RIGHT (R)	7	7	1650	0.0042	
THRU (T)	33	33	3300	0.0100	
LEFT (L)	97	97	1650	0.0588	0.0588
T + R		40	3300	0.0121	

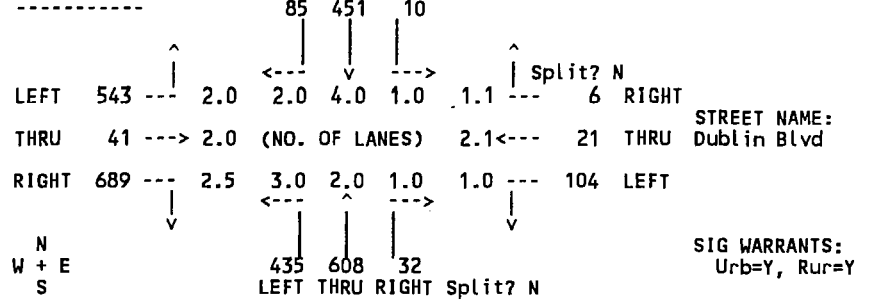
TOTAL VOLUME-TO-CAPACITY RATIO: 0.29
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/08/04

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	32	0 *	1650	0.0000	
THRU (T)	608	608	3300	0.1842	0.1842
LEFT (L)	435	435	4304	0.1011	
SB RIGHT (R)	85	0 *	3000	0.0000	
THRU (T)	451	451	6600	0.0683	
LEFT (L)	10	10	1650	0.0061	0.0061
EB RIGHT (R)	689	386 *	3000	0.1287	0.1287
THRU (T)	41	41	3300	0.0124	
LEFT (L)	543	543	3000	0.1810	
WB RIGHT (R)	6	6	1650	0.0036	
THRU (T)	21	21	3300	0.0064	
LEFT (L)	104	104	1650	0.0630	0.0630
T + R		27	3300	0.0082	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.38
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak 07/05/05

INTERSECTION 10 Tassajara Rd/Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD 8-PHASE SIGNAL

RIGHT 6 THRU 976 LEFT 10
 3 --- 1.0 1.0 2.0 1.0 1.1 --- 8 RIGHT
 THRU 0 ---> 1.0 (NO. OF LANES) 1.1<--- 0 THRU
 RIGHT 3 --- 1.0 1.0 2.0 1.0 2.0 --- 11 LEFT
 N
 W + E
 S

SIG WARRANTS:
 Urb=N, Rur=N

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	14	8 *	1650	0.0048	
THRU (T)	421	421	3300	0.1276	
LEFT (L)	5	5	1650	0.0030	0.0030
SB RIGHT (R)	6	3 *	1650	0.0018	
THRU (T)	976	976	3300	0.2958	0.2958
LEFT (L)	10	10	1650	0.0061	
EB RIGHT (R)	3	0 *	1650	0.0000	
THRU (T)	0	0	1650	0.0000	
LEFT (L)	3	3	1650	0.0018	0.0018
WB RIGHT (R)	8	8	1650	0.0048	0.0048
THRU (T)	0	0	1650	0.0000	
LEFT (L)	11	11	3000	0.0037	
T + R		8	1650	0.0048	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.31
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 07/05/05

INTERSECTION 10 Tassajara Rd/Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD 8-PHASE SIGNAL

RIGHT 0 THRU 522 LEFT 4
 2 --- 1.0 1.0 2.0 1.0 1.1 --- 14 RIGHT
 THRU 1 ---> 1.0 (NO. OF LANES) 1.1<--- 0 THRU
 RIGHT 5 --- 1.0 1.0 2.0 1.0 2.0 --- 10 LEFT
 N
 W + E
 S

SIG WARRANTS:
 Urb=N, Rur=N

STREET NAME: Tassajara Rd

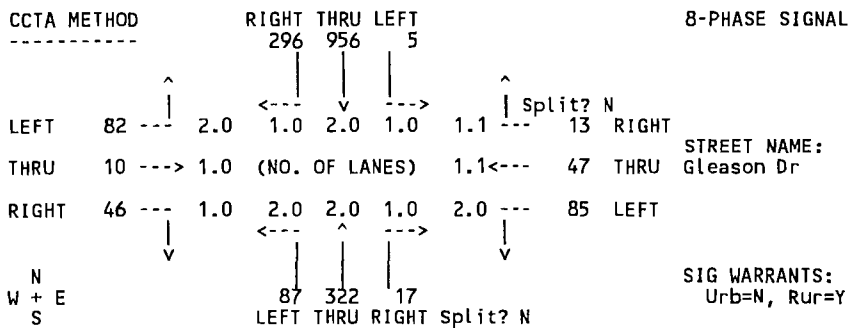
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	6	1 *	1650	0.0006	
THRU (T)	1144	1144	3300	0.3467	0.3467
LEFT (L)	58	58	1650	0.0352	
SB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	522	522	3300	0.1582	
LEFT (L)	4	4	1650	0.0024	0.0024
EB RIGHT (R)	5	0 *	1650	0.0000	
THRU (T)	1	1	1650	0.0006	
LEFT (L)	2	2	1650	0.0012	0.0012
WB RIGHT (R)	14	14	1650	0.0085	0.0085
THRU (T)	0	0	1650	0.0000	
LEFT (L)	10	10	3000	0.0033	
T + R		14	1650	0.0085	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.36
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-A.M. Peak 07/15/05

INTERSECTION 11 Tassajara Rd/Gleason Dr City of Dublin
 Count Date Peak Hour



STREET NAME: Tassajara Rd

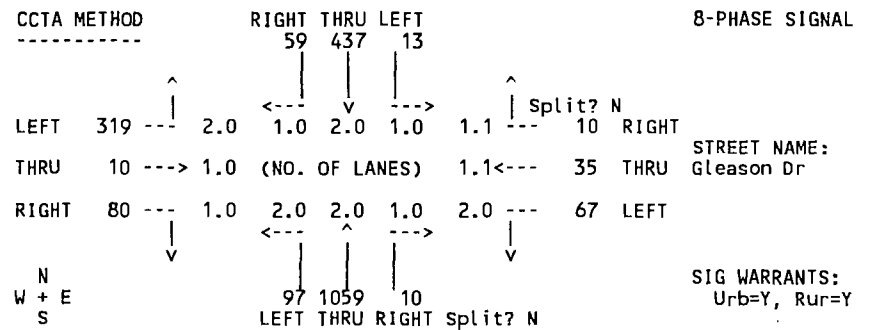
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	17	0 *	1650	0.0000	
NB THRU (T)	322	322	3300	0.0976	
NB LEFT (L)	87	87	3000	0.0290	0.0290
SB RIGHT (R)	296	251 *	1650	0.1521	
SB THRU (T)	956	956	3300	0.2897	0.2897
SB LEFT (L)	5	5	1650	0.0030	
EB RIGHT (R)	46	0 *	1650	0.0000	
EB THRU (T)	10	10	1650	0.0061	
EB LEFT (L)	82	82	3000	0.0273	0.0273
WB RIGHT (R)	13	13	1650	0.0079	
WB THRU (T)	47	47	1650	0.0285	
WB LEFT (L)	85	85	3000	0.0283	
T + R		60	1650	0.0364	0.0364

TOTAL VOLUME-TO-CAPACITY RATIO: 0.38
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-P.M. Peak 07/15/05

INTERSECTION 11 Tassajara Rd/Gleason Dr City of Dublin
 Count Date Peak Hour



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	10	0 *	1650	0.0000	
NB THRU (T)	1059	1059	3300	0.3209	0.3209
NB LEFT (L)	97	97	3000	0.0323	
SB RIGHT (R)	59	0 *	1650	0.0000	
SB THRU (T)	437	437	3300	0.1324	
SB LEFT (L)	13	13	1650	0.0079	0.0079
EB RIGHT (R)	80	27 *	1650	0.0164	
EB THRU (T)	10	10	1650	0.0061	
EB LEFT (L)	319	319	3000	0.1063	0.1063
WB RIGHT (R)	10	10	1650	0.0061	
WB THRU (T)	35	35	1650	0.0212	
WB LEFT (L)	67	67	3000	0.0223	
T + R		45	1650	0.0273	0.0273

TOTAL VOLUME-TO-CAPACITY RATIO: 0.46
 INTERSECTION LEVEL OF SERVICE: A

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	PB	Intersection	El Charro Rd/I-580 EB Ramps
Agency/Co.	TJKM	Jurisdiction	City of Dublin
Date Performed	4/23/2003	Analysis Year	Existing
Analysis Time Period	AM Peak	Project ID	157-158

East/West Street: I-580 EB Ramps	North/South Street: El Charro
Intersection Orientation: North-South	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street Movement	Northbound			Southbound		
	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	88	43	30	33	0
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	97	47	33	36	0
Percent Heavy Vehicles	0	-	-	0	-	-
Median Type	Undivided					
RT Channelized			1			0
Lanes	0	1	1	0	1	0
Configuration		T	R	LT		
Upstream Signal		0			0	

Minor Street Movement	Westbound			Eastbound		
	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	77	5	99
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	0	0	85	5	110
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			1
Lanes	0	0	0	0	1	1
Configuration				LT		R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
	1	4	7	8	9	10	11	12
Movement								
Lane Configuration		LT				LT		R
v (vph)		33				90		110
C (m) (vph)		1509				750		1042
v/c		0.02				0.12		0.11
95% queue length		0.07				0.41		0.35
Control Delay		7.4				10.5		8.9
LOS		A				B		A
Approach Delay	-	-					9.6	
Approach LOS	-	-					A	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	PB	Intersection	El Charro Rd/I-580 EB Ramps
Agency/Co.	TJKM	Jurisdiction	City of Dublin
Date Performed	4/23/2003	Analysis Year	Existing
Analysis Time Period	PM Peak	Project ID	157-158

East/West Street: I-580 EB Ramps	North/South Street: El Charro
Intersection Orientation: North-South	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	48	67	436	39	0
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	53	74	484	43	0
Percent Heavy Vehicles	0	-	-	0	-	-
Median Type	Undivided					
RT Channelized			1			0
Lanes	0	1	1	0	1	0
Configuration		T	R	LT		
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	21	139	17
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	0	0	23	154	18
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			1
Lanes	0	0	0	0	1	1
Configuration				LT		R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT				LT		R
v (vph)		484				177		18
C (m) (vph)		1566				155		1033
v/c		0.31				1.14		0.02
95% queue length		1.33				9.64		0.05
Control Delay		8.3				174.0		8.5
LOS		A				F		A
Approach Delay	-	-				158.7		
Approach LOS	-	-				F		

AM

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	PB	Intersection	Fallon Rd/I-580 WB Ramps
Agency/Co.	TJKM	Jurisdiction	City of Dublin
Date Performed	4/23/2003	Analysis Year	Existing
Analysis Time Period	AM Peak	Project ID	157-158

East/West Street: I-580 WB Ramps	North/South Street: Fallon Rd
Intersection Orientation: North-South	Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
	1	2	3	4	5	6
Movement	L	T	R	L	T	R
Volume	96	107	0	0	24	102
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	106	118	0	0	26	113
Percent Heavy Vehicles	0	-	-	0	-	-
Median Type	Undivided					
RT Channelized			1			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
	7	8	9	10	11	12
Movement	L	T	R	L	T	R
Volume	40	19	71	0	0	0
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	44	21	78	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			1			1
Lanes	0	1	1	0	0	0
Configuration	LT		R			

Delay, Queue Length, and Level of Service

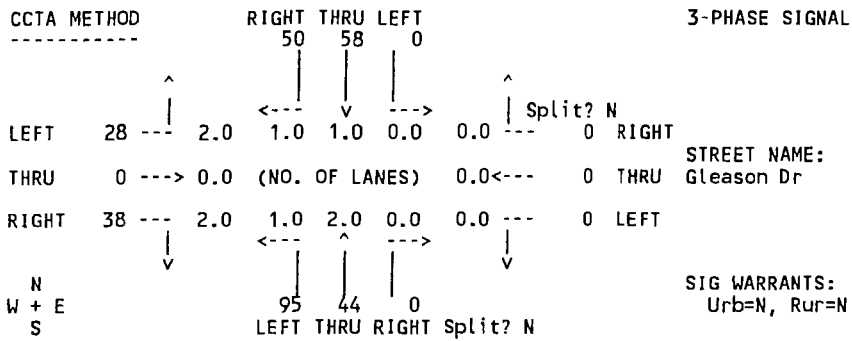
Approach	NB	SB	Westbound			Eastbound		
	1	4	7	8	9	10	11	12
Movement	LT		LT		R			
v (vph)	106		65		78			
C (m) (vph)	1457		519		939			
v/c	0.07		0.13		0.08			
95% queue length	0.24		0.43		0.27			
Control Delay	7.7		12.9		9.2			
LOS	A		B		A			
Approach Delay	-	-	10.9					
Approach LOS	-	-	B					

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information				
Analyst	PB		Intersection	Fallon Rd/I-580 WB Ramps			
Agency/Co.	TJKM		Jurisdiction	City of Dublin			
Date Performed	4/23/2003		Analysis Year	Existing			
Analysis Time Period	PM Peak		Project ID	157-158			
East/West Street: I-580 WB Ramps			North/South Street: Fallon Rd				
Intersection Orientation: North-South			Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	66	21	0	0	368	72	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	73	23	0	0	408	80	
Percent Heavy Vehicles	0	-	-	0	-	-	
Median Type	Undivided						
RT Channelized			1			0	
Lanes	0	1	0	0	1	0	
Configuration	LT					TR	
Upstream Signal		0			0		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	28	3	30	0	0	0	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	31	3	33	0	0	0	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			1			1	
Lanes	0	1	1	0	0	0	
Configuration	LT		R				
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LT		LT		R		
v (vph)	73		34		33		
C (m) (vph)	1086		419		1060		
v/c	0.07		0.08		0.03		
95% queue length	0.22		0.26		0.10		
Control Delay	8.6		14.3		8.5		
LOS	A		B		A		
Approach Delay	-	-	11.5				
Approach LOS	-	-	B				

Condition: Existing-AM Peak 07/06/05

INTERSECTION 16 Fallon Rd/Gleason Dr City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=N, Rur=N

STREET NAME: Fallon Rd

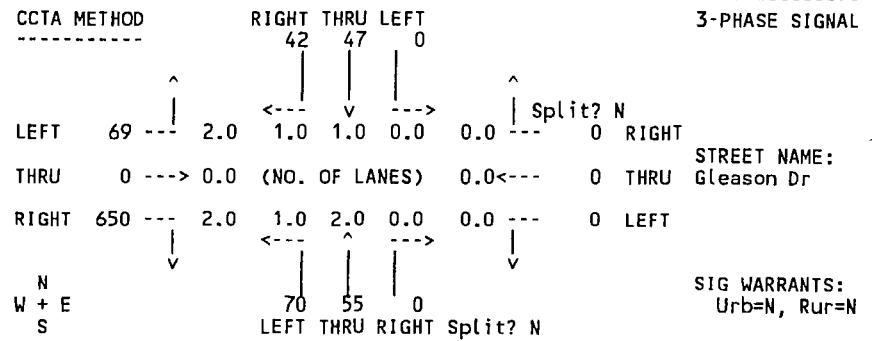
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	44	44	3440	0.0128	
LEFT (L)	95	95	1720	0.0552	0.0552
SB RIGHT (R)	50	35 *	1720	0.0203	
THRU (T)	58	58	1720	0.0337	0.0337
EB RIGHT (R)	38	0 *	3127	0.0000	
LEFT (L)	28	28	3127	0.0090	0.0090

TOTAL VOLUME-TO-CAPACITY RATIO: 0.10
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 07/06/05

INTERSECTION 16 Fallon Rd/Gleason Dr City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=N, Rur=N

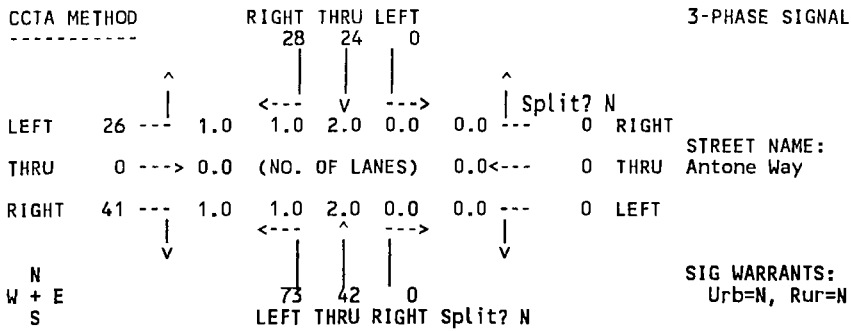
STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	55	55	3440	0.0160	
LEFT (L)	70	70	1720	0.0407	0.0407
SB RIGHT (R)	42	4 *	1720	0.0023	
THRU (T)	47	47	1720	0.0273	0.0273
EB RIGHT (R)	650	580 *	3127	0.1855	0.1855
LEFT (L)	69	69	3127	0.0221	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.25
 INTERSECTION LEVEL OF SERVICE: A

Condition: Existing-AM Peak 07/05/05

INTERSECTION 17 Fallon Rd/Antone Way City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd

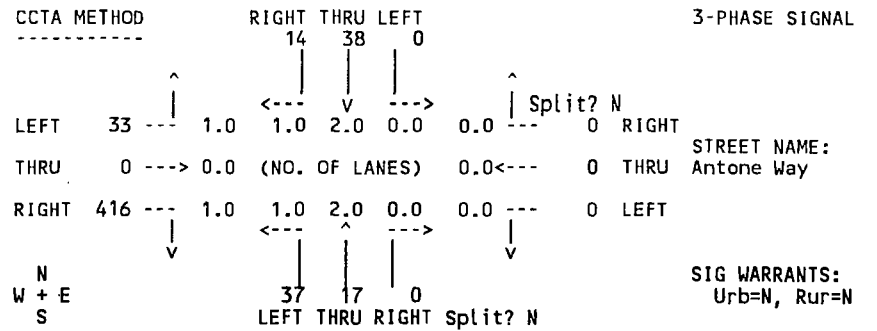
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	42	42	3440	0.0122	
NB LEFT (L)	73	73	1720	0.0424	0.0424
SB RIGHT (R)	28	2 *	1720	0.0012	
SB THRU (T)	24	24	3440	0.0070	0.0070
EB RIGHT (R)	41	0 *	1720	0.0000	
EB LEFT (L)	26	26	1720	0.0151	0.0151

TOTAL VOLUME-TO-CAPACITY RATIO: 0.06
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 07/05/05

INTERSECTION 17 Fallon Rd/Antone Way City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	17	17	3440	0.0049	
NB LEFT (L)	37	37	1720	0.0215	0.0215
SB RIGHT (R)	14	0 *	1720	0.0000	
SB THRU (T)	38	38	3440	0.0110	0.0110
EB RIGHT (R)	416	379 *	1720	0.2203	0.2203
EB LEFT (L)	33	33	1720	0.0192	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.25
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT

Condition: Existing-AM Peak 11/08/04

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL
 0 616 30

LEFT 0 0.0 0.0 4.0 2.0 1.0 Split? N 25 RIGHT
 THRU 0 0.0 (NO. OF LANES) 0.0 0 THRU STREET NAME: Hacienda Xing
 RIGHT 0 0.0 0.0 3.0 1.5 2.0 151 LEFT

N
 W + E
 S

LEFT THRU RIGHT Split? N
 0 825 148

SIG WARRANTS:
 Urb=B, Rur=Y

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	148	65 *	1720	0.0378	
THRU (T)	825	825	5160	0.1599	0.1599
SB THRU (T)	616	616	6880	0.0895	
LEFT (L)	30	30	3127	0.0096	0.0096
WB RIGHT (R)	25	8 *	1720	0.0047	
LEFT (L)	151	151	3127	0.0483	0.0483
TOTAL VOLUME-TO-CAPACITY RATIO:				0.22	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/08/04

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL
 0 884 122

LEFT 0 0.0 0.0 4.0 2.0 1.0 Split? N 65 RIGHT
 THRU 0 0.0 (NO. OF LANES) 0.0 0 THRU STREET NAME: Hacienda Xing
 RIGHT 0 0.0 0.0 3.0 1.5 2.0 394 LEFT

N
 W + E
 S

LEFT THRU RIGHT Split? N
 0 1236 513

SIG WARRANTS:
 Urb=Y, Rur=Y

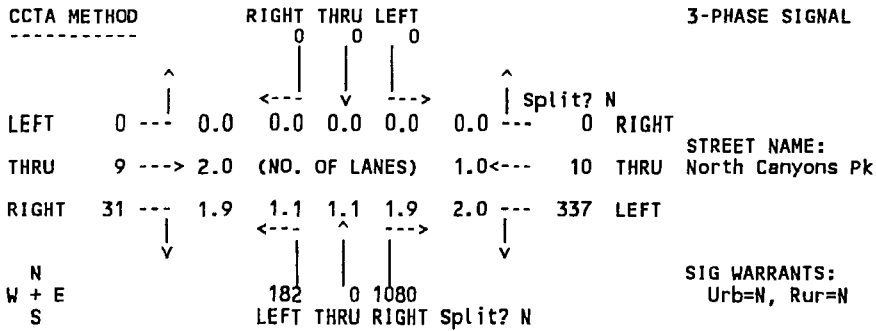
STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	513	296 *	1720	0.1721	
THRU (T)	1236	1236	5160	0.2395	0.2395
SB THRU (T)	884	884	6880	0.1285	
LEFT (L)	122	122	3127	0.0390	0.0390
WB RIGHT (R)	65	0 *	1720	0.0000	
LEFT (L)	394	394	3127	0.1260	0.1260
TOTAL VOLUME-TO-CAPACITY RATIO:				0.40	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak 11/08/04

INTERSECTION 24 Airway Blvd/North Canyons Pk City of Dublin
 Count Date Time Peak Hour



STREET NAME: Airway Blvd

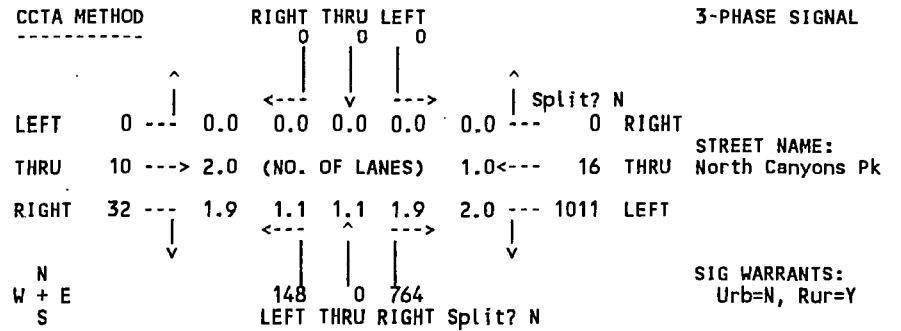
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1080	1080	1720	0.6279	
THRU (T)	0	0	1720	0.0000	
LEFT (L)	182	182	1720	0.1058	0.1058
T + L		182	1720	0.1058	
EB RIGHT (R)	31	31	1720	0.0180	
THRU (T)	9	9	3440	0.0026	0.0026
WB THRU (T)	10	10	1720	0.0058	
LEFT (L)	337	337	3127	0.1078	0.1078

TOTAL VOLUME-TO-CAPACITY RATIO: 0.22
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/08/04

INTERSECTION 24 Airway Blvd/North Canyons Pk City of Dublin
 Count Date Time Peak Hour



STREET NAME: Airway Blvd

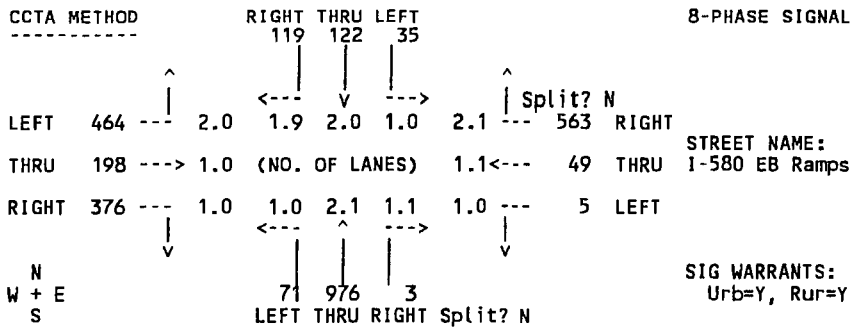
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	764	764	1720	0.4442	
THRU (T)	0	0	1720	0.0000	
LEFT (L)	148	148	1720	0.0860	0.0860
T + L		148	1720	0.0860	
EB RIGHT (R)	32	32	1720	0.0186	
THRU (T)	10	10	3440	0.0029	0.0029
WB THRU (T)	16	16	1720	0.0093	
LEFT (L)	1011	1011	3127	0.3233	0.3233

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT

Condition: Existing-AM Peak 11/11/04

INTERSECTION 26 Airway Blvd/I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Airway Blvd

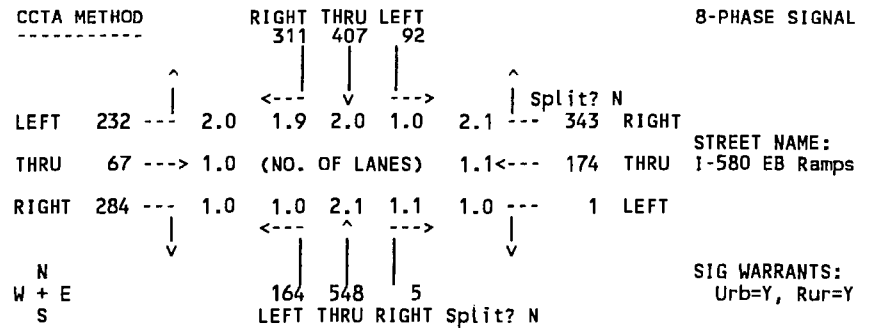
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	3	3	1650	0.0018	
THRU (T)	976	976	3300	0.2958	
LEFT (L)	71	71	1650	0.0430	
T + R		979	3300	0.2967	0.2967
SB RIGHT (R)	119	119	1650	0.0721	
THRU (T)	122	122	3300	0.0370	
LEFT (L)	35	35	1650	0.0212	0.0212
EB RIGHT (R)	376	305 *	1650	0.1848	
THRU (T)	198	198	1650	0.1200	
LEFT (L)	464	464	3000	0.1547	0.1547
WB RIGHT (R)	563	528 *	3000	0.1760	
THRU (T)	49	49	1650	0.0297	
LEFT (L)	5	5	1650	0.0030	
T + R		577	3000	0.1923	0.1923

TOTAL VOLUME-TO-CAPACITY RATIO: 0.66
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/11/04

INTERSECTION 26 Airway Blvd/I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



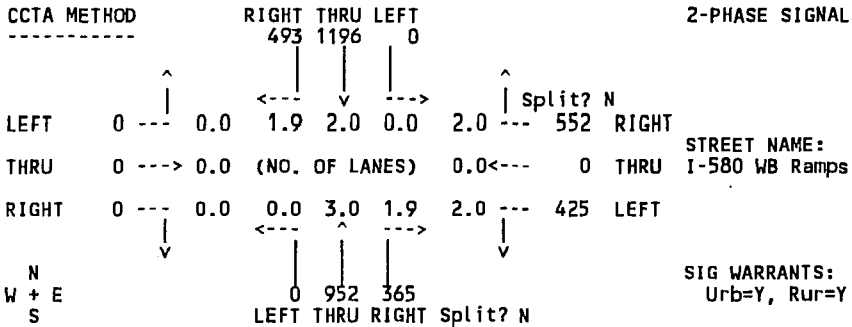
STREET NAME: Airway Blvd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	5	5	1650	0.0030	
THRU (T)	548	548	3300	0.1661	
LEFT (L)	164	164	1650	0.0994	
T + R		553	3300	0.1676	0.1676
SB RIGHT (R)	311	311	1650	0.1885	
THRU (T)	407	407	3300	0.1233	
LEFT (L)	92	92	1650	0.0558	0.0558
EB RIGHT (R)	284	120 *	1650	0.0727	
THRU (T)	67	67	1650	0.0406	
LEFT (L)	232	232	3000	0.0773	0.0773
WB RIGHT (R)	343	251 *	3000	0.0837	
THRU (T)	174	174	1650	0.1055	
LEFT (L)	1	1	1650	0.0006	
T + R		425	3000	0.1417	0.1417

TOTAL VOLUME-TO-CAPACITY RATIO: 0.44
INTERSECTION LEVEL OF SERVICE: A

Condition: Existing-AM Peak 11/08/04

INTERSECTION 28 Dougherty Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



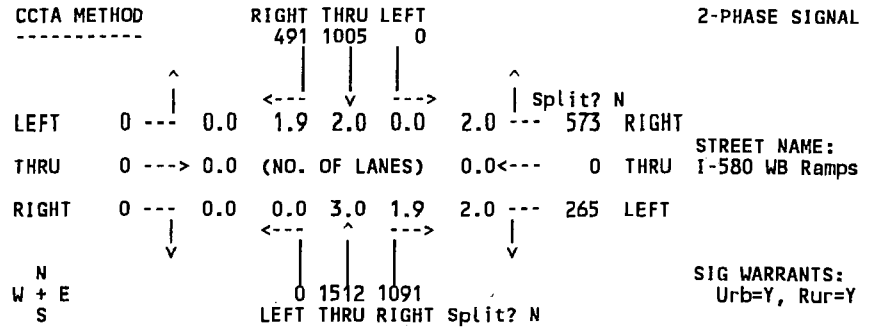
STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	365	365	1800	0.2028	
THRU (T)	952	952	5400	0.1763	
SB RIGHT (R)	493	493	1800	0.2739	
THRU (T)	1196	1196	3600	0.3322	0.3322
WB RIGHT (R)	552	552	3273	0.1687	0.1687
LEFT (L)	425	425	3273	0.1299	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.50	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak 11/08/04

INTERSECTION 28 Dougherty Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1091	1091	1800	0.6061	
THRU (T)	1512	1512	5400	0.2800	0.2800
SB RIGHT (R)	491	491	1800	0.2728	
THRU (T)	1005	1005	3600	0.2792	
WB RIGHT (R)	573	573	3273	0.1751	0.1751
LEFT (L)	265	265	3273	0.0810	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.46	
INTERSECTION LEVEL OF SERVICE:				A	

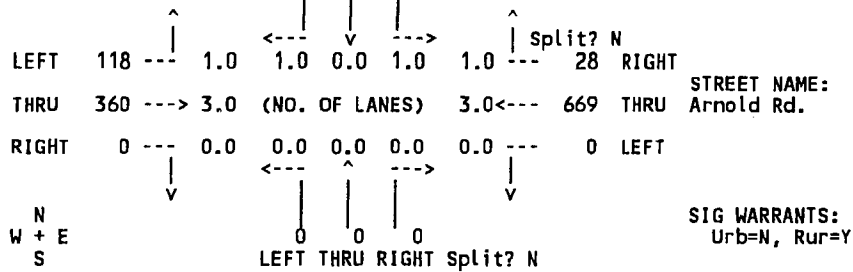
* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.PMV,CAP=...LOSCAP.TAB

Condition: Existing-AM Peak

11/08/04

INTERSECTION 29 Dublin Blvd/Arnold Rd. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL
 ----- 183 0 13



STREET NAME: Dublin Blvd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
SB RIGHT (R)	183	65 *	1720	0.0378	0.0378
LEFT (L)	13	13	1720	0.0076	
EB THRU (T)	360	360	5160	0.0698	
LEFT (L)	118	118	1720	0.0686	0.0686
WB RIGHT (R)	28	15 *	1720	0.0087	
THRU (T)	669	669	5160	0.1297	0.1297
TOTAL VOLUME-TO-CAPACITY RATIO:					0.24
INTERSECTION LEVEL OF SERVICE:					A

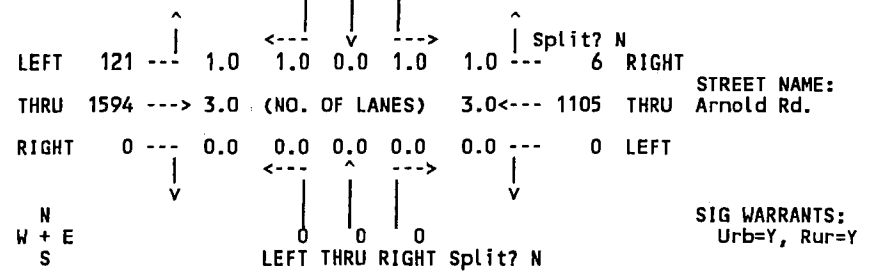
* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT,VOL=EXISTING.AMV,CAP=...LOSCAP.TAB

Condition: Existing-PM Peak

11/08/04

INTERSECTION 29 Dublin Blvd/Arnold Rd. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL
 ----- 271 0 20

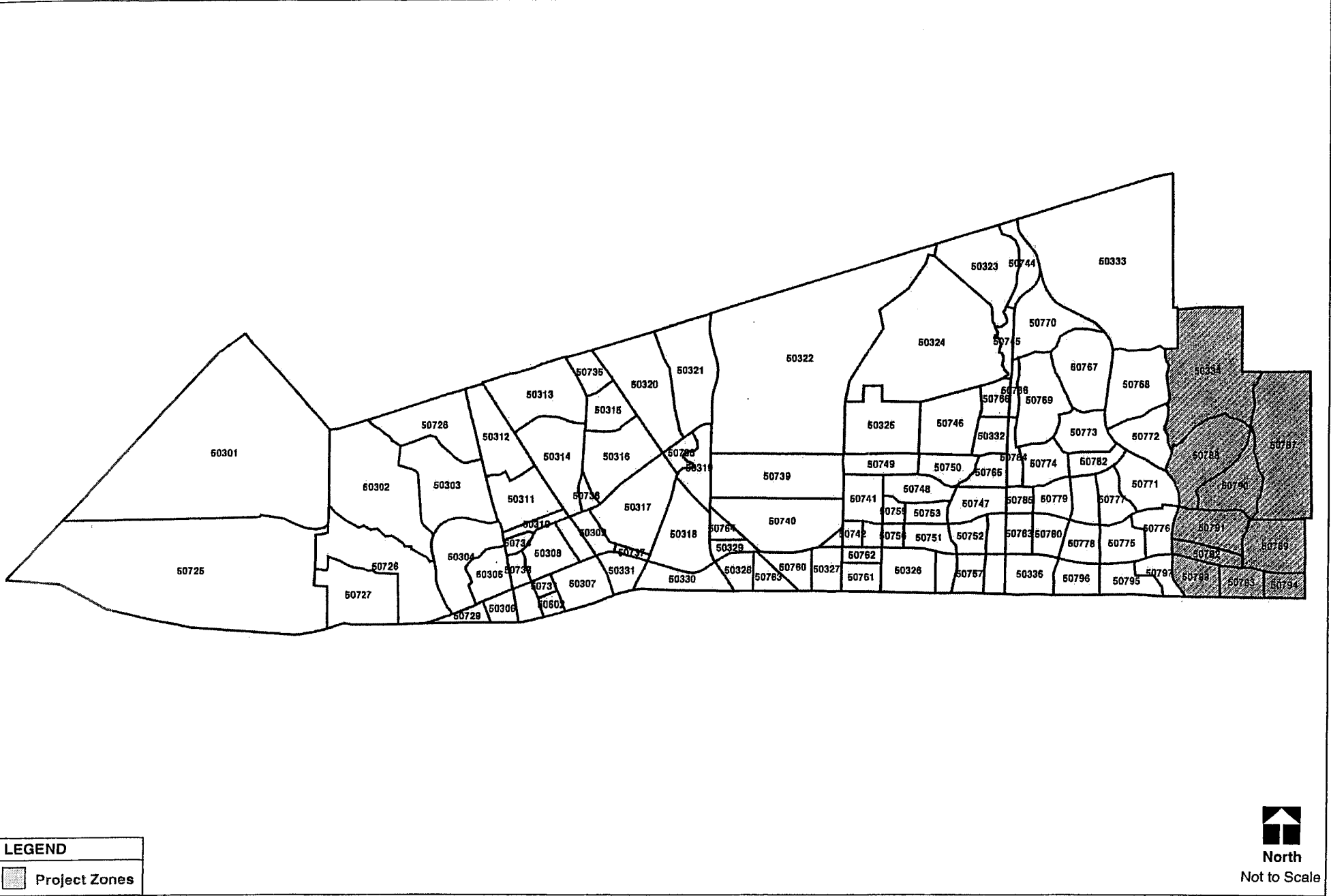


STREET NAME: Dublin Blvd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
SB RIGHT (R)	271	150 *	1720	0.0872	0.0872
LEFT (L)	20	20	1720	0.0116	
EB THRU (T)	1594	1594	5160	0.3089	0.3089
LEFT (L)	121	121	1720	0.0703	
WB RIGHT (R)	6	0 *	1720	0.0000	
THRU (T)	1105	1105	5160	0.2141	
TOTAL VOLUME-TO-CAPACITY RATIO:					0.40
INTERSECTION LEVEL OF SERVICE:					A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=EXISTING.INT

**APPENDIX C – LEVEL OF SERVICE WORKSHEETS: INTERIM YEAR
2015 CONDITIONS**



LEGEND
 Project Zones



North

Not to Scale

City of Dublin
 Fallon Village
Traffic Analysis Zones

Figure
1C



TABLE 1: YEAR 2015 LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50333	259	813	813	246	13	28	28	0	0	0	0	0
50301	0	0	0	0	0	0	0	0	0	0	0	0
50725	279	894	894	279	0	44	44	0	0	0	0	0
50763	0	0	0	0	0	303	227	0	0	0	0	76
50760	900	1800	1800	0	900	1992	0	1992	0	0	0	0
50327	180	360	360	0	180	4011	51	3960	0	0	0	0
50740	0	0	0	0	0	0	0	0	0	0	0	0
50764	205	410	410	0	205	278	77	0	0	0	28	173
50319	175	350	350	0	175	7	7	0	0	0	0	0
50739	0	0	0	0	0	0	0	0	0	0	0	0
50322	0	0	0	0	0	0	0	0	0	0	0	0
50323	419	1340	1340	419	0	0	0	0	0	0	0	0
50727	246	492	492	0	246	0	0	0	0	0	0	0
50602	182	364	364	0	182	896	274	526	0	0	0	94
50730	0	0	0	0	0	540	210	330	0	0	0	0
50307	0	0	0	0	0	2573	1750	534	0	0	0	289
50731	0	0	0	0	0	419	419	0	0	0	0	0
50308	0	0	0	0	0	1526	1456	70	0	0	0	0
50331	0	0	0	0	0	593	110	483	0	0	0	0
50732	0	0	0	0	0	523	523	0	0	0	0	0
50310	211	638	638	180	31	157	0	157	0	0	0	0
50304	546	1514	1514	352	194	136	0	136	0	0	0	0
50311	378	1209	1209	378	0	0	0	0	0	0	0	0
50303	469	1500	1500	469	0	53	7	38	0	0	0	8
50312	277	886	886	277	0	142	142	0	0	0	0	0
50317	667	2134	2134	667	0	0	0	0	0	0	0	0
50738	240	480	480	0	240	0	0	0	0	0	0	0
50320	728	1663	1663	173	555	0	0	0	0	0	0	0
50321	1112	2398	2398	145	967	0	0	0	0	0	0	0
50302	292	846	846	219	73	0	0	0	0	0	0	0
50728	380	1216	1216	380	0	0	0	0	0	0	0	0
50316	505	1616	1616	505	0	1	1	0	0	0	0	0
50736	0	0	0	0	0	187	187	0	0	0	0	0
50314	492	1574	1574	492	0	48	43	5	0	0	0	0
50726	369	1181	1181	369	0	0	0	0	0	0	0	0
50313	637	2007	2007	611	26	0	0	0	0	0	0	0
50729	0	0	0	0	0	447	0	329	0	0	118	0
50306	0	0	0	0	0	500	141	359	0	0	0	0
50305	455	1019	1019	91	364	509	230	279	0	0	0	0
50733	0	0	0	0	0	437	390	47	0	0	0	0
50734	0	0	0	0	0	229	224	5	0	0	0	0
50330	0	0	0	0	0	594	301	293	0	0	0	0
50318	0	0	0	0	0	2618	329	231	0	0	1322	736

TABLE 1: YEAR 2015 LAND USE BY TAZ

CCTA TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50737	0	0	0	0	0	173	145	28	0	0	0	0
50309	0	0	0	0	0	590	472	104	0	0	0	14
50328	0	0	0	0	0	492	120	0	0	0	339	33
50329	0	0	0	0	0	337	215	0	0	0	0	122
50315	11	35	35	11	0	0	0	0	0	0	0	0
50735	175	560	560	175	0	28	0	28	0	0	0	0
50793	0	0	0	0	0	0	0	0	0	0	0	0
50794	0	0	0	0	0	0	0	0	0	0	0	0
50789	263	841	841	263	0	0	0	0	0	0	0	0
50796	0	0	0	0	0	1703	0	1703	0	0	0	0
50795	0	0	0	0	0	2576	0	2576	0	0	0	0
50778	629	2012	2012	629	0	173	173	0	0	0	0	0
50780	359	719	719	0	359	220	220	0	0	0	0	0
50781	151	483	483	151	0	0	0	0	0	0	0	0
50775	721	1638	1638	163	558	0	0	0	0	0	0	0
50783	0	0	0	0	0	416	416	0	0	0	0	0
50779	252	806	806	252	0	0	0	0	0	0	0	0
50785	324	648	648	0	324	0	0	0	0	0	0	0
50774	72	232	232	72	0	0	0	0	0	0	0	0
50782	70	224	224	70	0	0	0	0	0	0	0	0
50784	168	537	537	168	0	0	0	0	0	0	0	0
50765	204	652	652	204	0	0	0	0	0	0	0	0
50332	238	763	763	238	0	0	0	0	0	0	0	0
50750	0	0	0	0	0	0	0	0	0	0	0	0
50748	259	828	828	259	0	0	0	0	0	0	0	0
50749	0	0	0	0	0	1326	0	1326	0	0	0	0
50746	0	0	0	0	0	0	0	0	0	0	0	0
50772	189	606	606	189	0	0	0	0	0	0	0	0
50771	0	0	0	0	0	0	0	0	0	0	0	0
50788	325	1040	1040	325	0	0	0	0	0	0	0	0
50773	205	656	656	205	0	0	0	0	0	0	0	0
50769	363	1161	1161	363	0	0	0	0	0	0	0	0
50334	676	2163	2163	676	0	0	0	0	0	0	0	0
50790	853	2206	2206	417	436	0	0	0	0	0	0	0
50787	269	860	860	269	0	0	0	0	0	0	0	0
50766	253	810	810	253	0	0	0	0	0	0	0	0
50786	111	355	355	111	0	0	0	0	0	0	0	0
50767	80	258	258	80	0	0	0	0	0	0	0	0
50768	150	480	480	150	0	0	0	0	0	0	0	0
50325	0	0	0	0	0	0	0	0	0	0	0	0
50324	0	0	0	0	0	0	0	0	0	0	0	0
50770	136	350	350	65	70	0	0	0	0	0	0	0
50744	214	526	526	81	133	100	100	0	0	0	0	0

TABLE 1: YEAR 2015 LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50757	0	0	0	0	0	249	249	0	0	0	0	0
50758	0	0	0	0	0	1834	102	1731	0	0	0	0
50336	0	0	0	0	0	1695	1695	0	0	0	0	0
50759	0	0	0	0	0	219	219	0	0	0	0	0
50326	0	0	0	0	0	1179	1179	0	0	0	0	0
50751	277	738	738	154	123	0	0	0	0	0	0	0
50756	324	648	648	0	324	0	0	0	0	0	0	0
50755	368	736	736	0	368	0	0	0	0	0	0	0
50753	88	224	224	40	48	0	0	0	0	0	0	0
50747	0	0	0	0	0	0	0	0	0	0	0	0
50741	0	0	0	0	0	3122	0	3122	0	0	0	0
50761	0	0	0	0	0	775	775	0	0	0	0	0
50762	0	0	0	0	0	848	0	848	0	0	0	0
50798	0	0	0	0	0	0	0	0	0	0	0	0
50742	0	0	0	0	0	858	0	858	0	0	0	0
50743	0	0	0	0	0	1386	0	1386	0	0	0	0
50754	390	780	780	0	390	383	383	0	0	0	0	0
50752	295	761	761	143	152	0	0	0	0	0	0	0
50745	72	144	144	0	72	0	0	0	0	0	0	0
50797	0	0	0	0	0	643	643	0	0	0	0	0
50791	219	438	438	0	219	143	143	0	0	0	0	0
50799	0	0	0	0	0	858	858	0	0	0	0	0
50792	0	0	0	0	0	0	0	0	0	0	0	0
50777	226	725	725	226	0	0	0	0	0	0	0	0
50776	0	0	0	0	0	233	233	0	0	0	0	0

Notes: TOTHH=Total Households, HHPOP=Household Population, TOTPOP=Total Population, SFDU=No. of Households in Single Family Dwelling Units
MFDU= No. of Households in Multi Family Dwelling Units, TOTEMP=Total Employment, RETEMP=Retail Employment, SEREMP=Service Employment
OTHEMP=Other Employment, ARGEMP=Agricultural Employment, MFGEMP=Manufacturing Employment, TRDEMP=Wholesale Employment

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION	1 Dougherty/Dublin			City of Dublin		
Count	Date	Time	Peak Hour	Count	Date	Time
CCTA METHOD						
		RIGHT	THRU	LEFT		8-PHASE SIGNAL
		112	2255	13		
LEFT	154	2.0	1.1	4.1	2.0	1.0
THRU	856	3.0	(NO. OF LANES)		3.0	1427
RIGHT	391	2.0	3.0	3.0	2.0	3.0
			164	1212	781	
			LEFT THRU RIGHT		Split? N	
STREET NAME: Dougherty						
STREET NAME: Dublin						
SIG WARRANTS: Urb=Y, Rur=Y						

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	781	674 *	3000	0.2247	
THRU (T)	1212	1212	4950	0.2448	
LEFT (L)	164	164	4304	0.0381	0.0381
SB RIGHT (R)	112	112	1650	0.0679	
THRU (T)	2255	2255	6600	0.3417	
LEFT (L)	13	13	3000	0.0043	
T + R		2367	6600	0.3586	0.3586
EB RIGHT (R)	391	328 *	3000	0.1093	
THRU (T)	856	856	4950	0.1729	
LEFT (L)	154	154	3000	0.0513	0.0513
WB RIGHT (R)	28	21 *	1650	0.0127	
THRU (T)	1427	1427	4950	0.2883	0.2883
LEFT (L)	278	278	4304	0.0646	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.74	
INTERSECTION LEVEL OF SERVICE:				C	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION	1 Dougherty/Dublin			City of Dublin		
Count	Date	Time	Peak Hour	Count	Date	Time
CCTA METHOD						
		RIGHT	THRU	LEFT		8-PHASE SIGNAL
		133	1324	15		
LEFT	306	2.0	1.1	4.1	2.0	1.0
THRU	1158	3.0	(NO. OF LANES)		3.0	1735
RIGHT	535	2.0	3.0	3.0	2.0	3.0
			831	1749	456	
			LEFT THRU RIGHT		Split? N	
STREET NAME: Dougherty						
STREET NAME: Dublin						
SIG WARRANTS: Urb=Y, Rur=Y						

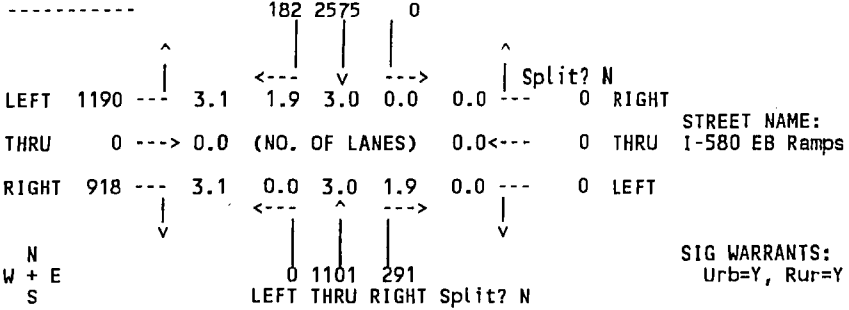
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	456	207 *	3000	0.0690	
THRU (T)	1749	1749	4950	0.3533	
LEFT (L)	831	831	4304	0.1931	0.1931
SB RIGHT (R)	133	133	1650	0.0806	
THRU (T)	1324	1324	6600	0.2006	
LEFT (L)	15	15	3000	0.0050	
T + R		1457	6600	0.2208	0.2208
EB RIGHT (R)	535	216 *	3000	0.0720	
THRU (T)	1158	1158	4950	0.2339	
LEFT (L)	306	306	3000	0.1020	0.1020
WB RIGHT (R)	12	4 *	1650	0.0024	
THRU (T)	1735	1735	4950	0.3505	0.3505
LEFT (L)	650	650	4304	0.1510	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.87	
INTERSECTION LEVEL OF SERVICE:				D	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



STREET NAME:
I-580 EB Ramps

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	291	291	1800	0.1617	
THRU (T)	1101	1101	5400	0.2039	
SB RIGHT (R)	182	182	1800	0.1011	
THRU (T)	2575	2575	5400	0.4769	0.4769
EB RIGHT (R)	918	918	4695	0.1955	
LEFT (L)	1190	1190	4695	0.2535	
T + R + L		2108	7590	0.2777	0.2777

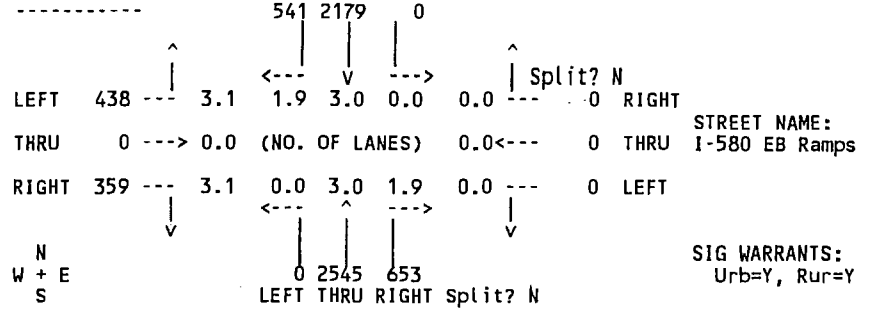
TOTAL VOLUME-TO-CAPACITY RATIO: 0.75
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



STREET NAME:
I-580 EB Ramps

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	653	653	1800	0.3628	
THRU (T)	2545	2545	5400	0.4713	0.4713
SB RIGHT (R)	541	541	1800	0.3006	
THRU (T)	2179	2179	5400	0.4035	
EB RIGHT (R)	359	359	4695	0.0765	
LEFT (L)	438	438	4695	0.0933	
T + R + L		797	7590	0.1050	0.1050

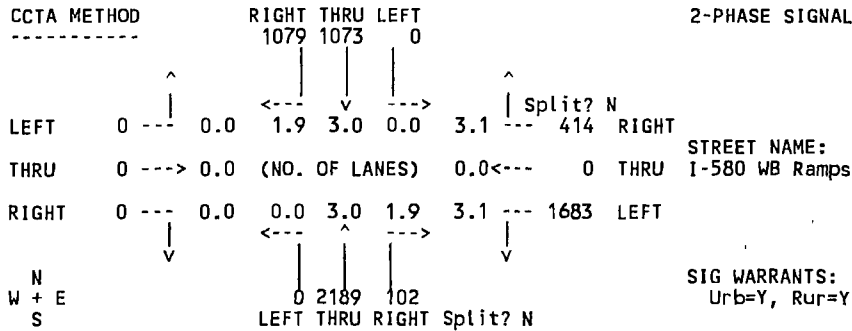
TOTAL VOLUME-TO-CAPACITY RATIO: 0.58
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	102	102	1800	0.0567	
THRU (T)	2189	2189	5400	0.4054	0.4054
SB RIGHT (R)	1079	1079	1800	0.5994	
THRU (T)	1073	1073	5400	0.1987	
WB RIGHT (R)	414	414	4695	0.0882	
LEFT (L)	1683	1683	4695	0.3585	0.3585
T + R + L		2097	7590	0.2763	

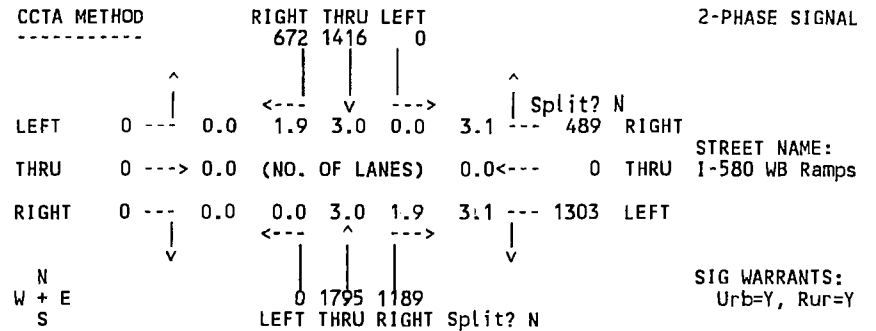
TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour



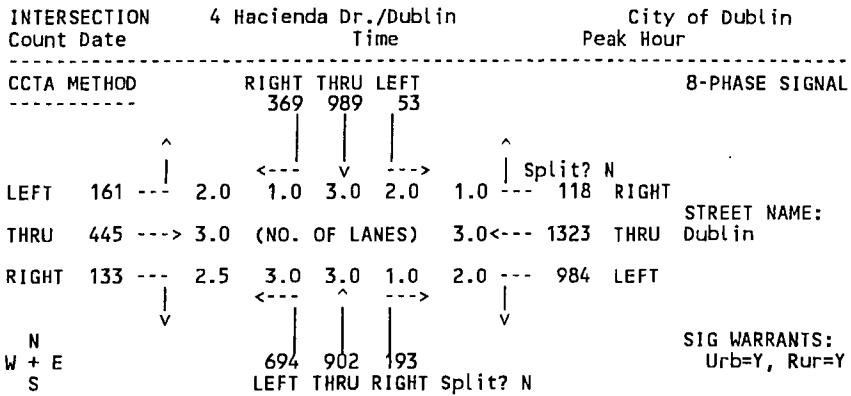
STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1189	1189	1800	0.6606	
THRU (T)	1795	1795	5400	0.3324	0.3324
SB RIGHT (R)	672	672	1800	0.3733	
THRU (T)	1416	1416	5400	0.2622	
WB RIGHT (R)	489	489	4695	0.1042	
LEFT (L)	1303	1303	4695	0.2775	0.2775
T + R + L		1792	7590	0.2361	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.61
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05



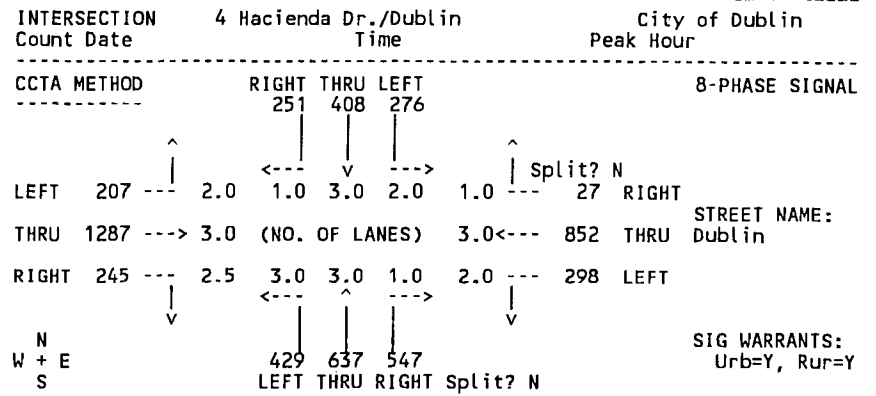
STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	193	0 *	1650	0.0000	
THRU (T)	902	902	4950	0.1822	
LEFT (L)	694	694	4304	0.1612	0.1612
SB RIGHT (R)	369	280 *	1650	0.1697	
THRU (T)	989	989	4950	0.1998	0.1998
LEFT (L)	53	53	3000	0.0177	
EB RIGHT (R)	133	0 *	3000	0.0000	
THRU (T)	445	445	4950	0.0899	0.0899
LEFT (L)	161	161	3000	0.0537	
WB RIGHT (R)	118	89 *	1650	0.0539	
THRU (T)	1323	1323	4950	0.2673	
LEFT (L)	984	984	3000	0.3280	0.3280

TOTAL VOLUME-TO-CAPACITY RATIO: 0.78
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	547	383 *	1650	0.2321	0.2321
THRU (T)	637	637	4950	0.1287	
LEFT (L)	429	429	4304	0.0997	
SB RIGHT (R)	251	137 *	1650	0.0830	
THRU (T)	408	408	4950	0.0824	
LEFT (L)	276	276	3000	0.0920	0.0920
EB RIGHT (R)	245	0 *	3000	0.0000	
THRU (T)	1287	1287	4950	0.2600	0.2600
LEFT (L)	207	207	3000	0.0690	
WB RIGHT (R)	27	0 *	1650	0.0000	
THRU (T)	852	852	4950	0.1721	
LEFT (L)	298	298	3000	0.0993	0.0993

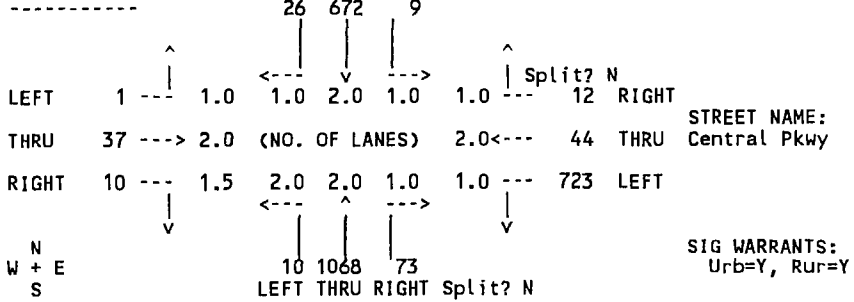
TOTAL VOLUME-TO-CAPACITY RATIO: 0.68
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak 07/03/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	73	0 *	1650	0.0000	
NB THRU (T)	1068	1068	3300	0.3236	0.3236
NB LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	26	25 *	1650	0.0152	
SB THRU (T)	672	672	3300	0.2036	
SB LEFT (L)	9	9	1650	0.0055	0.0055
EB RIGHT (R)	10	5 *	1650	0.0030	
EB THRU (T)	37	37	3300	0.0112	0.0112
EB LEFT (L)	1	1	1650	0.0006	
WB RIGHT (R)	12	3 *	1650	0.0018	
WB THRU (T)	44	44	3300	0.0133	
WB LEFT (L)	723	723	1650	0.4382	0.4382

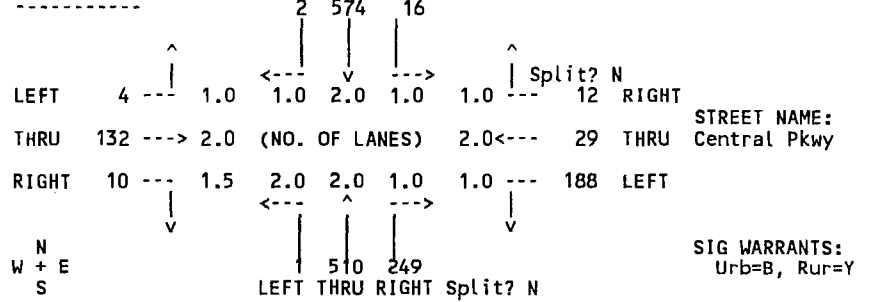
TOTAL VOLUME-TO-CAPACITY RATIO: 0.78
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 07/03/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	4	0 *	1650	0.0024	
NB THRU (T)	132	132	3300	0.0400	0.0400
NB LEFT (L)	10	10	3000	0.0033	0.0033
SB RIGHT (R)	2	0 *	1650	0.0012	
SB THRU (T)	574	574	3300	0.1739	0.1739
SB LEFT (L)	16	16	1650	0.0097	0.0097
EB RIGHT (R)	10	9 *	1650	0.0055	
EB THRU (T)	132	132	3300	0.0400	0.0400
EB LEFT (L)	4	4	1650	0.0024	
WB RIGHT (R)	12	0 *	1650	0.0007	
WB THRU (T)	29	29	3300	0.0088	
WB LEFT (L)	188	188	1650	0.1139	0.1139

TOTAL VOLUME-TO-CAPACITY RATIO: 0.33
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak Mit 07/03/05

INTERSECTION	5 Hacienda Dr./Central Pkwy			City of Dublin		
Count Date	Time			Peak Hour		
CCTA METHOD	RIGHT THRU LEFT			8-PHASE SIGNAL		
		26	672	9		
LEFT	1	1.0	1.0	2.0	1.0	1.0
THRU	37	2.0	(NO. OF LANES)		1.0	44
RIGHT	10	1.5	2.0	2.0	1.0	2.0
			10	1068	73	
			LEFT THRU RIGHT		Split? N	
STREET NAME: Hacienda Dr.						
SIG WARRANTS: Urb=Y, Rur=Y						

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	73	0 *	1650	0.0000	
THRU (T)	1068	1068	3300	0.3236	0.3236
LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	26	25 *	1650	0.0152	
THRU (T)	672	672	3300	0.2036	
LEFT (L)	9	9	1650	0.0055	0.0055
EB RIGHT (R)	10	5 *	1650	0.0030	
THRU (T)	37	37	3300	0.0112	0.0112
LEFT (L)	1	1	1650	0.0006	
WB RIGHT (R)	12	3 *	1650	0.0018	
THRU (T)	44	44	1650	0.0267	
LEFT (L)	723	723	3000	0.2410	0.2410
TOTAL VOLUME-TO-CAPACITY RATIO:					0.58
INTERSECTION LEVEL OF SERVICE:					A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak Mit 07/03/05

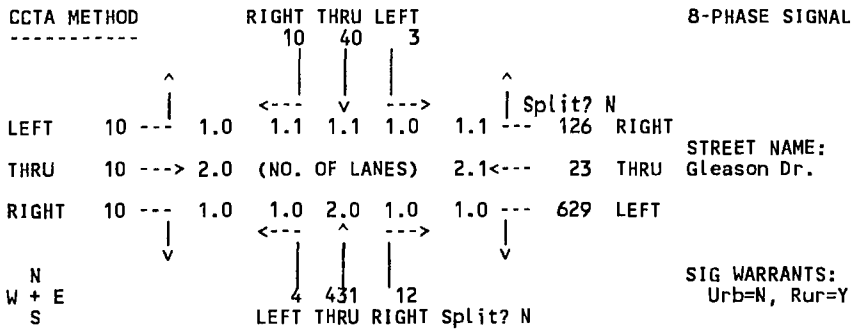
INTERSECTION	5 Hacienda Dr./Central Pkwy			City of Dublin		
Count Date	Time			Peak Hour		
CCTA METHOD	RIGHT THRU LEFT			8-PHASE SIGNAL		
		2	574	16		
LEFT	4	1.0	1.0	2.0	1.0	1.0
THRU	132	2.0	(NO. OF LANES)		1.0	29
RIGHT	10	1.5	2.0	2.0	1.0	2.0
			1	510	249	
			LEFT THRU RIGHT		Split? N	
STREET NAME: Hacienda Dr.						
SIG WARRANTS: Urb=B, Rur=Y						

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	249	146 *	1650	0.0885	
THRU (T)	510	510	3300	0.1545	
LEFT (L)	1	1	3000	0.0003	0.0003
SB RIGHT (R)	2	0 *	1650	0.0000	
THRU (T)	574	574	3300	0.1739	0.1739
LEFT (L)	16	16	1650	0.0097	
EB RIGHT (R)	10	9 *	1650	0.0055	
THRU (T)	132	132	3300	0.0400	0.0400
LEFT (L)	4	4	1650	0.0024	
WB RIGHT (R)	12	0 *	1650	0.0000	
THRU (T)	29	29	1650	0.0176	
LEFT (L)	188	188	3000	0.0627	0.0627
TOTAL VOLUME-TO-CAPACITY RATIO:					0.28
INTERSECTION LEVEL OF SERVICE:					A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak 07/03/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

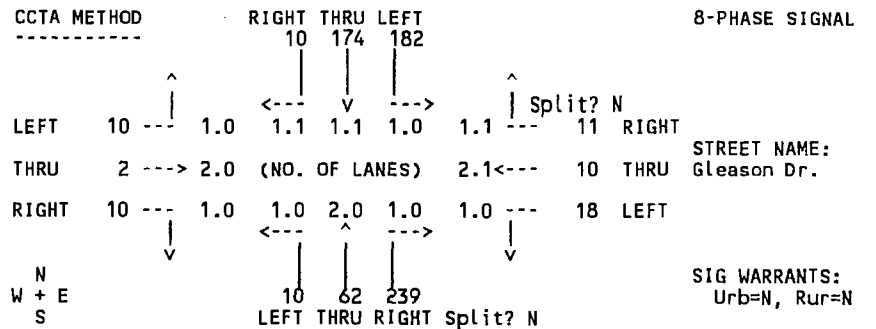
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	12	0 *	1650	0.0000	
NB THRU (T)	431	431	3300	0.1306	0.1306
NB LEFT (L)	4	4	1650	0.0024	
SB RIGHT (R)	10	10	1650	0.0061	
SB THRU (T)	40	40	1650	0.0242	
SB LEFT (L)	3	3	1650	0.0018	0.0018
SB T + R		50	1650	0.0303	
EB RIGHT (R)	10	6 *	1650	0.0036	0.0036
EB THRU (T)	10	10	3300	0.0030	
EB LEFT (L)	10	10	1650	0.0061	
WB RIGHT (R)	126	126	1650	0.0764	
WB THRU (T)	23	23	3300	0.0070	
WB LEFT (L)	629	629	1650	0.3812	0.3812
WB T + R		149	3300	0.0452	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.52
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 07/03/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	239	221 *	1650	0.1339	0.1339
NB THRU (T)	62	62	3300	0.0188	
NB LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	10	10	1650	0.0061	
SB THRU (T)	174	174	1650	0.1055	
SB LEFT (L)	182	182	1650	0.1103	0.1103
SB T + R		184	1650	0.1115	
EB RIGHT (R)	10	0 *	1650	0.0000	
EB THRU (T)	2	2	3300	0.0006	
EB LEFT (L)	10	10	1650	0.0061	0.0061
WB RIGHT (R)	11	11	1650	0.0067	0.0067
WB THRU (T)	10	10	3300	0.0030	
WB LEFT (L)	18	18	1650	0.0109	
WB T + R		21	3300	0.0064	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.26
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 with Extensions-AM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL
 321 1913 235

LEFT 305 --- 2.0 <--- 1.9 v 2.0 1.0 2.5 --- Split? N 412 RIGHT
 THRU 140 ---> 1.0 (NO. OF LANES) 0.0<--- 0 THRU STREET NAME:
 RIGHT 759 --- 1.9 0.0 4.1 1.1 2.0 --- 154 LEFT I-580 EB Ramps

N
 W + E
 S

0 1720 364
 LEFT THRU RIGHT Split? N

SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1720	1720	6600	0.2606	
T + R		2084	6600	0.3158	
SB RIGHT (R)	321	321	1650	0.1945	
THRU (T)	1913	1913	3300	0.5797	0.5797
LEFT (L)	235	235	1650	0.1424	
EB RIGHT (R)	759	759	1650	0.4600	
THRU (T)	140	140	1650	0.0848	0.0848
LEFT (L)	305	305	3000	0.1017	
WB RIGHT (R)	412	0 *	3000	0.0000	
LEFT (L)	154	154	3000	0.0513	0.0513

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 with Extensions-PM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL
 864 1525 265

LEFT 1077 --- 2.0 <--- 1.9 v 2.0 1.0 2.5 --- Split? N 504 RIGHT
 THRU 71 ---> 1.0 (NO. OF LANES) 0.0<--- 0 THRU STREET NAME:
 RIGHT 57 --- 1.9 0.0 4.1 1.1 2.0 --- 118 LEFT I-580 EB Ramps

N
 W + E
 S

0 2118 198
 LEFT THRU RIGHT Split? N

SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

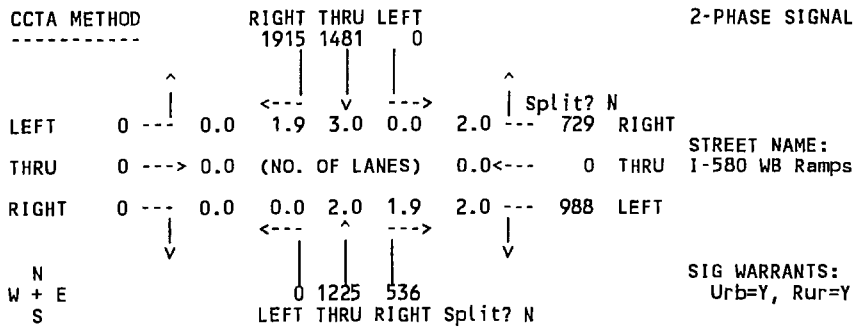
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	198	198	1650	0.1200	
THRU (T)	2118	2118	6600	0.3209	
T + R		2316	6600	0.3509	0.3509
SB RIGHT (R)	864	864	1650	0.5236	
THRU (T)	1525	1525	3300	0.4621	
LEFT (L)	265	265	1650	0.1606	0.1606
EB RIGHT (R)	57	57	1650	0.0345	
THRU (T)	71	71	1650	0.0430	
LEFT (L)	1077	1077	3000	0.3590	0.3590
WB RIGHT (R)	504	22 *	3000	0.0073	0.0073
LEFT (L)	118	118	3000	0.0393	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED

Condition: Year 2015 With Extensions- A.M. Peak 07/03/05

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Tassajara Rd

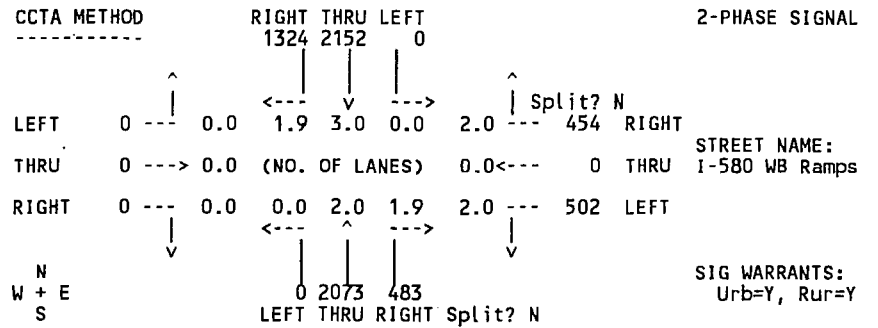
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	536	536	1800	0.2978	
THRU (T)	1225	1225	3600	0.3403	0.3403
SB RIGHT (R)	1915	1915	1800	1.0639 **	
THRU (T)	1481	1481	5400	0.2743	
WB RIGHT (R)	729	729	3273	0.2227	
LEFT (L)	988	988	3273	0.3019	0.3019

TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED ** APPROACHING OR EXCEEDING CAPACITY
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 07/03/05

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	483	483	1800	0.2683	
THRU (T)	2073	2073	3600	0.5758	0.5758
SB RIGHT (R)	1324	1324	1800	0.7356	
THRU (T)	2152	2152	5400	0.3985	
WB RIGHT (R)	454	454	3273	0.1387	
LEFT (L)	502	502	3273	0.1534	0.1534

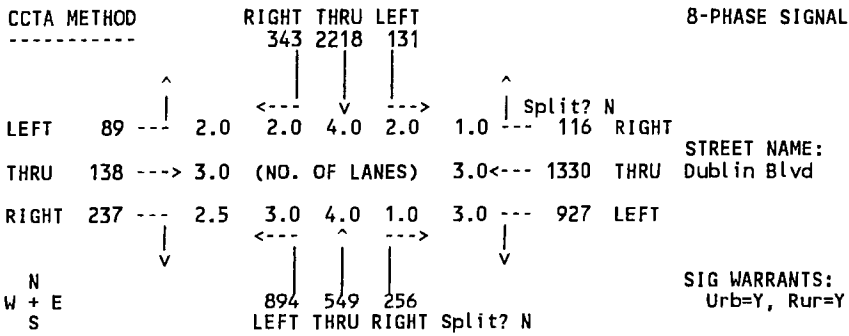
TOTAL VOLUME-TO-CAPACITY RATIO: 0.73
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 07/03/05

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	256	0 *	1650	0.0000	
THRU (T)	549	549	6600	0.0832	
LEFT (L)	894	894	4304	0.2077	0.2077
SB RIGHT (R)	343	294 *	3000	0.0980	
THRU (T)	2218	2218	6600	0.3361	0.3361
LEFT (L)	131	131	3000	0.0437	
EB RIGHT (R)	237	0 *	3000	0.0000	
THRU (T)	138	138	4950	0.0279	
LEFT (L)	89	89	3000	0.0297	0.0297
WB RIGHT (R)	116	44 *	1650	0.0267	
THRU (T)	1330	1330	4950	0.2687	0.2687
LEFT (L)	927	927	4304	0.2154	

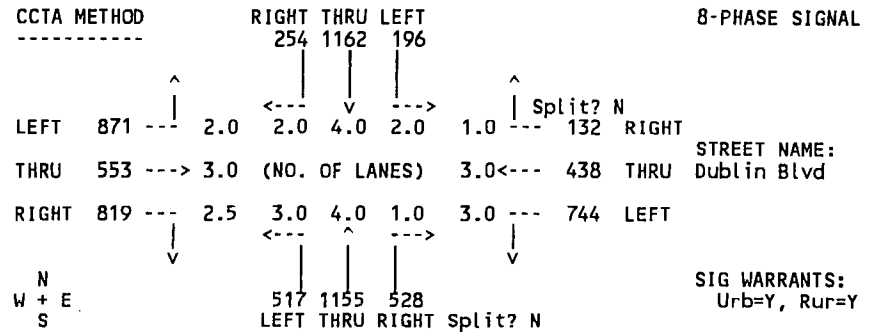
TOTAL VOLUME-TO-CAPACITY RATIO: 0.84
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 07/03/05

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	528	243 *	1650	0.1473	
THRU (T)	1155	1155	6600	0.1750	
LEFT (L)	517	517	4304	0.1201	0.1201
SB RIGHT (R)	254	0 *	3000	0.0000	
THRU (T)	1162	1162	6600	0.1761	0.1761
LEFT (L)	196	196	3000	0.0653	
EB RIGHT (R)	819	459 *	3000	0.1530	
THRU (T)	553	553	4950	0.1117	
LEFT (L)	871	871	3000	0.2903	0.2903
WB RIGHT (R)	132	24 *	1650	0.0145	
THRU (T)	438	438	4950	0.0885	0.0885
LEFT (L)	744	744	4304	0.1729	

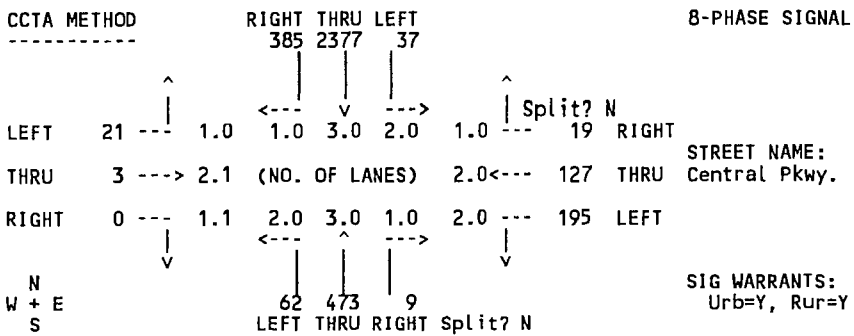
TOTAL VOLUME-TO-CAPACITY RATIO: 0.68
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 07/03/05

INTERSECTION 10 Tassajara Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	9	0 *	1650	0.0000	
THRU (T)	473	473	4950	0.0956	
LEFT (L)	62	62	3000	0.0207	0.0207
SB RIGHT (R)	385	364 *	1650	0.2206	
THRU (T)	2377	2377	4950	0.4802	0.4802
LEFT (L)	37	37	3000	0.0123	
EB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	3	3	3300	0.0009	0.0009
LEFT (L)	21	21	1650	0.0127	
T + R		3	3300	0.0009	
WB RIGHT (R)	19	0 *	1650	0.0000	
THRU (T)	127	127	3300	0.0385	
LEFT (L)	195	195	3000	0.0650	0.0650

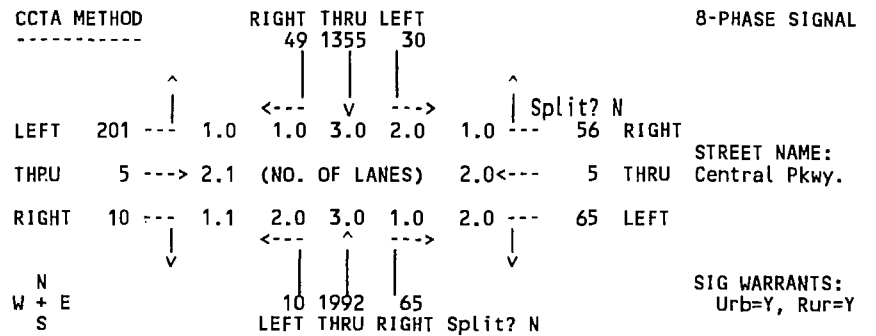
TOTAL VOLUME-TO-CAPACITY RATIO: 0.57
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 07/03/05

INTERSECTION 10 Tassajara Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	65	29 *	1650	0.0176	
THRU (T)	1992	1992	4950	0.4024	0.4024
LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	49	0 *	1650	0.0000	
THRU (T)	1355	1355	4950	0.2737	
LEFT (L)	30	30	3000	0.0100	0.0100
EB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	5	5	3300	0.0015	
LEFT (L)	201	201	1650	0.1218	0.1218
T + R		15	3300	0.0045	
WB RIGHT (R)	56	40 *	1650	0.0242	0.0242
THRU (T)	5	5	3300	0.0015	
LEFT (L)	65	65	3000	0.0217	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.56
 INTERSECTION LEVEL OF SERVICE: A

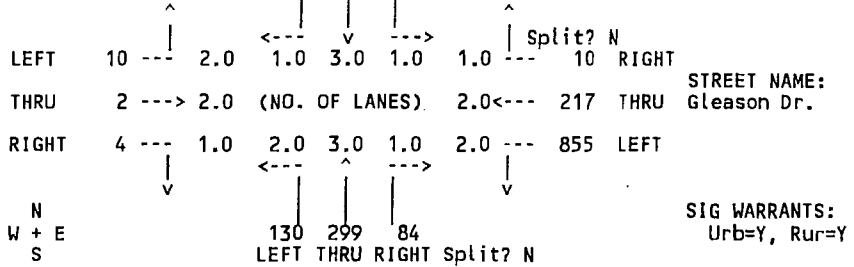
* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 11 Tassajara Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 ----- 439 1939 6



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	84	0 *	1650	0.0000	
THRU (T)	299	299	4950	0.0604	
LEFT (L)	130	130	3000	0.0433	0.0433
SB RIGHT (R)	439	434 *	1650	0.2630	
THRU (T)	1939	1939	4950	0.3917	0.3917
LEFT (L)	6	6	1650	0.0036	
EB RIGHT (R)	4	0 *	1650	0.0000	
THRU (T)	2	2	3300	0.0006	0.0006
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	10	4 *	1650	0.0024	
THRU (T)	217	217	3300	0.0658	
LEFT (L)	855	855	3000	0.2850	0.2850

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72
 INTERSECTION LEVEL OF SERVICE: C

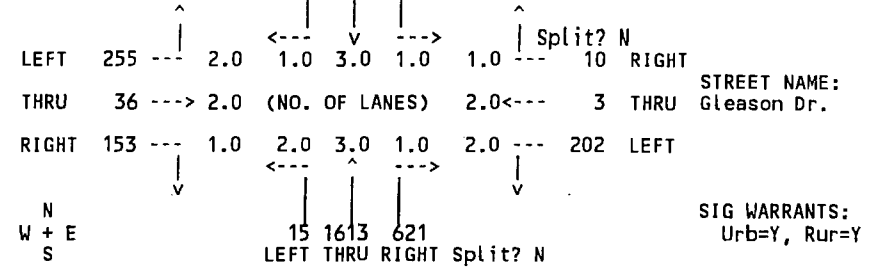
* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 11 Tassajara Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 ----- 18 1078 14



STREET NAME: Tassajara Rd.

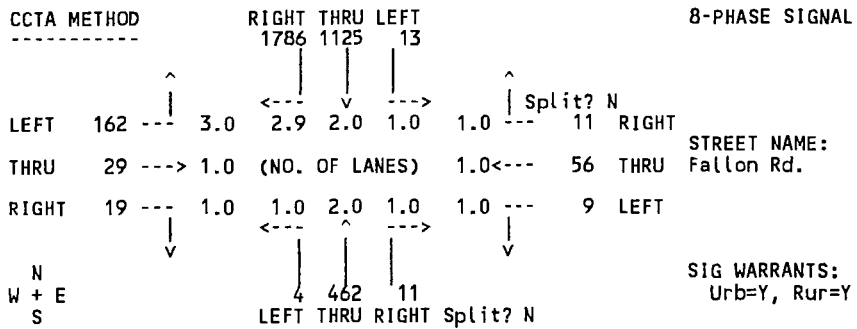
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	621	510 *	1650	0.3091	
THRU (T)	1613	1613	4950	0.3259	0.3259
LEFT (L)	15	15	3000	0.0050	
SB RIGHT (R)	18	0 *	1650	0.0000	
THRU (T)	1078	1078	4950	0.2178	
LEFT (L)	14	14	1650	0.0085	0.0085
EB RIGHT (R)	153	145 *	1650	0.0879	0.0879
THRU (T)	36	36	3300	0.0109	
LEFT (L)	255	255	3000	0.0850	
WB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	3	3	3300	0.0009	
LEFT (L)	202	202	3000	0.0673	0.0673

TOTAL VOLUME-TO-CAPACITY RATIO: 0.49
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak 07/03/05

INTERSECTION 12 Tassajara Rd./Fallon Rd. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd.

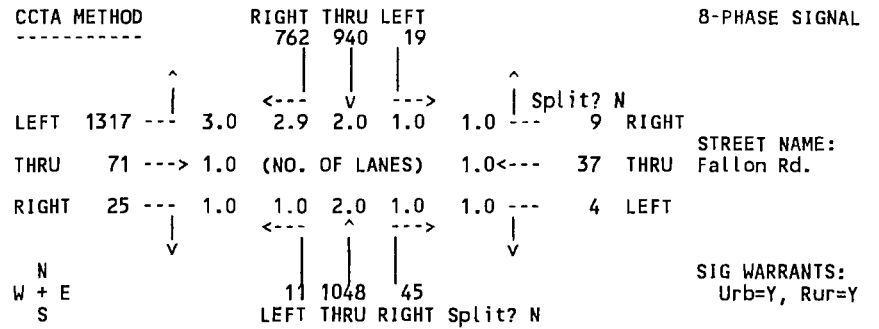
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	11	2 *	1650	0.0012	
THRU (T)	462	462	3300	0.1400	
LEFT (L)	4	4	1650	0.0024	0.0024
SB RIGHT (R)	1786	1786	3000	0.5953	
THRU (T)	1125	1125	3300	0.3409	0.3409
LEFT (L)	13	13	1650	0.0079	
EB RIGHT (R)	19	15 *	1650	0.0091	
THRU (T)	29	29	1650	0.0176	
LEFT (L)	162	162	4304	0.0376	0.0376
WB RIGHT (R)	11	0 *	1650	0.0000	
THRU (T)	56	56	1650	0.0339	0.0339
LEFT (L)	9	9	1650	0.0055	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 07/03/05

INTERSECTION 12 Tassajara Rd./Fallon Rd. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	45	41 *	1650	0.0248	
THRU (T)	1048	1048	3300	0.3176	0.3176
LEFT (L)	11	11	1650	0.0067	
SB RIGHT (R)	762	762	3000	0.2540	
THRU (T)	940	940	3300	0.2848	
LEFT (L)	19	19	1650	0.0115	0.0115
EB RIGHT (R)	25	14 *	1650	0.0085	
THRU (T)	71	71	1650	0.0430	
LEFT (L)	1317	1317	4304	0.3060	0.3060
WB RIGHT (R)	9	0 *	1650	0.0000	
THRU (T)	37	37	1650	0.0224	0.0224
LEFT (L)	4	4	1650	0.0024	

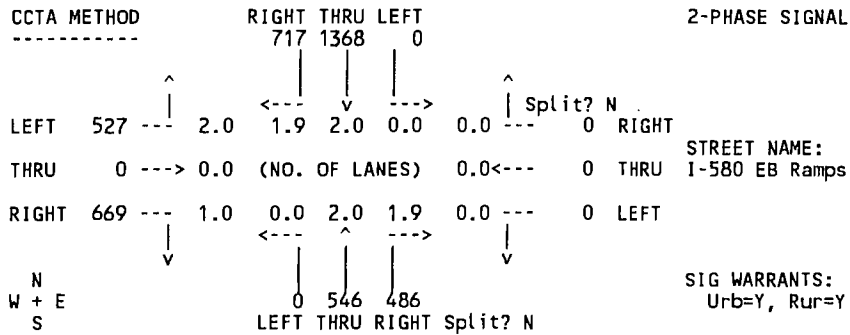
TOTAL VOLUME-TO-CAPACITY RATIO: 0.66
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions-AM Peak 07/18/05

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: El Charro Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	486	486	1800	0.2700	
THRU (T)	546	546	3600	0.1517	
SB RIGHT (R)	717	717	1800	0.3983	
THRU (T)	1368	1368	3600	0.3800	0.3800
EB RIGHT (R)	669	669	1800	0.3717	0.3717
LEFT (L)	527	527	3273	0.1610	

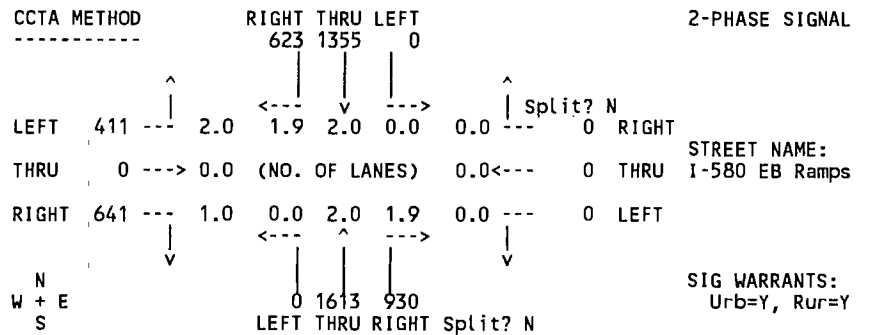
TOTAL VOLUME-TO-CAPACITY RATIO: 0.75
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=2015REV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions-PM Peak 07/18/05

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: El Charro Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	930	930	1800	0.5167	
THRU (T)	1613	1613	3600	0.4481	0.4481
SB RIGHT (R)	623	623	1800	0.3461	
THRU (T)	1355	1355	3600	0.3764	
EB RIGHT (R)	641	641	1800	0.3561	0.3561
LEFT (L)	411	411	3273	0.1256	

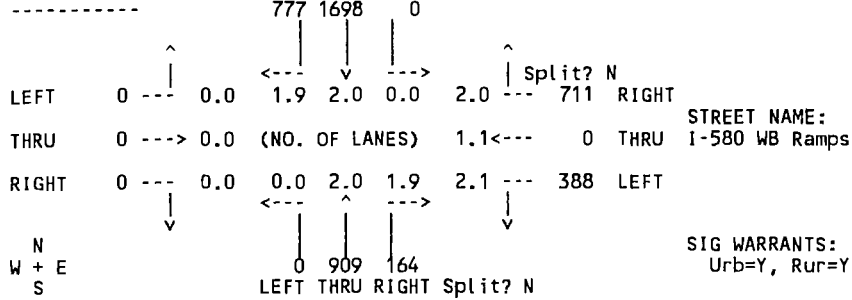
TOTAL VOLUME-TO-CAPACITY RATIO: 0.80
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=2015REV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions-AM Peak 07/18/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	164	164	1800	0.0911	
NB THRU (T)	909	909	3600	0.2525	
SB RIGHT (R)	777	777	1800	0.4317	
SB THRU (T)	1698	1698	3600	0.4717	0.4717
WB RIGHT (R)	711	711	3273	0.2172	0.2172
WB THRU (T)	0	0	1800	0.0000	
WB LEFT (L)	388	388	3273	0.1185	
T + L		388	3273	0.1185	

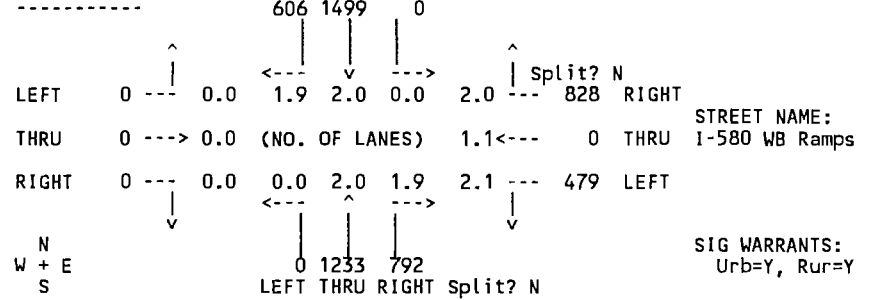
TOTAL VOLUME-TO-CAPACITY RATIO: 0.69
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=2015REV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions-PM Peak 07/18/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	792	792	1800	0.4400	
NB THRU (T)	1233	1233	3600	0.3425	
SB RIGHT (R)	606	606	1800	0.3367	
SB THRU (T)	1499	1499	3600	0.4164	0.4164
WB RIGHT (R)	828	828	3273	0.2530	0.2530
WB THRU (T)	0	0	1800	0.0000	
WB LEFT (L)	479	479	3273	0.1463	
T + L		479	3273	0.1463	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.67
 INTERSECTION LEVEL OF SERVICE: B

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION	15 Fallon Rd./Dublin Blvd	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	8-PHASE SIGNAL
	359 1265 408	
LEFT 22	2.0	1.0 4.0 2.0
THRU 220	3.0	3.0<--- 1362 THRU
RIGHT 148	2.5	3.0 4.0 2.0 3.0
	779 199 363	LEFT THRU RIGHT Split? N

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	363	25 *	3000	0.0083	
THRU (T)	199	199	6600	0.0302	
LEFT (L)	779	779	4304	0.1810	0.1810
SB RIGHT (R)	359	347 *	1650	0.2103	0.2103
THRU (T)	1265	1265	6600	0.1917	
LEFT (L)	408	408	3000	0.1360	
EB RIGHT (R)	148	0 *	3000	0.0000	
THRU (T)	220	220	4950	0.0444	
LEFT (L)	22	22	3000	0.0073	0.0073
WB RIGHT (R)	221	0 *	1650	0.0000	
THRU (T)	1362	1362	4950	0.2752	0.2752
LEFT (L)	881	881	4304	0.2047	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.67
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION	15 Fallon Rd./Dublin Blvd	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	8-PHASE SIGNAL
	44 691 499	
LEFT 369	2.0	1.0 4.0 2.0 1.0
THRU 1150	3.0	3.0<--- 480 THRU
RIGHT 481	2.5	3.0 4.0 2.0 3.0
	225 1071 661	LEFT THRU RIGHT Split? N

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	661	436 *	3000	0.1453	
THRU (T)	1071	1071	6600	0.1623	0.1623
LEFT (L)	225	225	4304	0.0523	
SB RIGHT (R)	44	0 *	1650	0.0000	
THRU (T)	691	691	6600	0.1047	
LEFT (L)	499	499	3000	0.1663	0.1663
EB RIGHT (R)	481	324 *	3000	0.1080	
THRU (T)	1150	1150	4950	0.2323	0.2323
LEFT (L)	369	369	3000	0.1230	
WB RIGHT (R)	150	0 *	1650	0.0000	
THRU (T)	480	480	4950	0.0970	
LEFT (L)	586	586	4304	0.1362	0.1362

TOTAL VOLUME-TO-CAPACITY RATIO: 0.70
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

INTERSECTION 16 Fallon Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD 3-PHASE SIGNAL

		RIGHT	THRU	LEFT			
		28	1180	0			
LEFT	13	2.0	1.0	2.0	0.0	0.0	Split? N
THRU	0	0.0	(NO. OF LANES)		0.0	0	THRU
RIGHT	50	2.0	1.0	3.0	0.0	0.0	LEFT
			494	444	0		
			LEFT	THRU	RIGHT	Split? N	

STREET NAME: Gleason Dr.

SIG WARRANTS: Urb=N, Rur=N

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	444	444	5160	0.0860	
LEFT (L)	494	494	1720	0.2872	0.2872
SB RIGHT (R)	28	21 *	1720	0.0122	
THRU (T)	1180	1180	3440	0.3430	0.3430
EB RIGHT (R)	50	0 *	3127	0.0000	
LEFT (L)	13	13	3127	0.0042	0.0042

TOTAL VOLUME-TO-CAPACITY RATIO: 0.63
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

INTERSECTION 16 Fallon Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD 3-PHASE SIGNAL

		RIGHT	THRU	LEFT			
		18	1112	0			
LEFT	30	2.0	1.0	2.0	0.0	0.0	Split? N
THRU	0	0.0	(NO. OF LANES)		0.0	0	THRU
RIGHT	546	2.0	1.0	3.0	0.0	0.0	LEFT
			117	1070	0		
			LEFT	THRU	RIGHT	Split? N	

STREET NAME: Gleason Dr.

SIG WARRANTS: Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

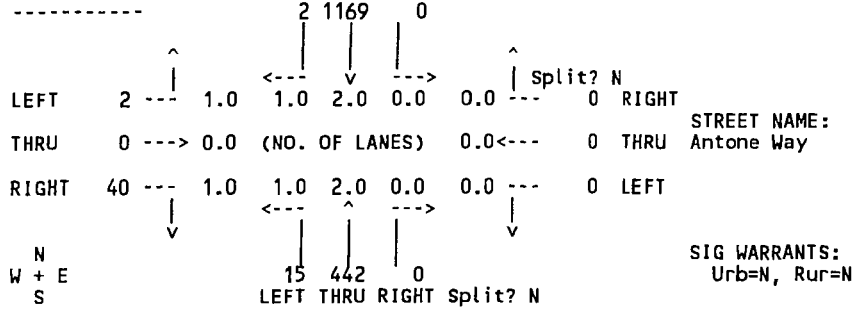
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1070	1070	5160	0.2074	
LEFT (L)	117	117	1720	0.0680	0.0680
SB RIGHT (R)	18	1 *	1720	0.0006	
THRU (T)	1112	1112	3440	0.3233	0.3233
EB RIGHT (R)	546	429 *	3127	0.1372	0.1372
LEFT (L)	30	30	3127	0.0096	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.53
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

INTERSECTION 17 Fallon Rd./Antone Way City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



STREET NAME: Fallon Rd.

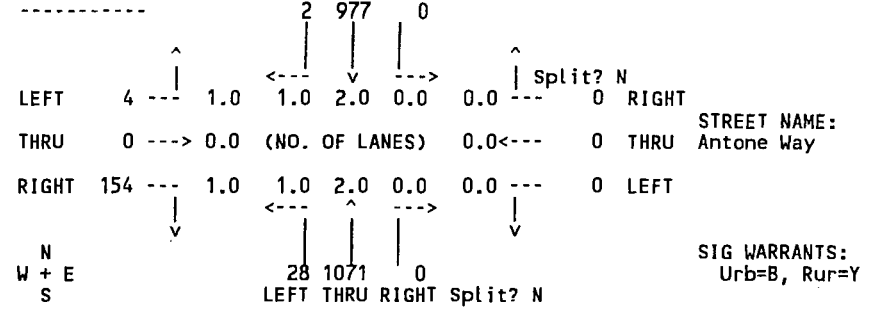
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	442	442	3440	0.1285	
NB LEFT (L)	15	15	1720	0.0087	0.0087
SB RIGHT (R)	2	0 *	1720	0.0000	
SB THRU (T)	1169	1169	3440	0.3398	0.3398
EB RIGHT (R)	40	25 *	1720	0.0145	0.0145
EB LEFT (L)	2	2	1720	0.0012	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.36
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

INTERSECTION 17 Fallon Rd./Antone Way City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1071	1071	3440	0.3113	0.3113
NB LEFT (L)	28	28	1720	0.0163	
SB RIGHT (R)	2	0 *	1720	0.0000	
SB THRU (T)	977	977	3440	0.2840	
EB RIGHT (R)	154	126 *	1720	0.0733	0.0733
EB LEFT (L)	4	4	1720	0.0023	

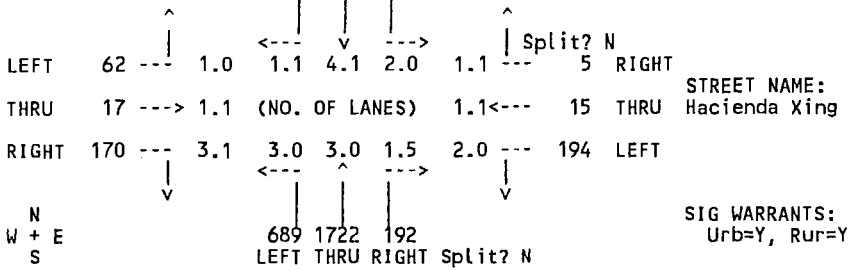
TOTAL VOLUME-TO-CAPACITY RATIO: 0.38
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL
 317 1789 10



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	192	85 *	1650	0.0515	
THRU (T)	1722	1722	4950	0.3479	
LEFT (L)	689	689	4304	0.1601	0.1601
SB RIGHT (R)	317	317	1650	0.1921	
THRU (T)	1789	1789	6600	0.2711	
LEFT (L)	10	10	3000	0.0033	
T + R		2106	6600	0.3191	0.3191
EB RIGHT (R)	170	0 *	4304	0.0000	
THRU (T)	17	17	1650	0.0103	0.0103
LEFT (L)	62	62	1650	0.0376	
T + R		17	4304	0.0039	
WB RIGHT (R)	5	5	1650	0.0030	
THRU (T)	15	15	1650	0.0091	
LEFT (L)	194	194	3000	0.0647	0.0647
T + R		20	1650	0.0121	

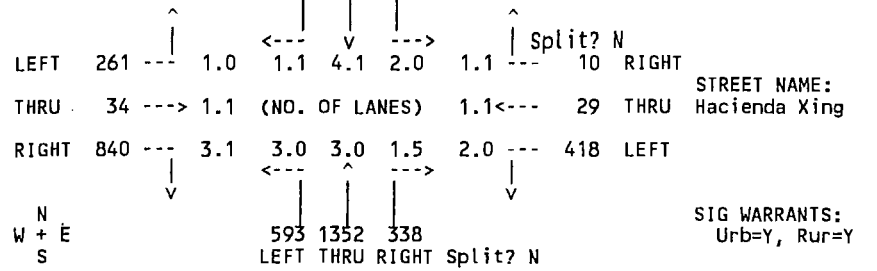
TOTAL VOLUME-TO-CAPACITY RATIO: 0.55
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL
 122 830 10



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Hacienda Dr

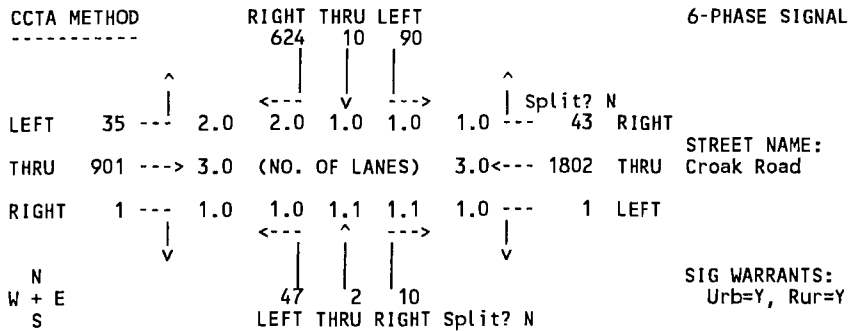
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	338	108 *	1650	0.0655	
THRU (T)	1352	1352	4950	0.2731	
LEFT (L)	593	593	4304	0.1378	0.1378
SB RIGHT (R)	122	122	1650	0.0739	
THRU (T)	830	830	6600	0.1258	
LEFT (L)	10	10	3000	0.0033	
T + R		952	6600	0.1442	0.1442
EB RIGHT (R)	840	613 *	4304	0.1424	
THRU (T)	34	34	1650	0.0206	
LEFT (L)	261	261	1650	0.1582	
T + R		647	4304	0.1503	0.1503
WB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	29	29	1650	0.0176	
LEFT (L)	418	418	3000	0.1393	0.1393
T + R		39	1650	0.0236	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.57
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015-AM Peak 07/18/05

INTERSECTION 19 Dublin Blvd./Croak Road City of Dublin
 Count Date Time Peak Hour



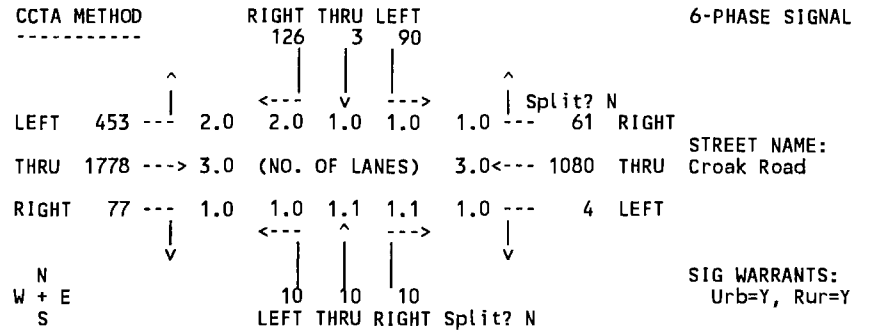
STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	2	2	1650	0.0012	
LEFT (L)	47	47	1650	0.0285	0.0285
T + R		12	1650	0.0073	
SB RIGHT (R)	624	605 *	3000	0.2017	0.2017
THRU (T)	10	10	1650	0.0061	
LEFT (L)	90	90	1650	0.0545	
EB RIGHT (R)	1	0 *	1650	0.0000	
THRU (T)	901	901	4950	0.1820	
LEFT (L)	35	35	3000	0.0117	0.0117
WB RIGHT (R)	43	0 *	1650	0.0000	
THRU (T)	1802	1802	4950	0.3640	0.3640
LEFT (L)	1	1	1650	0.0006	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.61	
INTERSECTION LEVEL OF SERVICE:				B	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=2015REV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015-PM Peak 07/18/05

INTERSECTION 19 Dublin Blvd./Croak Road City of Dublin
 Count Date Time Peak Hour



STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	10	10	1650	0.0061	
LEFT (L)	10	10	1650	0.0061	
T + R		20	1650	0.0121	0.0121
SB RIGHT (R)	126	0 *	3000	0.0000	
THRU (T)	3	3	1650	0.0018	
LEFT (L)	90	90	1650	0.0545	0.0545
EB RIGHT (R)	77	67 *	1650	0.0406	
THRU (T)	1778	1778	4950	0.3592	
LEFT (L)	453	453	3000	0.1510	0.1510
WB RIGHT (R)	61	0 *	1650	0.0000	
THRU (T)	1080	1080	4950	0.2182	0.2182
LEFT (L)	4	4	1650	0.0024	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.44	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 with Extensions-AM Peak 07/15/05

INTERSECTION	20 Fallon Rd./Central Pkwy.	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	8-PHASE SIGNAL
	509 1518 14	
LEFT	5 --- 1.0	1.0 3.0 1.0 1.0
THRU	8 ---> 1.0	(NO. OF LANES) 1.0<---
RIGHT	10 --- 1.0	2.0 3.0 1.0 2.0
		24 381 36
		LEFT THRU RIGHT Split? N
		SIG WARRANTS: Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	36	0 *	1650	0.0000	
THRU (T)	381	381	4950	0.0770	
LEFT (L)	24	24	3000	0.0080	0.0080
SB RIGHT (R)	509	504 *	1650	0.3055	
THRU (T)	1518	1518	4950	0.3067	0.3067
LEFT (L)	14	14	1650	0.0085	
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	8	8	1650	0.0048	0.0048
LEFT (L)	5	5	1650	0.0030	
WB RIGHT (R)	41	27 *	1650	0.0164	
THRU (T)	170	170	1650	0.1030	
LEFT (L)	514	514	3000	0.1713	0.1713

TOTAL VOLUME-TO-CAPACITY RATIO: 0.49
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV. INT, VOL=2015.AMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 with Extensions-PM Peak 07/15/05

INTERSECTION	20 Fallon Rd./Central Pkwy.	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	8-PHASE SIGNAL
	10 1181 46	
LEFT	20 --- 1.0	1.0 3.0 1.0 1.0
THRU	19 ---> 1.0	(NO. OF LANES) 1.0<---
RIGHT	10 --- 1.0	2.0 3.0 1.0 2.0
		0 1216 374
		LEFT THRU RIGHT Split? N
		SIG WARRANTS: Urb=N, Rur=N

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	374	345 *	1650	0.2091	
THRU (T)	1216	1216	4950	0.2457	0.2457
LEFT (L)	0	0	3000	0.0000	
SB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	1181	1181	4950	0.2386	
LEFT (L)	46	46	1650	0.0279	0.0279
EB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	19	19	1650	0.0115	0.0115
LEFT (L)	20	20	1650	0.0121	
WB RIGHT (R)	21	0 *	1650	0.0000	
THRU (T)	15	15	1650	0.0091	
LEFT (L)	53	53	3000	0.0177	0.0177

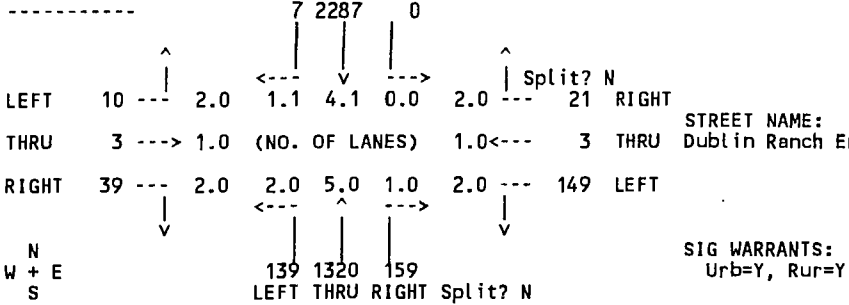
TOTAL VOLUME-TO-CAPACITY RATIO: 0.30
 INTERSECTION LEVEL OF SERVICE: A

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 07/03/05

INTERSECTION 21 Fallon Rd./Dublin Ranch Ent City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	159	77 *	1650	0.0467	
THRU (T)	1320	1320	8250	0.1600	
LEFT (L)	139	139	3000	0.0463	0.0463
SB RIGHT (R)	7	7	1650	0.0042	
THRU (T)	2287	2287	6600	0.3465	
T + R		2294	6600	0.3476	0.3476
EB RIGHT (R)	39	0 *	3000	0.0000	
THRU (T)	3	3	1650	0.0018	0.0018
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	21	21	3000	0.0070	
THRU (T)	3	3	1650	0.0018	
LEFT (L)	149	149	3000	0.0497	0.0497

TOTAL VOLUME-TO-CAPACITY RATIO: 0.45
INTERSECTION LEVEL OF SERVICE: A

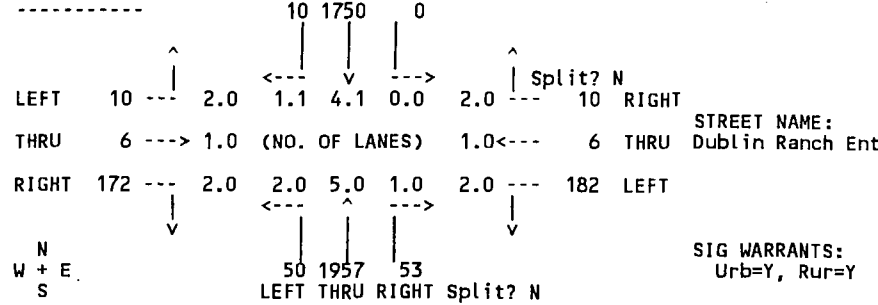
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT, VOL=2015.AMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 07/03/05

INTERSECTION 21 Fallon Rd./Dublin Ranch Ent City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



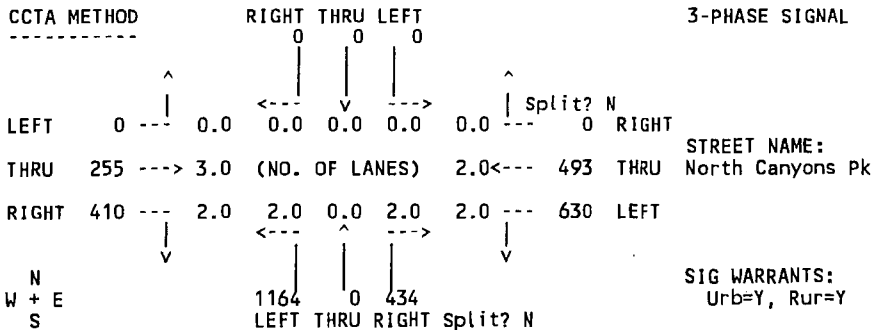
SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	53	0 *	1650	0.0000	
THRU (T)	1957	1957	8250	0.2372	
LEFT (L)	50	50	3000	0.0167	0.0167
SB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	1750	1750	6600	0.2652	
T + R		1760	6600	0.2667	0.2667
EB RIGHT (R)	172	145 *	3000	0.0483	0.0483
THRU (T)	6	6	1650	0.0036	
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	10	10	3000	0.0033	
THRU (T)	6	6	1650	0.0036	
LEFT (L)	182	182	3000	0.0607	0.0607

TOTAL VOLUME-TO-CAPACITY RATIO: 0.39
INTERSECTION LEVEL OF SERVICE: A

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05
 INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
 Count Date Time Peak Hour

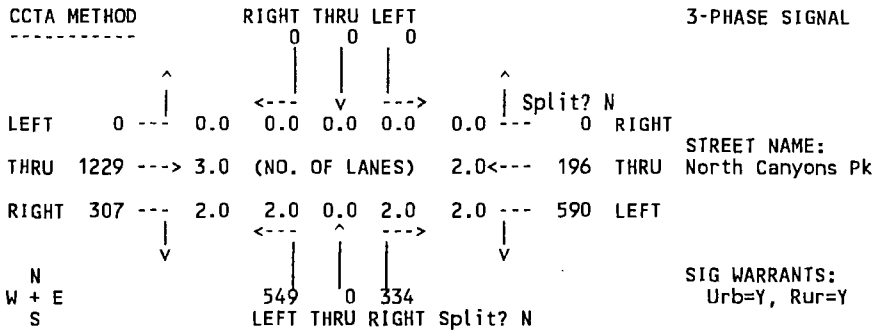


STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	434	87 *	3127	0.0278	
NB LEFT (L)	1164	1164	3127	0.3722	0.3722
EB RIGHT (R)	410	0 *	3127	0.0000	
EB THRU (T)	255	255	5160	0.0494	0.0494
WB THRU (T)	493	493	3440	0.1433	
WB LEFT (L)	630	630	3127	0.2015	0.2015
TOTAL VOLUME-TO-CAPACITY RATIO:				0.62	
INTERSECTION LEVEL OF SERVICE:				B	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05
 INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
 Count Date Time Peak Hour



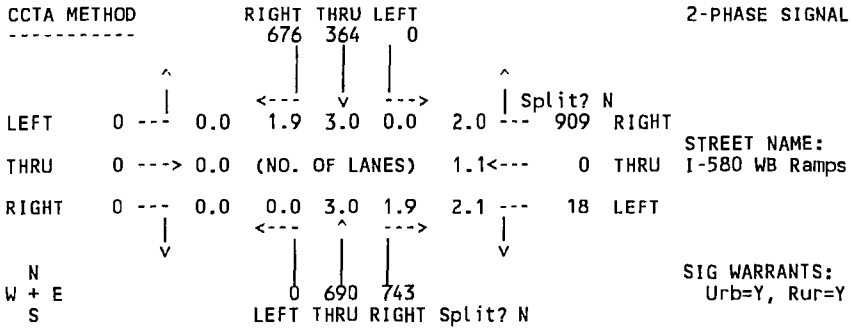
STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	334	9 *	3127	0.0029	
NB LEFT (L)	549	549	3127	0.1756	0.1756
EB RIGHT (R)	307	5 *	3127	0.0016	
EB THRU (T)	1229	1229	5160	0.2382	0.2382
WB THRU (T)	196	196	3440	0.0570	
WB LEFT (L)	590	590	3127	0.1887	0.1887
TOTAL VOLUME-TO-CAPACITY RATIO:				0.60	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 24 Airway Blvd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Airway Blvd.

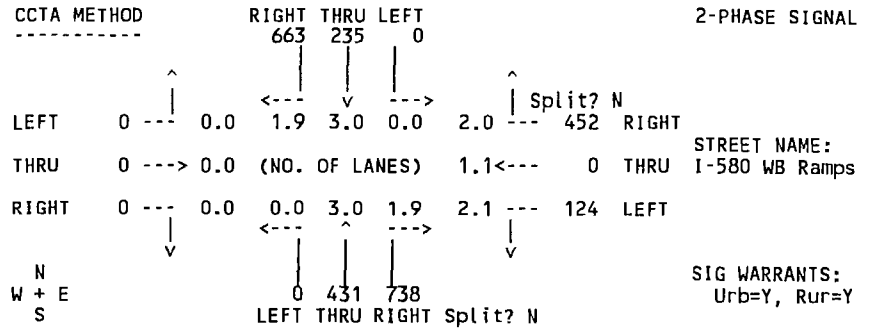
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	743	743	1800	0.4128	
THRU (T)	690	690	5400	0.1278	0.1278
SB RIGHT (R)	676	676	1800	0.3756	
THRU (T)	364	364	5400	0.0674	
WB RIGHT (R)	909	909	3273	0.2777	0.2777
THRU (T)	0	0	1800	0.0000	
LEFT (L)	18	18	3273	0.0055	
T + L		18	3273	0.0055	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOU.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 24 Airway Blvd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	738	738	1800	0.4100	
THRU (T)	431	431	5400	0.0798	0.0798
SB RIGHT (R)	663	663	1800	0.3683	
THRU (T)	235	235	5400	0.0435	
WB RIGHT (R)	452	452	3273	0.1381	0.1381
THRU (T)	0	0	1800	0.0000	
LEFT (L)	124	124	3273	0.0379	
T + L		124	3273	0.0379	

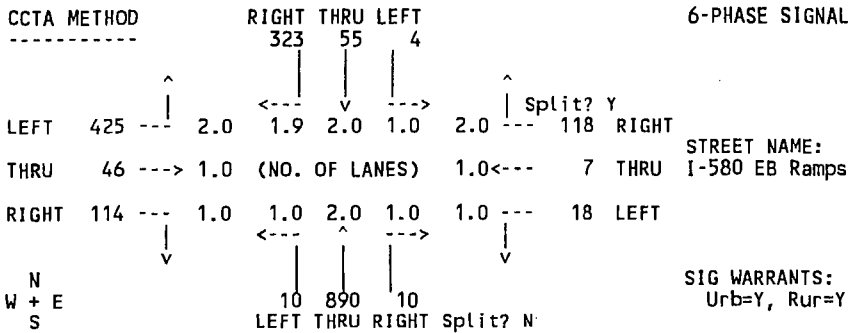
TOTAL VOLUME-TO-CAPACITY RATIO: 0.22
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOU.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 25 Airway Blvd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



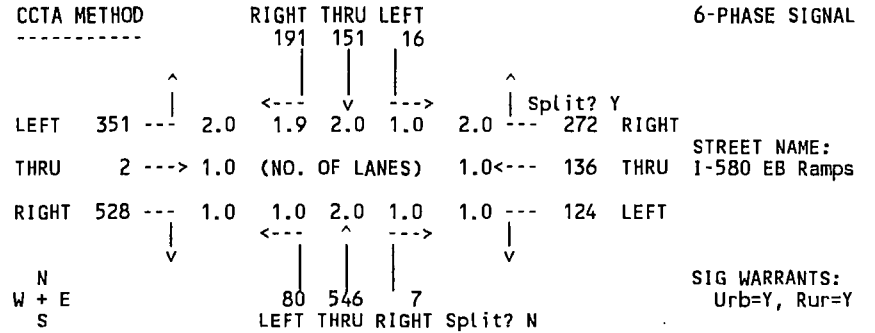
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	890	890	3300	0.2697	0.2697
LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	323	323	1650	0.1958	
THRU (T)	55	55	3300	0.0167	
LEFT (L)	4	4	1650	0.0024	0.0024
EB RIGHT (R)	114	104 *	1650	0.0630	
THRU (T)	46	46	1650	0.0279	
LEFT (L)	425	425	3000	0.1417	0.1417
WB RIGHT (R)	118	114 *	3000	0.0380	0.0380
THRU (T)	7	7	1650	0.0042	
LEFT (L)	18	18	1650	0.0109	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.45	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 25 Airway Blvd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	7	0 *	1650	0.0000	
THRU (T)	546	546	3300	0.1655	0.1655
LEFT (L)	80	80	1650	0.0485	
SB RIGHT (R)	191	191	1650	0.1158	
THRU (T)	151	151	3300	0.0458	
LEFT (L)	16	16	1650	0.0097	0.0097
EB RIGHT (R)	528	448 *	1650	0.2715	0.2715
THRU (T)	2	2	1650	0.0012	
LEFT (L)	351	351	3000	0.1170	
WB RIGHT (R)	272	256 *	3000	0.0853	0.0853
THRU (T)	136	136	1650	0.0824	
LEFT (L)	124	124	1650	0.0752	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.53	
INTERSECTION LEVEL OF SERVICE:				A	

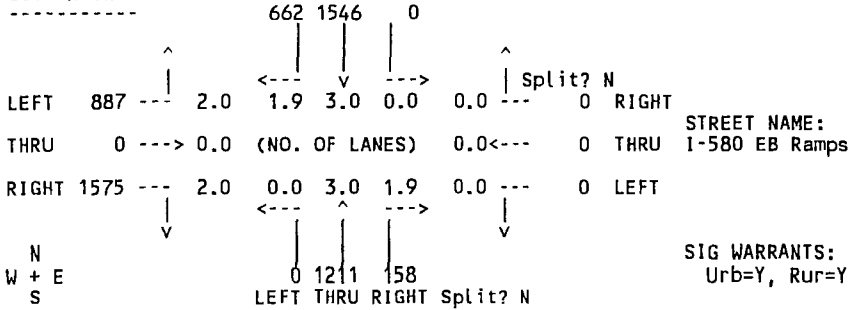
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



STREET NAME: Hopyard Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	158	158	1800	0.0878	
NB THRU (T)	1211	1211	5400	0.2243	
SB RIGHT (R)	662	662	1800	0.3678	
SB THRU (T)	1546	1546	5400	0.2863	0.2863
EB RIGHT (R)	1575	1575	3273	0.4812	0.4812
EB LEFT (L)	887	887	3273	0.2710	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.77
 INTERSECTION LEVEL OF SERVICE: C

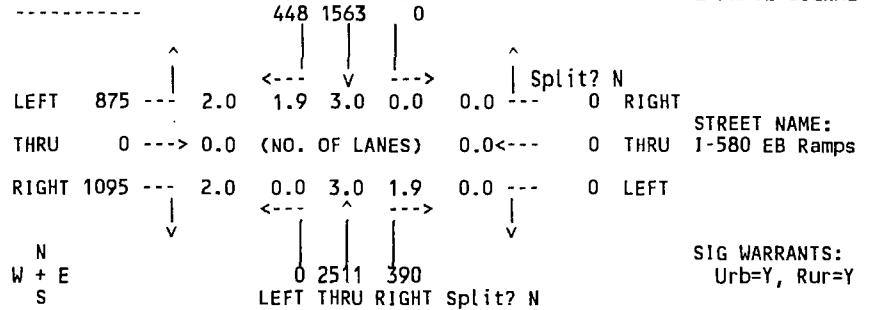
* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



STREET NAME: Hopyard Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	390	390	1800	0.2167	
NB THRU (T)	2511	2511	5400	0.4650	0.4650
SB RIGHT (R)	448	448	1800	0.2489	
SB THRU (T)	1563	1563	5400	0.2894	
EB RIGHT (R)	1095	1095	3273	0.3346	0.3346
EB LEFT (L)	875	875	3273	0.2673	

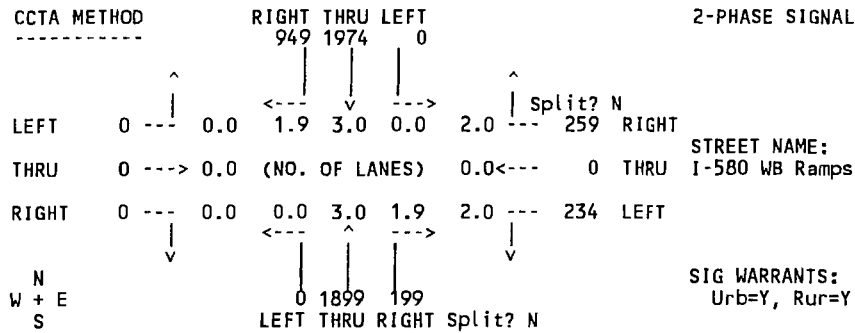
TOTAL VOLUME-TO-CAPACITY RATIO: 0.80
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	199	199	1800	0.1106	
THRU (T)	1899	1899	5400	0.3517	
SB RIGHT (R)	949	949	1800	0.5272	
THRU (T)	1974	1974	5400	0.3656	0.3656
WB RIGHT (R)	259	259	3273	0.0791	0.0791
LEFT (L)	234	234	3273	0.0715	

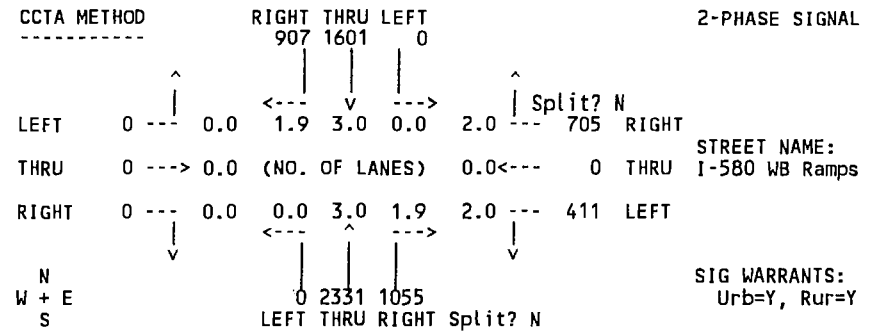
TOTAL VOLUME-TO-CAPACITY RATIO: 0.44
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1055	1055	1800	0.5861	
THRU (T)	2331	2331	5400	0.4317	0.4317
SB RIGHT (R)	907	907	1800	0.5039	
THRU (T)	1601	1601	5400	0.2965	
WB RIGHT (R)	705	705	3273	0.2154	0.2154
LEFT (L)	411	411	3273	0.1256	

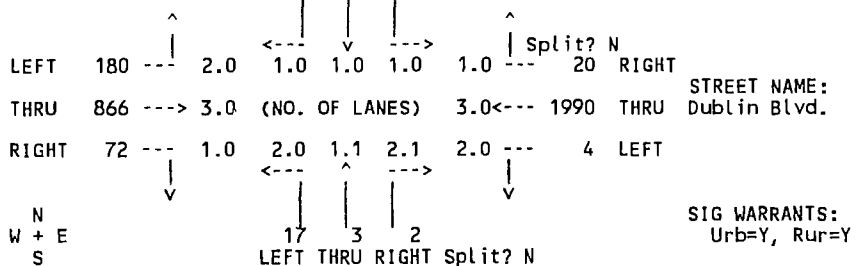
TOTAL VOLUME-TO-CAPACITY RATIO: 0.65
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- A.M. Peak 05/23/05

INTERSECTION 28 Arnold Rd./Dublin Blvd. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 ----- 213 6 1



STREET NAME: Arnold Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	2	0 *	3000	0.0000	
THRU (T)	3	3	1650	0.0018	
LEFT (L)	17	17	3000	0.0057	0.0057
T + R		3	3000	0.0010	
SB RIGHT (R)	213	114 *	1650	0.0691	0.0691
THRU (T)	6	6	1650	0.0036	
LEFT (L)	1	1	1650	0.0006	
EB RIGHT (R)	72	63 *	1650	0.0382	
THRU (T)	866	866	4950	0.1749	
LEFT (L)	180	180	3000	0.0600	0.0600
WB RIGHT (R)	20	19 *	1650	0.0115	
THRU (T)	1990	1990	4950	0.4020	0.4020
LEFT (L)	4	4	3000	0.0013	

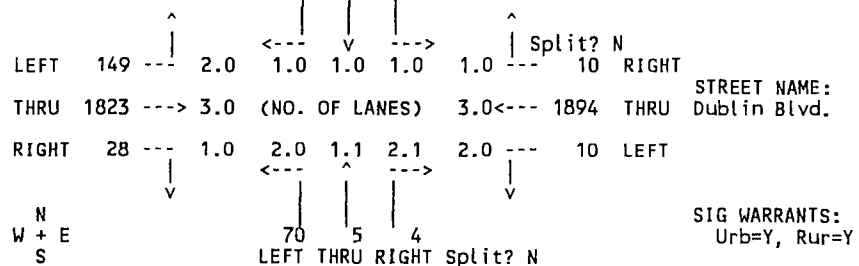
TOTAL VOLUME-TO-CAPACITY RATIO: 0.54
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

Condition: Year 2015 With Extensions- P.M. Peak 05/23/05

INTERSECTION 28 Arnold Rd./Dublin Blvd. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 ----- 393 12 10



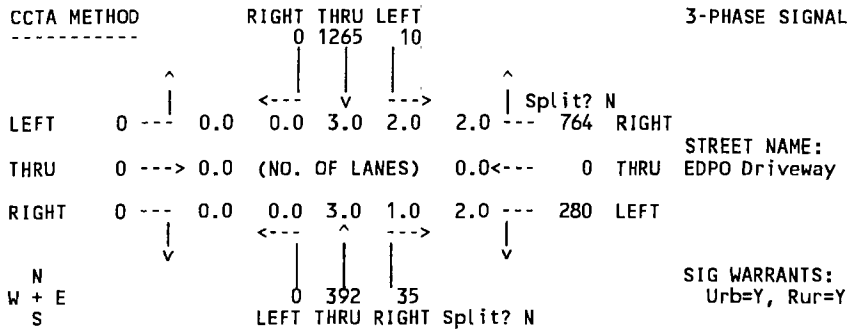
STREET NAME: Arnold Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	4	0 *	3000	0.0000	
THRU (T)	5	5	1650	0.0030	
LEFT (L)	70	70	3000	0.0233	0.0233
T + R		5	3000	0.0017	
SB RIGHT (R)	393	311 *	1650	0.1885	0.1885
THRU (T)	12	12	1650	0.0073	
LEFT (L)	10	10	1650	0.0061	
EB RIGHT (R)	28	0 *	1650	0.0000	
THRU (T)	1823	1823	4950	0.3683	
LEFT (L)	149	149	3000	0.0497	0.0497
WB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	1894	1894	4950	0.3826	0.3826
LEFT (L)	10	10	3000	0.0033	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=2015.PMV,CAP=...LOSCAP.TAB

INTERSECTION 29 Fallon Rd./EDPO Driveway City of Dublin
 Count Date Time Peak Hour



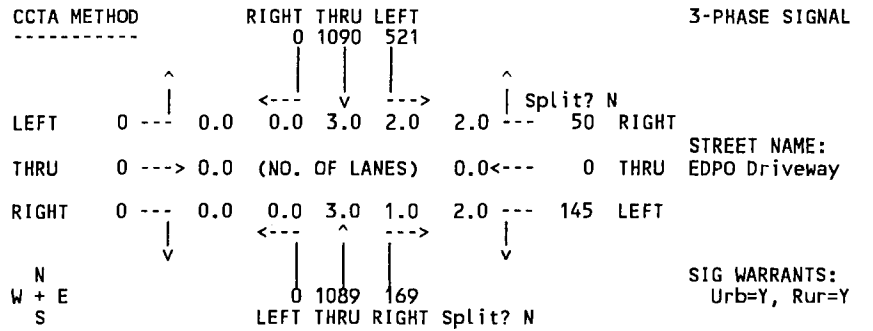
STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	35	0 *	1720	0.0000	
THRU (T)	392	392	5160	0.0760	
SB THRU (T)	1265	1265	5160	0.2452	0.2452
LEFT (L)	10	10	3127	0.0032	
WB RIGHT (R)	764	759 *	3127	0.2427	0.2427
LEFT (L)	280	280	3127	0.0895	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.49
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=2015.AMV,CAP=...LOSCAP.TAB

INTERSECTION 29 Fallon Rd./EDPO Driveway City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	169	89 *	1720	0.0517	
THRU (T)	1089	1089	5160	0.2110	0.2110
SB THRU (T)	1090	1090	5160	0.2112	
LEFT (L)	521	521	3127	0.1666	0.1666
WB RIGHT (R)	50	0 *	3127	0.0000	
LEFT (L)	145	145	3127	0.0464	0.0464

TOTAL VOLUME-TO-CAPACITY RATIO: 0.42
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VO

**APPENDIX D – LEVEL OF SERVICE WORKSHEETS: BUILDOUT
CONDITIONS**

TABLE 1: YEAR 2025 NO PROJECT LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50333	432	1356	1356	410	22	48	48	0	0	0	0	0
50301	0	0	0	0	0	0	0	0	0	0	0	0
50725	466	1491	1491	466	0	74	74	0	0	0	0	0
50763	0	0	0	0	0	303	227	0	0	0	0	76
50760	1500	3000	3000	0	1500	2185	0	2185	0	0	0	0
50327	0	0	0	0	0	6600	0	6600	0	0	0	0
50740	0	0	0	0	0	0	0	0	0	0	0	0
50764	205	410	410	0	205	280	77	0	0	0	28	173
50319	271	542	542	0	271	7	7	0	0	0	0	0
50739	0	0	0	0	0	0	0	0	0	0	0	0
50322	0	0	0	0	0	0	0	0	0	0	0	0
50323	697	2230	2230	697	0	0	0	0	0	0	0	0
50727	246	492	492	0	246	0	0	0	0	0	0	0
50602	304	608	608	0	304	1308	430	878	0	0	0	0
50730	0	0	0	0	0	540	210	330	0	0	0	0
50307	0	0	0	0	0	2574	1750	534	0	0	0	289
50731	0	0	0	0	0	419	419	0	0	0	0	0
50308	0	0	0	0	0	1526	1456	70	0	0	0	0
50331	0	0	0	0	0	594	110	483	0	0	0	0
50732	0	0	0	0	0	523	523	0	0	0	0	0
50310	211	638	638	180	31	157	0	157	0	0	0	0
50304	546	1514	1514	352	194	136	0	136	0	0	0	0
50311	378	1209	1209	378	0	0	0	0	0	0	0	0
50303	469	1500	1500	469	0	54	7	38	0	0	0	8
50312	277	886	886	277	0	142	142	0	0	0	0	0
50317	667	2134	2134	667	0	0	0	0	0	0	0	0
50738	240	480	480	0	240	0	0	0	0	0	0	0
50320	728	1663	1663	173	555	0	0	0	0	0	0	0
50321	1112	2398	2398	145	967	0	0	0	0	0	0	0
50302	292	846	846	219	73	0	0	0	0	0	0	0
50728	380	1216	1216	380	0	0	0	0	0	0	0	0
50316	505	1616	1616	505	0	1	1	0	0	0	0	0
50736	0	0	0	0	0	187	187	0	0	0	0	0
50314	492	1574	1574	492	0	49	43	5	0	0	0	0
50726	370	1184	1184	370	0	0	0	0	0	0	0	0
50313	637	2007	2007	611	26	0	0	0	0	0	0	0

TABLE 1: YEAR 2025 NO PROJECT LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50729	0	0	0	0	0	448	0	329	0	0	118	0
50306	0	0	0	0	0	501	141	359	0	0	0	0
50305	455	1019	1019	91	364	510	230	279	0	0	0	0
50733	0	0	0	0	0	438	390	47	0	0	0	0
50734	0	0	0	0	0	229	224	5	0	0	0	0
50330	0	0	0	0	0	595	301	293	0	0	0	0
50318	0	0	0	0	0	2619	329	231	0	0	1322	736
50737	0	0	0	0	0	174	145	28	0	0	0	0
50309	0	0	0	0	0	591	472	104	0	0	0	14
50328	0	0	0	0	0	573	200	0	0	0	339	33
50329	0	0	0	0	0	337	215	0	0	0	0	122
50315	11	35	35	11	0	0	0	0	0	0	0	0
50735	175	560	560	175	0	28	0	28	0	0	0	0
50793	0	0	0	0	0	995	0	0	0	0	995	0
50794	0	0	0	0	0	786	0	0	0	0	786	0
50789	97	310	310	97	0	0	0	0	0	0	0	0
50796	0	0	0	0	0	2839	0	2839	0	0	0	0
50795	0	0	0	0	0	4294	0	4294	0	0	0	0
50778	907	2902	2902	907	0	289	289	0	0	0	0	0
50780	489	978	978	0	489	368	368	0	0	0	0	0
50781	252	806	806	252	0	0	0	0	0	0	0	0
50775	1202	2730	2730	272	930	0	0	0	0	0	0	0
50783	0	0	0	0	0	694	694	0	0	0	0	0
50779	420	1344	1344	420	0	0	0	0	0	0	0	0
50785	540	1080	1080	0	540	0	0	0	0	0	0	0
50774	121	387	387	121	0	0	0	0	0	0	0	0
50782	117	374	374	117	0	0	0	0	0	0	0	0
50784	168	537	537	168	0	0	0	0	0	0	0	0
50765	204	652	652	204	0	0	0	0	0	0	0	0
50332	314	1004	1004	314	0	0	0	0	0	0	0	0
50750	0	0	0	0	0	0	0	0	0	0	0	0
50748	259	828	828	259	0	0	0	0	0	0	0	0
50749	0	0	0	0	0	2210	0	2210	0	0	0	0
50746	0	0	0	0	0	0	0	0	0	0	0	0
50772	202	646	646	202	0	0	0	0	0	0	0	0
50771	0	0	0	0	0	0	0	0	0	0	0	0
50788	674	1940	1940	494	180	384	384	0	0	0	0	0
50773	205	656	656	205	0	0	0	0	0	0	0	0
50769	363	1161	1161	363	0	0	0	0	0	0	0	0
50334	417	1334	1334	417	0	0	0	0	0	0	0	0

TABLE 1: YEAR 2025 NO PROJECT LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50790	352	1052	1052	290	62	0	0	0	0	0	0	0
50787	515	1648	1648	515	0	0	0	0	0	0	0	0
50766	422	1350	1350	422	0	0	0	0	0	0	0	0
50786	111	355	355	111	0	0	0	0	0	0	0	0
50767	110	352	352	110	0	0	0	0	0	0	0	0
50768	250	800	800	250	0	0	0	0	0	0	0	0
50325	0	0	0	0	0	0	0	0	0	0	0	0
50324	0	0	0	0	0	0	0	0	0	0	0	0
50770	227	584	584	109	118	0	0	0	0	0	0	0
50744	356	872	872	134	222	168	168	0	0	0	0	0
50757	0	0	0	0	0	367	367	0	0	0	0	0
50758	0	0	0	0	0	2140	171	1969	0	0	0	0
50336	0	0	0	0	0	2825	2825	0	0	0	0	0
50759	0	0	0	0	0	271	271	0	0	0	0	0
50326	0	0	0	0	0	1179	1179	0	0	0	0	0
50751	277	738	738	154	123	0	0	0	0	0	0	0
50756	324	648	648	0	324	0	0	0	0	0	0	0
50755	368	736	736	0	368	0	0	0	0	0	0	0
50753	88	224	224	40	48	0	0	0	0	0	0	0
50747	0	0	0	0	0	0	0	0	0	0	0	0
50741	0	0	0	0	0	3122	0	3122	0	0	0	0
50761	0	0	0	0	0	1293	1293	0	0	0	0	0
50762	0	0	0	0	0	1414	0	1414	0	0	0	0
50798	0	0	0	0	0	0	0	0	0	0	0	0
50742	0	0	0	0	0	1430	0	1430	0	0	0	0
50743	0	0	0	0	0	1386	0	1386	0	0	0	0
50754	390	780	780	0	390	383	383	0	0	0	0	0
50752	295	761	761	143	152	0	0	0	0	0	0	0
50745	120	240	240	0	120	0	0	0	0	0	0	0
50797	0	0	0	0	0	1072	1072	0	0	0	0	0
50791	431	882	882	17	414	0	0	0	0	0	0	0
50799	0	0	0	0	0	1276	1276	0	0	0	0	0
50792	0	0	0	0	0	0	0	0	0	0	0	0
50777	378	1209	1209	378	0	0	0	0	0	0	0	0
50776	0	0	0	0	0	389	389	0	0	0	0	0

Notes: TOTHH=Total Households, HHPOP=Household Population, TOTPOP=Total Population, SFDU=No. of Households in Single Family Dwelling Units
MFDU= No. of Households in Multi Family Dwelling Units, TOTEMP=Total Employment, RETEMP=Retail Employment, SEREMP=Service Employment
OTHEMP=Other Employment, ARGEMP=Agricultural Employment, MFGEMP=Manufacturing Employment, TRDEMP=Wholesale Employment

```

=====
Condition: Buildout- AM Peak                                04/05/05
=====
INTERSECTION      1 Dougherty/Dublin                      City of Dublin
Count Date        Time                                    Peak Hour
-----
CCTA METHOD        RIGHT THRU LEFT                                         8-PHASE SIGNAL
-----
                   133 2149  14
                   |   |   |
                   v   v   |
LEFT  156  --- 2.0  <--- 1.1 4.1 2.0  1.0  --- Split? N
                   |   |   |   |   |
THRU 1169 ---> 3.0  (NO. OF LANES)  3.0<--- 1603 THRU
                   |   |   |   |   |
RIGHT 577 --- 2.0  <--- 3.0 3.0 2.0  3.0  --- 318 LEFT
                   |   |   |   |   |
                   199 1192 959
                   |   |   |
                   v   v   |
N
W + E
S
                   LEFT THRU RIGHT Split? N
SIG WARRANTS:
Urb=Y, Rur=Y
    
```

STREET NAME: Dougherty

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	959	837 *	3000	0.2790	
THRU (T)	1192	1192	4950	0.2408	
LEFT (L)	199	199	4304	0.0462	0.0462
SB RIGHT (R)	133	133	1650	0.0806	
THRU (T)	2149	2149	6600	0.3256	
LEFT (L)	14	14	3000	0.0047	
T + R		2282	6600	0.3458	0.3458
EB RIGHT (R)	577	501 *	3000	0.1670	
THRU (T)	1169	1169	4950	0.2362	
LEFT (L)	156	156	3000	0.0520	0.0520
WB RIGHT (R)	31	23 *	1650	0.0139	
THRU (T)	1603	1603	4950	0.3238	0.3238
LEFT (L)	318	318	4304	0.0739	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.77	
INTERSECTION LEVEL OF SERVICE:				C	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

```

=====
Condition: Buildout- PM Peak                                04/05/05
=====
INTERSECTION      1 Dougherty/Dublin                      City of Dublin
Count Date        Time                                    Peak Hour
-----
CCTA METHOD        RIGHT THRU LEFT                                         8-PHASE SIGNAL
-----
                   130 1336  35
                   |   |   |
                   v   v   |
LEFT  262  --- 2.0  <--- 1.1 4.1 2.0  1.0  --- Split? N
                   |   |   |   |   |
THRU 1447 ---> 3.0  (NO. OF LANES)  3.0<--- 1667 THRU
                   |   |   |   |   |
RIGHT 580 --- 2.0  <--- 3.0 3.0 2.0  3.0  --- 777 LEFT
                   |   |   |   |   |
                   1015 1882 499
                   |   |   |
                   v   v   |
N
W + E
S
                   LEFT THRU RIGHT Split? N
SIG WARRANTS:
Urb=Y, Rur=Y
    
```

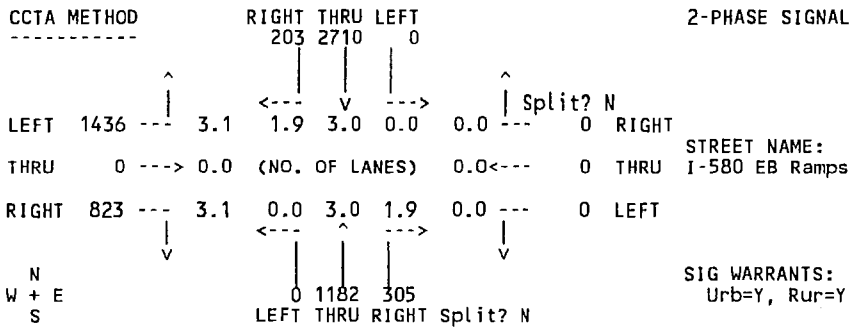
STREET NAME: Dougherty

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	499	201 *	3000	0.0670	
THRU (T)	1882	1882	4950	0.3802	
LEFT (L)	1015	1015	4304	0.2358	0.2358
SB RIGHT (R)	130	130	1650	0.0788	
THRU (T)	1336	1336	6600	0.2024	
LEFT (L)	35	35	3000	0.0117	
T + R		1466	6600	0.2221	0.2221
EB RIGHT (R)	580	191 *	3000	0.0637	
THRU (T)	1447	1447	4950	0.2923	0.2923
LEFT (L)	262	262	3000	0.0873	
WB RIGHT (R)	28	9 *	1650	0.0055	
THRU (T)	1667	1667	4950	0.3368	
LEFT (L)	777	777	4304	0.1805	0.1805
TOTAL VOLUME-TO-CAPACITY RATIO:				0.93	
INTERSECTION LEVEL OF SERVICE:				E	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

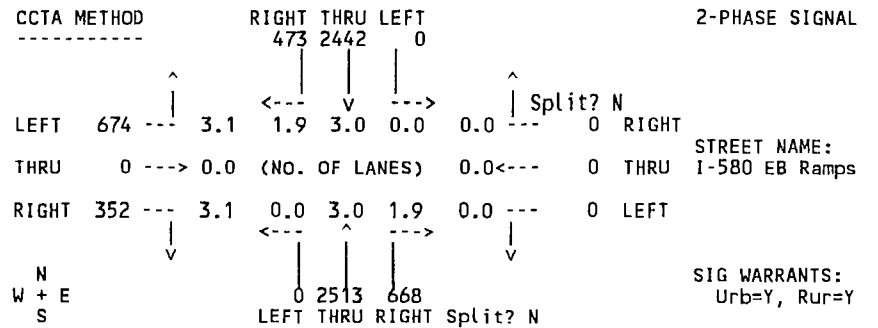
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	305	305	1800	0.1694	
THRU (T)	1182	1182	5400	0.2189	
SB RIGHT (R)	203	203	1800	0.1128	
THRU (T)	2710	2710	5400	0.5019	0.5019
EB RIGHT (R)	823	823	4695	0.1753	
LEFT (L)	1436	1436	4695	0.3059	0.3059
T + R + L		2259	7590	0.2976	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT, VOL=BDAP4.AMV, CAP=...LOSCAP.TAB

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	668	668	1800	0.3711	
THRU (T)	2513	2513	5400	0.4654	0.4654
SB RIGHT (R)	473	473	1800	0.2628	
THRU (T)	2442	2442	5400	0.4522	
EB RIGHT (R)	352	352	4695	0.0750	
LEFT (L)	674	674	4695	0.1436	0.1436
T + R + L		1026	7590	0.1352	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.61
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT, VOL=BDAP1.PMV, CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 1086 1290 0

LEFT 0 --- 0.0 1.9 3.0 0.0 3.1 --- Split? N 308 RIGHT
 THRU 0 ---> 0.0 (NO. OF LANES) 0.0<--- 0 THRU I-580 WB Ramps
 RIGHT 0 --- 0.0 0.0 3.0 1.9 3.1 --- 1623 LEFT

N
 W + E
 S

0 2511 107
 LEFT THRU RIGHT Split? N

SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	107	107	1800	0.0594	
THRU (T)	2511	2511	5400	0.4650	0.4650
SB RIGHT (R)	1086	1086	1800	0.6033	
THRU (T)	1290	1290	5400	0.2389	
WB RIGHT (R)	308	308	4695	0.0656	
LEFT (L)	1623	1623	4695	0.3457	0.3457
T + R + L		1931	7590	0.2544	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.81	
INTERSECTION LEVEL OF SERVICE:				D	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 936 1735 0

LEFT 0 --- 0.0 1.9 3.0 0.0 3.1 --- Split? N 441 RIGHT
 THRU 0 ---> 0.0 (NO. OF LANES) 0.0<--- 0 THRU I-580 WB Ramps
 RIGHT 0 --- 0.0 0.0 3.0 1.9 3.1 --- 1343 LEFT

N
 W + E
 S

0 2012 1175
 LEFT THRU RIGHT Split? N

SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1175	1175	1800	0.6528	
THRU (T)	2012	2012	5400	0.3726	0.3726
SB RIGHT (R)	936	936	1800	0.5200	
THRU (T)	1735	1735	5400	0.3213	
WB RIGHT (R)	441	441	4695	0.0939	
LEFT (L)	1343	1343	4695	0.2860	0.2860
T + R + L		1784	7590	0.2350	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.66	
INTERSECTION LEVEL OF SERVICE:				B	

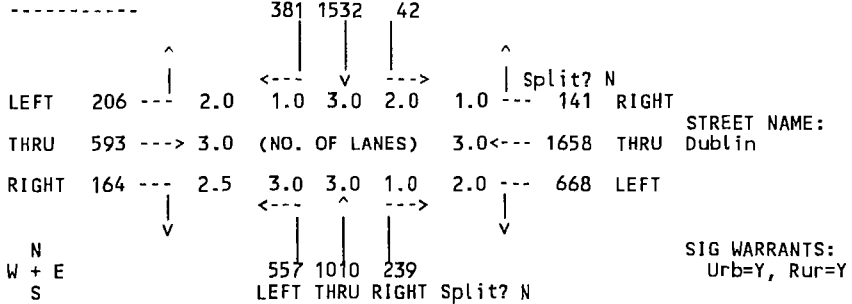
* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 4 Hacienda Dr./Dublin City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	239	0 *	1650	0.0000	
THRU (T)	1010	1010	4950	0.2040	
LEFT (L)	557	557	4304	0.1294	0.1294
SB RIGHT (R)	381	268 *	1650	0.1624	
THRU (T)	1532	1532	4950	0.3095	0.3095
LEFT (L)	42	42	3000	0.0140	
EB RIGHT (R)	164	0 *	3000	0.0000	
THRU (T)	593	593	4950	0.1198	
LEFT (L)	206	206	3000	0.0687	0.0687
WB RIGHT (R)	141	118 *	1650	0.0715	
THRU (T)	1658	1658	4950	0.3349	0.3349
LEFT (L)	668	668	3000	0.2227	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84
INTERSECTION LEVEL OF SERVICE: D

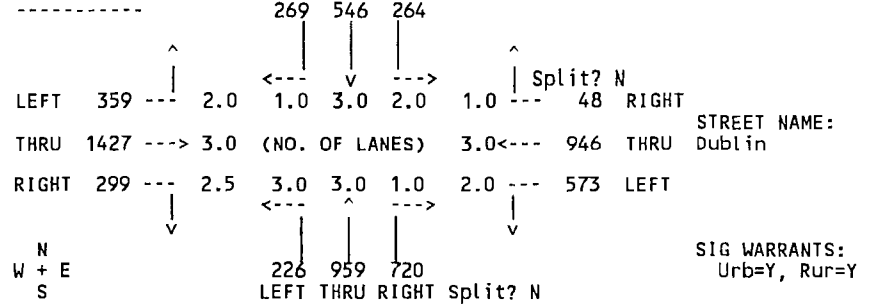
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 4 Hacienda Dr./Dublin City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	720	405 *	1650	0.2455	0.2455
THRU (T)	959	959	4950	0.1937	
LEFT (L)	226	226	4304	0.0525	
SB RIGHT (R)	269	72 *	1650	0.0436	
THRU (T)	546	546	4950	0.1103	
LEFT (L)	264	264	3000	0.0880	0.0880
EB RIGHT (R)	299	141 *	3000	0.0470	
THRU (T)	1427	1427	4950	0.2883	0.2883
LEFT (L)	359	359	3000	0.1197	
WB RIGHT (R)	48	0 *	1650	0.0000	
THRU (T)	946	946	4950	0.1911	
LEFT (L)	573	573	3000	0.1910	0.1910

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout-AM Peak 07/02/05

INTERSECTION	5 Hacienda Dr./Central Pkwy	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD		
LEFT	2	1.0
THRU	39	2.0
RIGHT	10	1.5
STREET NAME: Central Pkwy		
SIG WARRANTS: Urb=Y, Rur=Y		

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	72	0 *	1650	0.0000	
THRU (T)	1225	1225	3300	0.3712	0.3712
LEFT (L)	19	19	3000	0.0063	
SB RIGHT (R)	39	37 *	1650	0.0224	
THRU (T)	1129	1129	3300	0.3421	
LEFT (L)	9	9	1650	0.0055	0.0055
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	39	39	3300	0.0118	0.0118
LEFT (L)	2	2	1650	0.0012	
WB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	47	47	3300	0.0142	
LEFT (L)	803	803	1650	0.4867	0.4867

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/02/05

INTERSECTION	5 Hacienda Dr./Central Pkwy	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD		
LEFT	20	1.0
THRU	137	2.0
RIGHT	10	1.5
STREET NAME: Central Pkwy		
SIG WARRANTS: Urb=Y, Rur=Y		

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	488	237 *	1650	0.1436	
THRU (T)	757	757	3300	0.2294	0.2294
LEFT (L)	1	1	3000	0.0003	
SB RIGHT (R)	4	0 *	1650	0.0000	
THRU (T)	650	650	3300	0.1970	
LEFT (L)	17	17	1650	0.0103	0.0103
EB RIGHT (R)	10	9 *	1650	0.0055	
THRU (T)	137	137	3300	0.0415	0.0415
LEFT (L)	20	20	1650	0.0121	
WB RIGHT (R)	13	0 *	1650	0.0000	
THRU (T)	36	36	3300	0.0109	
LEFT (L)	251	251	1650	0.1521	0.1521

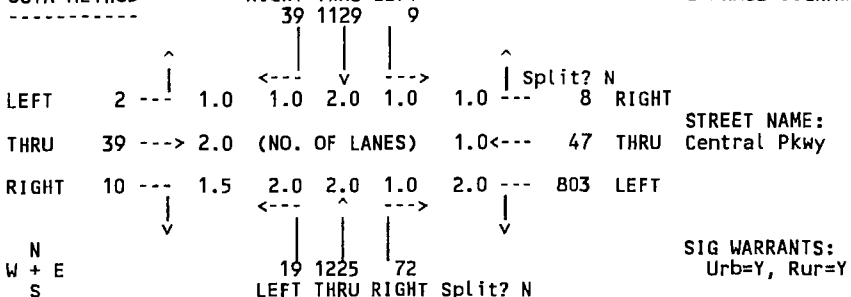
TOTAL VOLUME-TO-CAPACITY RATIO: 0.43
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout-AM Peak Mitigated 07/02/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	72	0 *	1650	0.0000	
THRU (T)	1225	1225	3300	0.3712	0.3712
LEFT (L)	19	19	3000	0.0063	
SB RIGHT (R)	39	37 *	1650	0.0224	
THRU (T)	1129	1129	3300	0.3421	
LEFT (L)	9	9	1650	0.0055	0.0055
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	39	39	3300	0.0118	0.0118
LEFT (L)	2	2	1650	0.0012	
WB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	47	47	1650	0.0285	
LEFT (L)	803	803	3000	0.2677	0.2677

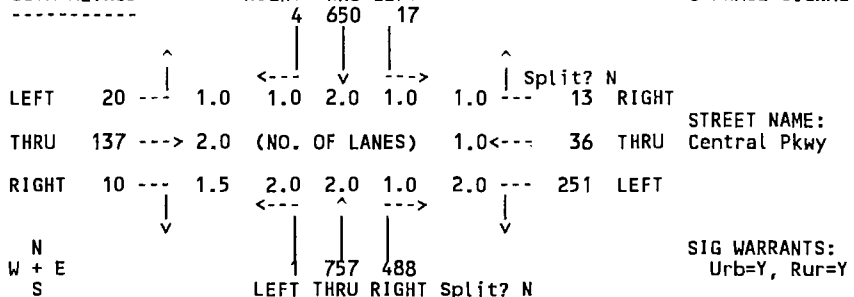
TOTAL VOLUME-TO-CAPACITY RATIO: 0.66
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT, VOL=BDAP4.AMV, CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak Mitigated 07/02/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	488	350 *	1650	0.2121	
THRU (T)	757	757	3300	0.2294	0.2294
LEFT (L)	1	1	3000	0.0003	
SB RIGHT (R)	4	0 *	1650	0.0000	
THRU (T)	650	650	3300	0.1970	
LEFT (L)	17	17	1650	0.0103	0.0103
EB RIGHT (R)	10	9 *	1650	0.0055	
THRU (T)	137	137	3300	0.0415	0.0415
LEFT (L)	20	20	1650	0.0121	
WB RIGHT (R)	13	0 *	1650	0.0000	
THRU (T)	36	36	1650	0.0218	
LEFT (L)	251	251	3000	0.0837	0.0837

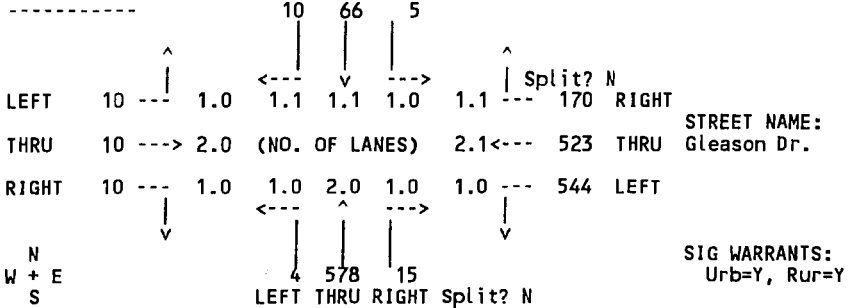
TOTAL VOLUME-TO-CAPACITY RATIO: 0.36
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT, VOL=BDAP1.PMV, CAP=...LOSCAP.TAB

Condition: Buildout-AM Peak 07/02/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	15	0 *	1650	0.0000	
THRU (T)	578	578	3300	0.1752	0.1752
LEFT (L)	4	4	1650	0.0024	
SB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	66	66	1650	0.0400	
LEFT (L)	5	5	1650	0.0030	0.0030
T + R		76	1650	0.0461	
EB RIGHT (R)	10	6 *	1650	0.0036	0.0036
THRU (T)	10	10	3300	0.0030	
LEFT (L)	10	10	1650	0.0061	
WB RIGHT (R)	170	170	1650	0.1030	
THRU (T)	523	523	3300	0.1585	
LEFT (L)	544	544	1650	0.3297	0.3297
T + R		693	3300	0.2100	

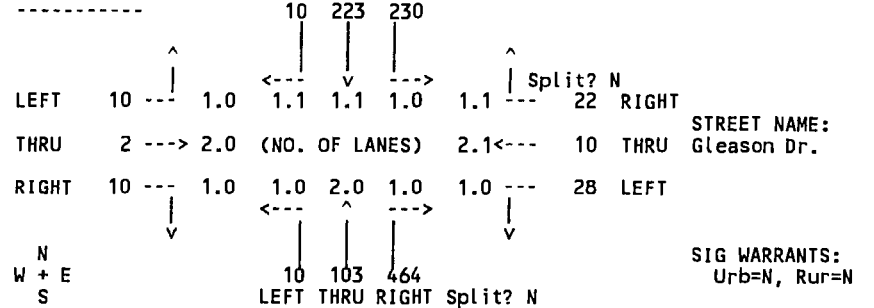
TOTAL VOLUME-TO-CAPACITY RATIO: 0.51
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/02/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	464	436 *	1650	0.2642	0.2642
THRU (T)	103	103	3300	0.0312	
LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	223	223	1650	0.1352	
LEFT (L)	230	230	1650	0.1394	0.1394
T + R		233	1650	0.1412	
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	2	2	3300	0.0006	
LEFT (L)	10	10	1650	0.0061	0.0061
WB RIGHT (R)	22	22	1650	0.0133	0.0133
THRU (T)	10	10	3300	0.0030	
LEFT (L)	28	28	1650	0.0170	
T + R		32	3300	0.0097	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.42
INTERSECTION LEVEL OF SERVICE: A

Condition: Buildout-AM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD 7-PHASE SIGNAL

RIGHT 452 2103 LEFT 240

LEFT 613 2.0 1.9 2.0 1.0 2.5 Split? N 416 RIGHT

THRU 141 1.0 (NO. OF LANES) 0.0 0 THRU I-580 EB Ramps

RIGHT 596 1.9 0.0 4.1 1.1 2.0 126 LEFT

N
W + E
S

0 1933 364
LEFT THRU RIGHT Split? N

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1933	1933	6600	0.2929	
T + R		2297	6600	0.3480	
SB RIGHT (R)	452	452	1650	0.2739	
THRU (T)	2103	2103	3300	0.6373	0.6373
LEFT (L)	240	240	1650	0.1455	
EB RIGHT (R)	596	596	1650	0.3612	
THRU (T)	141	141	1650	0.0855	
LEFT (L)	613	613	3000	0.2043	0.2043
WB RIGHT (R)	416	0 *	3000	0.0000	0.0000
LEFT (L)	126	126	3000	0.0420	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD 7-PHASE SIGNAL

RIGHT 873 1796 LEFT 280

LEFT 1049 2.0 1.9 2.0 1.0 2.5 Split? N 498 RIGHT

THRU 78 1.0 (NO. OF LANES) 0.0 0 THRU I-580 EB Ramps

RIGHT 63 1.9 0.0 4.1 1.1 2.0 124 LEFT

N
W + E
S

0 2448 211
LEFT THRU RIGHT Split? N

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	211	211	1650	0.1279	
THRU (T)	2448	2448	6600	0.3709	
T + R		2659	6600	0.4029	0.4029
SB RIGHT (R)	873	873	1650	0.5291	
THRU (T)	1796	1796	3300	0.5442	
LEFT (L)	280	280	1650	0.1697	0.1697
EB RIGHT (R)	63	63	1650	0.0382	
THRU (T)	78	78	1650	0.0473	
LEFT (L)	1049	1049	3000	0.3497	0.3497
WB RIGHT (R)	498	0 *	3000	0.0000	0.0000
LEFT (L)	124	124	3000	0.0413	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.92
 INTERSECTION LEVEL OF SERVICE: E

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout-AM Peak Mit 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL
452 2103 240

LEFT 613 3.0 1.9 2.0 1.0 2.5 Split? N 416 RIGHT
THRU 141 1.0 (NO. OF LANES) 0.0<--- 0 THRU STREET NAME:
RIGHT 596 1.9 0.0 4.1 1.1 2.0 --- 126 LEFT I-580 EB Ramps
N
W + E 0 1933 364
S LEFT THRU RIGHT Split? N
SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1933	1933	6600	0.2929	
T + R		2297	6600	0.3480	
SB RIGHT (R)	452	452	1650	0.2739	
THRU (T)	2103	2103	3300	0.6373	0.6373
LEFT (L)	240	240	1650	0.1455	
EB RIGHT (R)	596	596	1650	0.3612	
THRU (T)	141	141	1650	0.0855	
LEFT (L)	613	613	4304	0.1424	0.1424
WB RIGHT (R)	416	0 *	3000	0.0000	0.0000
LEFT (L)	126	126	3000	0.0420	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.78
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout-PM Peak Mit 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL
873 1796 280

LEFT 1049 3.0 1.9 2.0 1.0 2.5 Split? N 498 RIGHT
THRU 78 1.0 (NO. OF LANES) 0.0<--- 0 THRU STREET NAME:
RIGHT 63 1.9 0.0 4.1 1.1 2.0 --- 124 LEFT I-580 EB Ramps
N
W + E 0 2448 211
S LEFT THRU RIGHT Split? N
SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	211	211	1650	0.1279	
THRU (T)	2448	2448	6600	0.3709	
T + R		2659	6600	0.4029	0.4029
SB RIGHT (R)	873	873	1650	0.5291	
THRU (T)	1796	1796	3300	0.5442	
LEFT (L)	280	280	1650	0.1697	0.1697
EB RIGHT (R)	63	63	1650	0.0382	
THRU (T)	78	78	1650	0.0473	
LEFT (L)	1049	1049	4304	0.2437	0.2437
WB RIGHT (R)	498	0 *	3000	0.0000	0.0000
LEFT (L)	124	124	3000	0.0413	

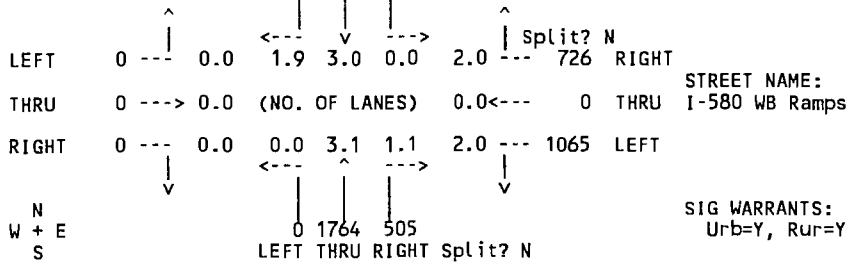
TOTAL VOLUME-TO-CAPACITY RATIO: 0.82
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED

Condition: Buildout-AM Peak 07/15/05

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
----- 1871 1729 0



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	505	505	1800	0.2806	
THRU (T)	1764	1764	5400	0.3267	
T + R		2269	5400	0.4202	0.4202
SB RIGHT (R)	1871	1871	1800	1.0394 **	
THRU (T)	1729	1729	5400	0.3202	
WB RIGHT (R)	726	726	3273	0.2218	
LEFT (L)	1065	1065	3273	0.3254	0.3254

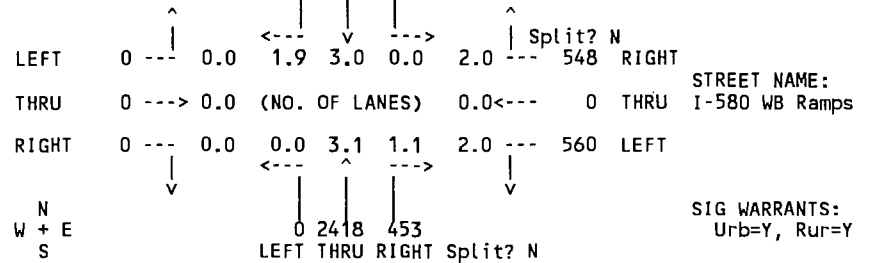
TOTAL VOLUME-TO-CAPACITY RATIO: 0.75
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED ** APPROACHING OR EXCEEDING CAPACITY
INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/15/05

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
----- 1673 2389 0



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	453	453	1800	0.2517	
THRU (T)	2418	2418	5400	0.4478	
T + R		2871	5400	0.5317	0.5317
SB RIGHT (R)	1673	1673	1800	0.9294 **	
THRU (T)	2389	2389	5400	0.4424	
WB RIGHT (R)	548	548	3273	0.1674	
LEFT (L)	560	560	3273	0.1711	0.1711

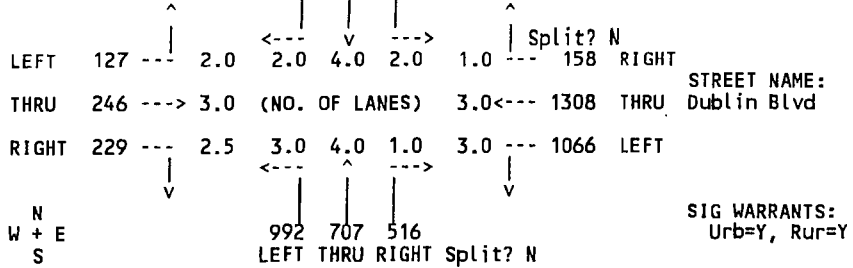
TOTAL VOLUME-TO-CAPACITY RATIO: 0.70
INTERSECTION LEVEL OF SERVICE: B

*

Condition: Buildout-AM Peak 07/02/05

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
----- 256 2294 227



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	516	107 *	1650	0.0648	
NB THRU (T)	707	707	6600	0.1071	
NB LEFT (L)	992	992	4304	0.2305	0.2305
SB RIGHT (R)	256	186 *	3000	0.0620	
SB THRU (T)	2294	2294	6600	0.3476	0.3476
SB LEFT (L)	227	227	3000	0.0757	
EB RIGHT (R)	229	0 *	3000	0.0000	
EB THRU (T)	246	246	4950	0.0497	
EB LEFT (L)	127	127	3000	0.0423	0.0423
WB RIGHT (R)	158	33 *	1650	0.0200	
WB THRU (T)	1308	1308	4950	0.2642	0.2642
WB LEFT (L)	1066	1066	4304	0.2477	

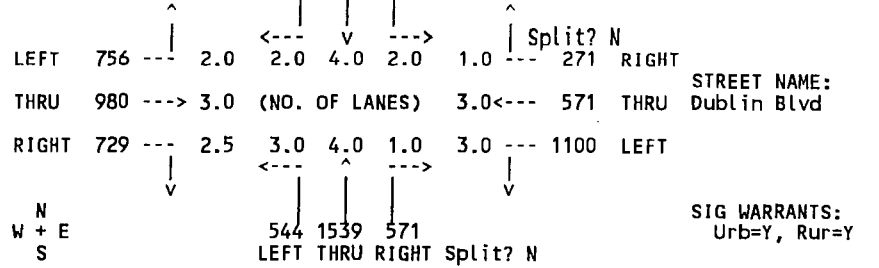
TOTAL VOLUME-TO-CAPACITY RATIO: 0.88
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/02/05

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
----- 388 1502 288



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	571	149 *	1650	0.0903	
NB THRU (T)	1539	1539	6600	0.2332	
NB LEFT (L)	544	544	4304	0.1264	0.1264
SB RIGHT (R)	388	0 *	3000	0.0000	
SB THRU (T)	1502	1502	6600	0.2276	0.2276
SB LEFT (L)	288	288	3000	0.0960	
EB RIGHT (R)	729	350 *	3000	0.1167	
EB THRU (T)	980	980	4950	0.1980	0.1980
EB LEFT (L)	756	756	3000	0.2520	
WB RIGHT (R)	271	113 *	1650	0.0685	
WB THRU (T)	571	571	4950	0.1154	
WB LEFT (L)	1100	1100	4304	0.2556	0.2556

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout-AM Peak 07/02/05

INTERSECTION	10 Tassajara Rd./Central Pkwy.	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	8-PHASE SIGNAL
	432 2367 63	
LEFT	23 1.0	1.0 3.0 2.0 1.0 Split? N
THRU	3 2.1	(NO. OF LANES) 2.0<--- 234 THRU
RIGHT	10 1.1	2.0 3.0 1.0 2.0 314 LEFT
N		SIG WARRANTS:
W + E		Urb=Y, Rur=Y
S		

STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	61	0 *	1650	0.0000	
THRU (T)	695	695	4950	0.1404	
LEFT (L)	6	6	3000	0.0020	0.0020
SB RIGHT (R)	432	409 *	1650	0.2479	
THRU (T)	2367	2367	4950	0.4782	0.4782
LEFT (L)	63	63	3000	0.0210	
EB RIGHT (R)	10	10	1650	0.0061	0.0061
THRU (T)	3	3	3300	0.0009	
LEFT (L)	23	23	1650	0.0139	
T + R		13	3300	0.0039	
WB RIGHT (R)	34	0 *	1650	0.0000	
THRU (T)	234	234	3300	0.0709	
LEFT (L)	314	314	3000	0.1047	0.1047

TOTAL VOLUME-TO-CAPACITY RATIO: 0.59
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT, VOL=BDAP4.AMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout-PM Peak 07/02/05

INTERSECTION	10 Tassajara Rd./Central Pkwy.	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	8-PHASE SIGNAL
	87 1806 79	
LEFT	412 1.0	1.0 3.0 2.0 1.0 Split? N
THRU	63 2.1	(NO. OF LANES) 2.0<--- 12 THRU
RIGHT	10 1.1	2.0 3.0 1.0 2.0 216 LEFT
N		SIG WARRANTS:
W + E		Urb=Y, Rur=Y
S		

STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	207	88 *	1650	0.0533	
THRU (T)	2258	2258	4950	0.4562	0.4562
LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	87	0 *	1650	0.0000	
THRU (T)	1806	1806	4950	0.3648	
LEFT (L)	79	79	3000	0.0263	0.0263
EB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	63	63	3300	0.0191	
LEFT (L)	412	412	1650	0.2497	0.2497
T + R		73	3300	0.0221	
WB RIGHT (R)	119	76 *	1650	0.0461	0.0461
THRU (T)	12	12	3300	0.0036	
LEFT (L)	216	216	3000	0.0720	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.78
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT, VOL=BDAP1.PMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 11 Tassajara Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 ----- 638 2192 31

LEFT 13 --- 2.0 1.0 3.0 1.0 1.0 --- Split? N 20 RIGHT
 THRU 4 ---> 2.0 (NO. OF LANES) 2.0<--- 422 THRU STREET NAME:
 Gleason Dr.
 RIGHT 5 --- 1.0 2.0 3.0 1.0 2.0 --- 666 LEFT
 N
 W + E 157 479 116
 S LEFT THRU RIGHT Split? N
 SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	116	0 *	1650	0.0000	
THRU (T)	479	479	4950	0.0968	
LEFT (L)	157	157	3000	0.0523	0.0523
SB RIGHT (R)	638	631 *	1650	0.3824	
THRU (T)	2192	2192	4950	0.4428	0.4428
LEFT (L)	31	31	1650	0.0188	
EB RIGHT (R)	5	0 *	1650	0.0000	
THRU (T)	4	4	3300	0.0012	0.0012
LEFT (L)	13	13	3000	0.0043	
WB RIGHT (R)	20	0 *	1650	0.0000	
THRU (T)	422	422	3300	0.1279	
LEFT (L)	666	666	3000	0.2220	0.2220

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 11 Tassajara Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 ----- 29 1516 33

LEFT 424 --- 2.0 1.0 3.0 1.0 1.0 --- Split? N 37 RIGHT
 THRU 120 ---> 2.0 (NO. OF LANES) 2.0<--- 8 THRU STREET NAME:
 Gleason Dr.
 RIGHT 173 --- 1.0 2.0 3.0 1.0 2.0 --- 283 LEFT
 N
 W + E 21 2186 582
 S LEFT THRU RIGHT Split? N
 SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	582	426 *	1650	0.2582	
THRU (T)	2186	2186	4950	0.4416	0.4416
LEFT (L)	21	21	3000	0.0070	
SB RIGHT (R)	29	0 *	1650	0.0000	
THRU (T)	1516	1516	4950	0.3063	
LEFT (L)	33	33	1650	0.0200	0.0200
EB RIGHT (R)	173	161 *	1650	0.0976	0.0976
THRU (T)	120	120	3300	0.0364	
LEFT (L)	424	424	3000	0.1413	
WB RIGHT (R)	37	4 *	1650	0.0024	
THRU (T)	8	8	3300	0.0024	
LEFT (L)	283	283	3000	0.0943	0.0943

TOTAL VOLUME-TO-CAPACITY RATIO: 0.65
 INTERSECTION LEVEL OF SERVICE: B

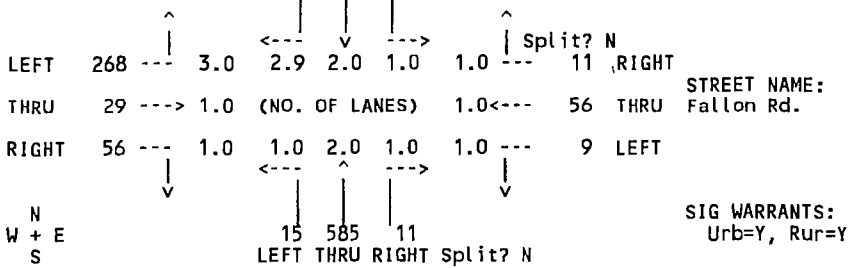
* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout-AM Peak 07/02/05

INTERSECTION 12 Tassajara Rd./Fallon Rd. City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
----- 1925 1199 13



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	11	2 *	1650	0.0012	
THRU (T)	585	585	3300	0.1773	
LEFT (L)	15	15	1650	0.0091	0.0091
SB RIGHT (R)	1925	1925	3000	0.6417	
THRU (T)	1199	1199	3300	0.3633	0.3633
LEFT (L)	13	13	1650	0.0079	
EB RIGHT (R)	56	41 *	1650	0.0248	
THRU (T)	29	29	1650	0.0176	
LEFT (L)	268	268	4304	0.0623	0.0623
WB RIGHT (R)	11	0 *	1650	0.0000	
THRU (T)	56	56	1650	0.0339	0.0339
LEFT (L)	9	9	1650	0.0055	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.47
INTERSECTION LEVEL OF SERVICE: A

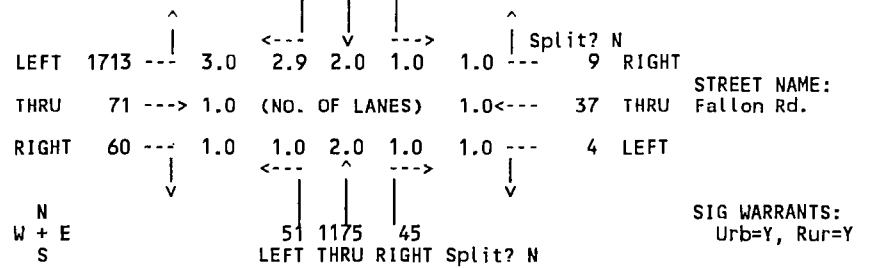
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout-PM Peak 07/02/05

INTERSECTION 12 Tassajara Rd./Fallon Rd. City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
----- 837 973 19



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	45	41 *	1650	0.0248	
THRU (T)	1175	1175	3300	0.3561	0.3561
LEFT (L)	51	51	1650	0.0309	
SB RIGHT (R)	837	837	3000	0.2790	
THRU (T)	973	973	3300	0.2948	
LEFT (L)	19	19	1650	0.0115	0.0115
EB RIGHT (R)	60	9 *	1650	0.0055	
THRU (T)	71	71	1650	0.0430	
LEFT (L)	1713	1713	4304	0.3980	0.3980
WB RIGHT (R)	9	0 *	1650	0.0000	
THRU (T)	37	37	1650	0.0224	0.0224
LEFT (L)	4	4	1650	0.0024	

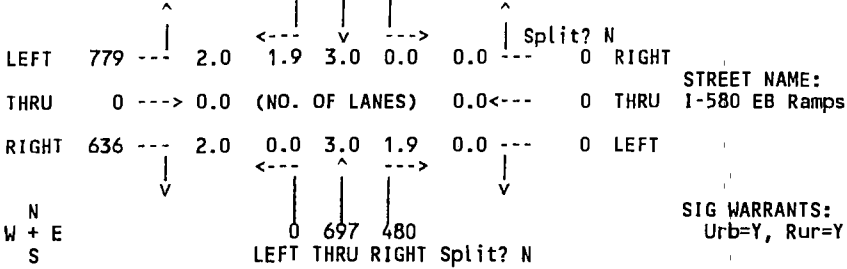
TOTAL VOLUME-TO-CAPACITY RATIO: 0.79
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout-AM Peak 07/02/05

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 771 1404 0



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R) THRU (T)	480 697	480 697	1800 5400	0.2667 0.1291	
SB RIGHT (R) THRU (T)	771 1404	771 1404	1800 5400	0.4283 0.2600	0.2600
EB RIGHT (R) LEFT (L)	636 779	636 779	3273 3273	0.1943 0.2380	0.2380

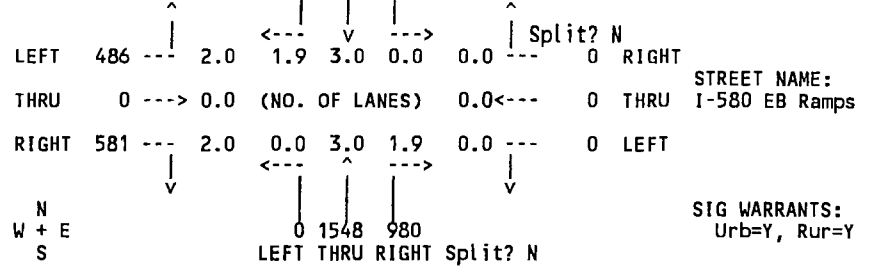
TOTAL VOLUME-TO-CAPACITY RATIO: 0.50
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/02/05

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 641 1448 0



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R) THRU (T)	980 1548	980 1548	1800 5400	0.5444 0.2867	0.2867
SB RIGHT (R) THRU (T)	641 1448	641 1448	1800 5400	0.3561 0.2681	0.2681
EB RIGHT (R) LEFT (L)	581 486	581 486	3273 3273	0.1775 0.1485	0.1775

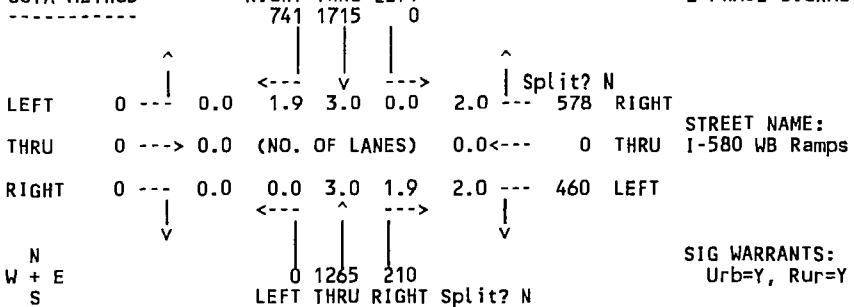
TOTAL VOLUME-TO-CAPACITY RATIO: 0.46
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 07/02/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



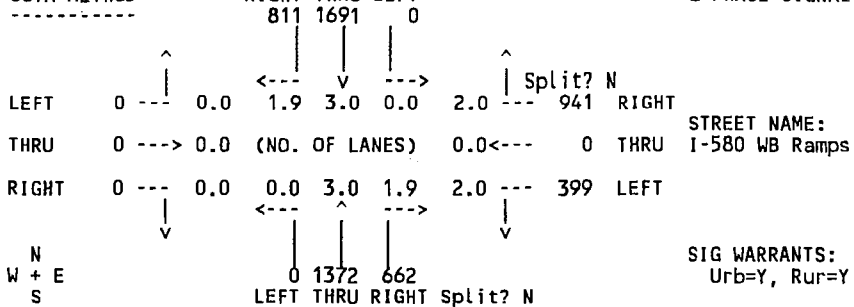
STREET NAME: Fallon Rd.					
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	210	210	1800	0.1167	
THRU (T)	1265	1265	5400	0.2343	
SB RIGHT (R)	741	741	1800	0.4117	
THRU (T)	1715	1715	5400	0.3176	0.3176
WB RIGHT (R)	578	578	3273	0.1766	0.1766
LEFT (L)	460	460	3273	0.1405	
TOTAL VOLUME-TO-CAPACITY RATIO:					0.49
INTERSECTION LEVEL OF SERVICE:					A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout- PM Peak 07/02/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



STREET NAME: Fallon Rd.					
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	662	662	1800	0.3678	
THRU (T)	1372	1372	5400	0.2541	
SB RIGHT (R)	811	811	1800	0.4506	
THRU (T)	1691	1691	5400	0.3131	0.3131
WB RIGHT (R)	941	941	3273	0.2875	0.2875
LEFT (L)	399	399	3273	0.1219	
TOTAL VOLUME-TO-CAPACITY RATIO:					0.60
INTERSECTION LEVEL OF SERVICE:					A

* AD

INTERSECTION	15 Fallon Rd./Dublin Blvd		City of Dublin	
Count Date	Time		Peak Hour	
CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL
	480	1343	531	
LEFT	44	2.0	1.0	4.0
THRU	313	3.0	(NO. OF LANES)	3.0
RIGHT	244	2.5	3.0	4.0
			2.0	3.0
				701
				Split? N
				244
				1625
				701
				578
				363
				563
				Split? N
				SIG WARRANTS:
				Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	563	294 *	3000	0.0980	
THRU (T)	363	363	6600	0.0550	
LEFT (L)	578	578	4304	0.1343	0.1343
SB RIGHT (R)	480	456 *	1650	0.2764	0.2764
THRU (T)	1343	1343	6600	0.2035	
LEFT (L)	531	531	3000	0.1770	
EB RIGHT (R)	244	0 *	3000	0.0000	
THRU (T)	313	313	4950	0.0632	
LEFT (L)	44	44	3000	0.0147	0.0147
WB RIGHT (R)	244	0 *	1650	0.0000	
THRU (T)	1625	1625	4950	0.3283	0.3283
LEFT (L)	701	701	4304	0.1629	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

INTERSECTION	15 Fallon Rd./Dublin Blvd		City of Dublin	
Count Date	Time		Peak Hour	
CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL
	100	792	601	
LEFT	654	2.0	1.0	4.0
THRU	1273	3.0	(NO. OF LANES)	3.0
RIGHT	689	2.5	3.0	4.0
			2.0	3.0
				655
				Split? N
				188
				550
				655
				SIG WARRANTS:
				Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	659	408 *	3000	0.1360	
THRU (T)	1178	1178	6600	0.1785	0.1785
LEFT (L)	380	380	4304	0.0883	
SB RIGHT (R)	100	0 *	1650	0.0000	
THRU (T)	792	792	6600	0.1200	
LEFT (L)	601	601	3000	0.2003	0.2003
EB RIGHT (R)	689	424 *	3000	0.1413	
THRU (T)	1273	1273	4950	0.2572	0.2572
LEFT (L)	654	654	3000	0.2180	
WB RIGHT (R)	188	0 *	1650	0.0000	
THRU (T)	550	550	4950	0.1111	
LEFT (L)	655	655	4304	0.1522	0.1522

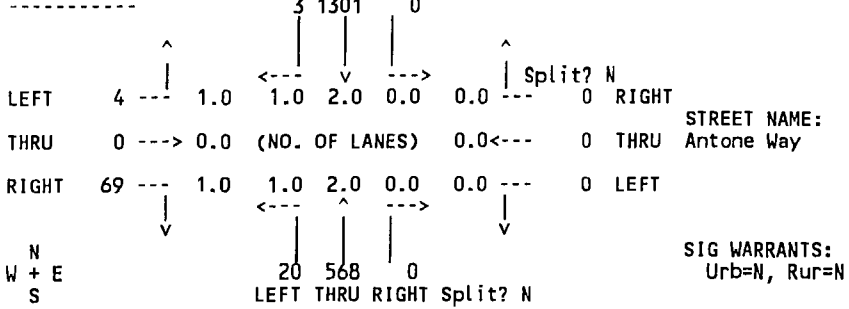
TOTAL VOLUME-TO-CAPACITY RATIO: 0.79
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout-AM Peak 07/02/05

INTERSECTION 17 Fallon Rd./Antone Way City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	568	568	3440	0.1651	
NB LEFT (L)	20	20	1720	0.0116	0.0116
SB RIGHT (R)	3	0 *	1720	0.0000	
SB THRU (T)	1301	1301	3440	0.3782	0.3782
EB RIGHT (R)	69	49 *	1720	0.0285	0.0285
EB LEFT (L)	4	4	1720	0.0023	

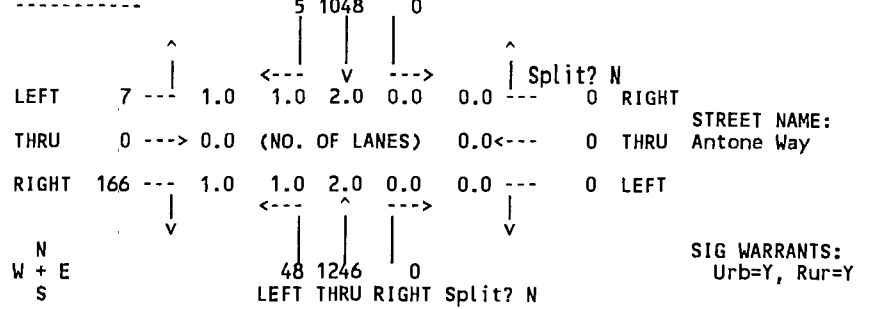
TOTAL VOLUME-TO-CAPACITY RATIO: 0.42
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT, VOL=BDAP4.AMV, CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/02/05

INTERSECTION 17 Fallon Rd./Antone Way City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1246	1246	3440	0.3622	0.3622
NB LEFT (L)	48	48	1720	0.0279	
SB RIGHT (R)	5	0 *	1720	0.0000	
SB THRU (T)	1048	1048	3440	0.3047	
EB RIGHT (R)	166	118 *	1720	0.0686	0.0686
EB LEFT (L)	7	7	1720	0.0041	

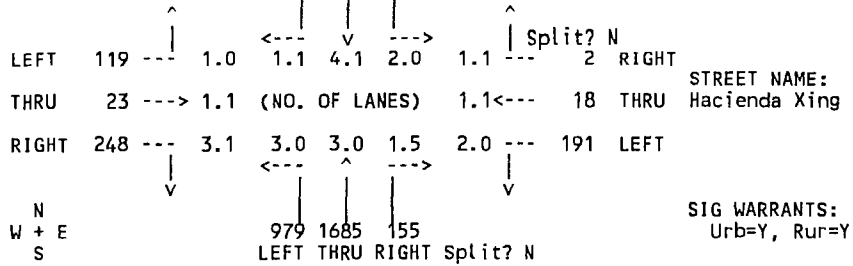
TOTAL VOLUME-TO-CAPACITY RATIO: 0.43
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT, VOL=BDAP1.PMV, CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL
426 1937 0



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	155	50 *	1650	0.0303	
THRU (T)	1685	1685	4950	0.3404	
LEFT (L)	979	979	4304	0.2275	0.2275
SB RIGHT (R)	426	426	1650	0.2582	
THRU (T)	1937	1937	6600	0.2935	
LEFT (L)	0	0	3000	0.0000	
T + R		2363	6600	0.3580	0.3580
EB RIGHT (R)	248	0 *	4304	0.0000	
THRU (T)	23	23	1650	0.0139	
LEFT (L)	119	119	1650	0.0721	0.0721
T + R		23	4304	0.0053	
WB RIGHT (R)	2	2	1650	0.0012	
THRU (T)	18	18	1650	0.0109	
LEFT (L)	191	191	3000	0.0637	
T + R		20	1650	0.0121	0.0121

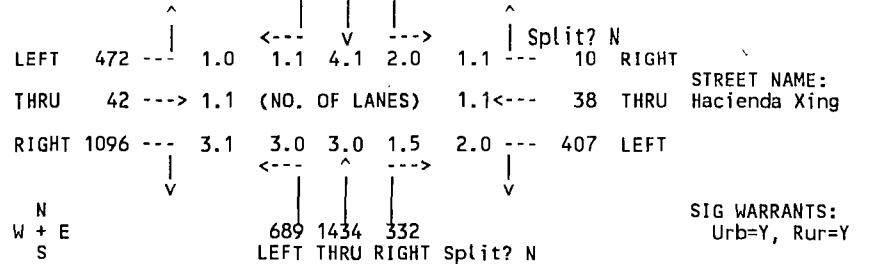
TOTAL VOLUME-TO-CAPACITY RATIO: 0.67
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT. INT, VOL=BDAP4. AMV, CAP=...LOSCAP. TAB

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL
250 1169 10



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	332	108 *	1650	0.0655	
THRU (T)	1434	1434	4950	0.2897	
LEFT (L)	689	689	4304	0.1601	0.1601
SB RIGHT (R)	250	250	1650	0.1515	
THRU (T)	1169	1169	6600	0.1771	
LEFT (L)	10	10	3000	0.0033	
T + R		1419	6600	0.2150	0.2150
EB RIGHT (R)	1096	832 *	4304	0.1933	
THRU (T)	42	42	1650	0.0255	
LEFT (L)	472	472	1650	0.2861	
T + R		874	4304	0.2031	0.2031
WB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	38	38	1650	0.0230	
LEFT (L)	407	407	3000	0.1357	0.1357
T + R		48	1650	0.0291	

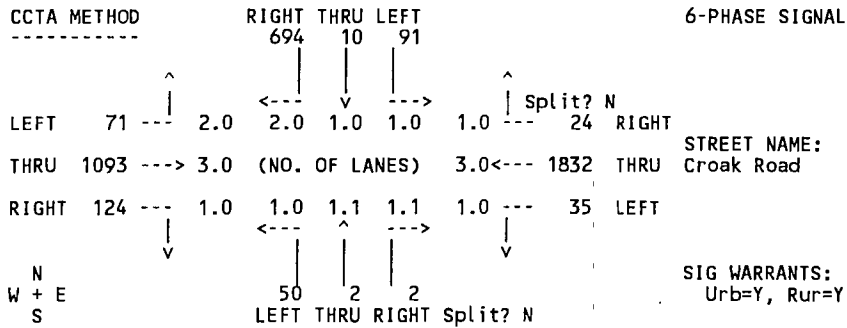
TOTAL VOLUME-TO-CAPACITY RATIO: 0.71
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT. INT, VOL=BDAP1. PMV, CAP=...LOSCAP. TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout-AM Peak 07/18/05

INTERSECTION 19 Dublin Blvd./Croak Road City of Dublin
 Count Date Time Peak Hour



STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	2	2	1650	0.0012	
THRU (T)	2	2	1650	0.0012	
LEFT (L)	50	50	1650	0.0303	0.0303
T + R		4	1650	0.0024	
SB RIGHT (R)	694	655 *	3000	0.2183	0.2183
THRU (T)	10	10	1650	0.0061	
LEFT (L)	91	91	1650	0.0552	
EB RIGHT (R)	124	74 *	1650	0.0448	
THRU (T)	1093	1093	4950	0.2208	
LEFT (L)	71	71	3000	0.0237	0.0237
WB RIGHT (R)	24	0 *	1650	0.0000	
THRU (T)	1832	1832	4950	0.3701	0.3701
LEFT (L)	35	35	1650	0.0212	

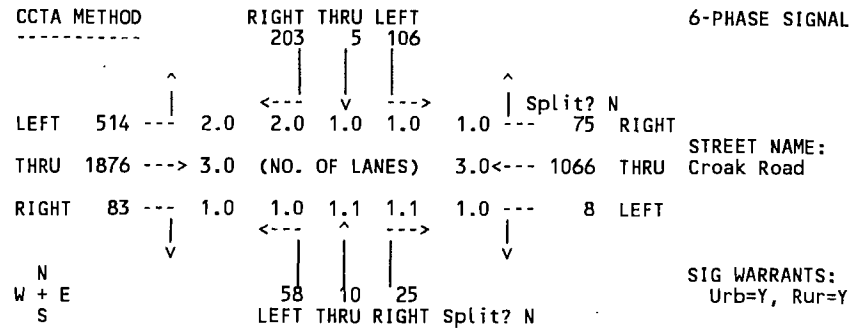
TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED

LOS Software by TJKM Transportation Consultants

Condition: Buildout-PM Peak 07/18/05

INTERSECTION 19 Dublin Blvd./Croak Road City of Dublin
 Count Date Time Peak Hour



STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	25	25	1650	0.0152	
THRU (T)	10	10	1650	0.0061	
LEFT (L)	58	58	1650	0.0352	
T + R		35	1650	0.0212	0.0212
SB RIGHT (R)	203	0 *	3000	0.0000	
THRU (T)	5	5	1650	0.0030	
LEFT (L)	106	106	1650	0.0642	0.0642
EB RIGHT (R)	83	25 *	1650	0.0152	
THRU (T)	1876	1876	4950	0.3790	
LEFT (L)	514	514	3000	0.1713	0.1713
WB RIGHT (R)	75	0 *	1650	0.0000	
THRU (T)	1066	1066	4950	0.2154	0.2154
LEFT (L)	8	8	1650	0.0048	

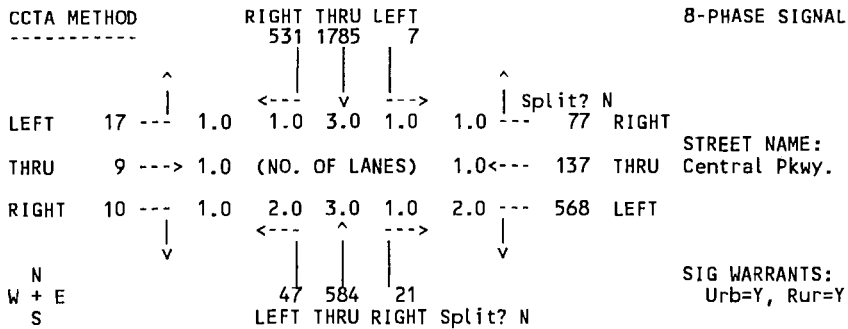
TOTAL VOLUME-TO-CAPACITY RATIO: 0.47
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout-AM Peak 07/15/05

INTERSECTION 20 Fallon Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	21	0 *	1650	0.0000	
THRU (T)	584	584	4950	0.1180	
LEFT (L)	47	47	3000	0.0157	0.0157
SB RIGHT (R)	531	514 *	1650	0.3115	
THRU (T)	1785	1785	4950	0.3606	0.3606
LEFT (L)	7	7	1650	0.0042	
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	9	9	1650	0.0055	0.0055
LEFT (L)	17	17	1650	0.0103	
WB RIGHT (R)	77	70 *	1650	0.0424	
THRU (T)	137	137	1650	0.0830	
LEFT (L)	568	568	3000	0.1893	0.1893

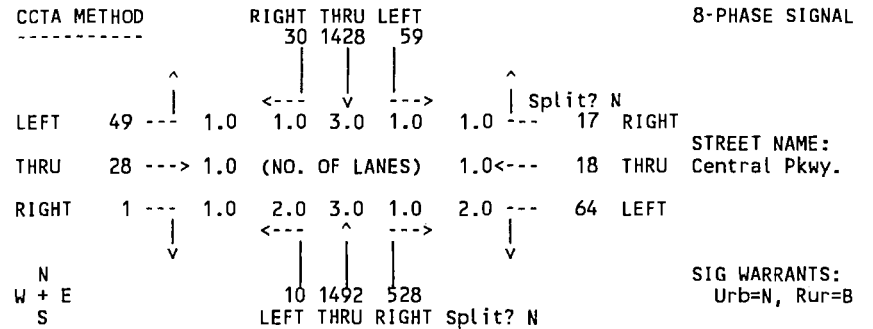
TOTAL VOLUME-TO-CAPACITY RATIO: 0.57
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout-PM Peak 07/15/05

INTERSECTION 20 Fallon Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=N, Rur=B

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	528	493 *	1650	0.2988	
THRU (T)	1492	1492	4950	0.3014	0.3014
LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	30	0 *	1650	0.0000	
THRU (T)	1428	1428	4950	0.2885	
LEFT (L)	59	59	1650	0.0358	0.0358
EB RIGHT (R)	1	0 *	1650	0.0000	
THRU (T)	28	28	1650	0.0170	
LEFT (L)	49	49	1650	0.0297	0.0297
WB RIGHT (R)	17	0 *	1650	0.0000	
THRU (T)	18	18	1650	0.0109	0.0109
LEFT (L)	64	64	3000	0.0213	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.38
 INTERSECTION LEVEL OF SERVICE: A

Condition: Buildout-AM Peak 07/02/05

INTERSECTION	21 Fallon Rd./Dublin Ranch Ent	City of Dublin
Count	Time	Peak Hour
CCTA METHOD		
RIGHT	THRU	LEFT
2	2286	0
8-PHASE SIGNAL		
LEFT	10	2.0
THRU	6	1.0
RIGHT	38	2.0
STREET NAME: Dublin Ranch Ent		
SIG WARRANTS: Urb=Y, Rur=Y		

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	194	121 *	1650	0.0733	
THRU (T)	1462	1462	8250	0.1772	
LEFT (L)	186	186	3000	0.0620	0.0620
SB RIGHT (R)	2	2	1650	0.0012	
THRU (T)	2286	2286	6600	0.3464	
T + R		2288	6600	0.3467	0.3467
EB RIGHT (R)	38	0 *	3000	0.0000	
THRU (T)	6	6	1650	0.0036	0.0036
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	42	42	3000	0.0140	
THRU (T)	6	6	1650	0.0036	
LEFT (L)	133	133	3000	0.0443	0.0443

TOTAL VOLUME-TO-CAPACITY RATIO: 0.46
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT, VOL=BDAP4.AMV, CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/02/05

INTERSECTION	21 Fallon Rd./Dublin Ranch Ent	City of Dublin
Count	Time	Peak Hour
CCTA METHOD		
RIGHT	THRU	LEFT
10	2109	0
8-PHASE SIGNAL		
LEFT	10	2.0
THRU	12	1.0
RIGHT	196	2.0
STREET NAME: Dublin Ranch Ent		
SIG WARRANTS: Urb=Y, Rur=Y		

STREET NAME: Fallon Rd.

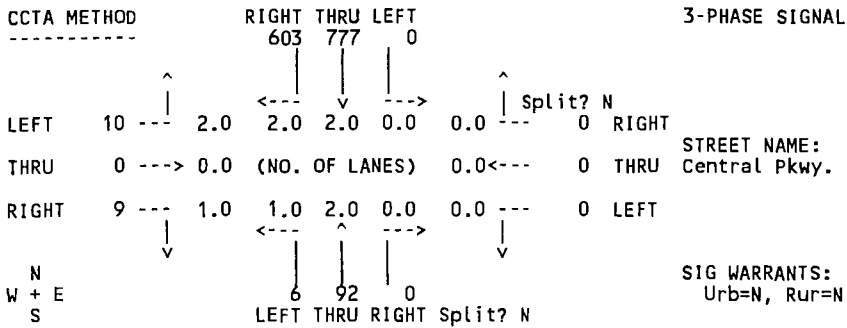
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	53	0 *	1650	0.0000	
THRU (T)	2210	2210	8250	0.2679	
LEFT (L)	50	50	3000	0.0167	0.0167
SB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	2109	2109	6600	0.3195	
T + R		2119	6600	0.3211	0.3211
EB RIGHT (R)	196	169 *	3000	0.0563	0.0563
THRU (T)	12	12	1650	0.0073	
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	7	7	3000	0.0023	
THRU (T)	12	12	1650	0.0073	
LEFT (L)	197	197	3000	0.0657	0.0657

TOTAL VOLUME-TO-CAPACITY RATIO: 0.46
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT, V

Condition: Buildout-AM Peak 07/15/05

INTERSECTION 22 Croak Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Croak Rd.

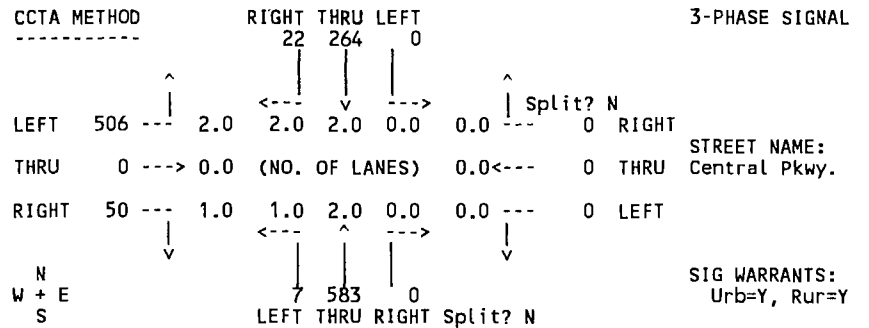
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	92	92	3440	0.0267	
LEFT (L)	6	6	1720	0.0035	0.0035
SB RIGHT (R)	603	598 *	3127	0.1912	
THRU (T)	777	777	3440	0.2259	0.2259
EB RIGHT (R)	9	3 *	1720	0.0017	
LEFT (L)	10	10	3127	0.0032	0.0032

TOTAL VOLUME-TO-CAPACITY RATIO: 0.23
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout-PM Peak 07/15/05

INTERSECTION 22 Croak Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Croak Rd.

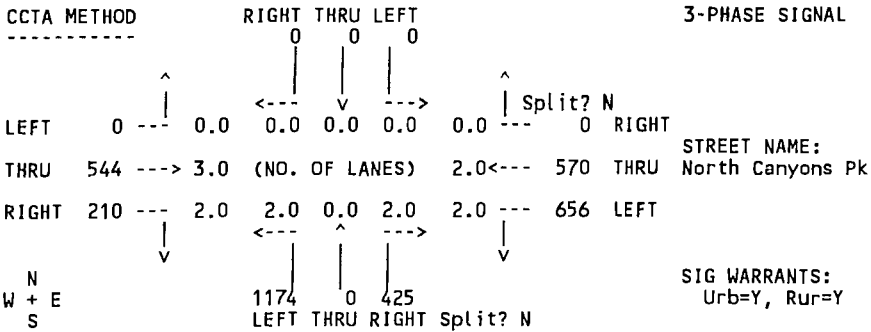
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	583	583	3440	0.1695	0.1695
LEFT (L)	7	7	1720	0.0041	
SB RIGHT (R)	22	0 *	3127	0.0000	
THRU (T)	264	264	3440	0.0767	
EB RIGHT (R)	50	43 *	1720	0.0250	
LEFT (L)	506	506	3127	0.1618	0.1618

TOTAL VOLUME-TO-CAPACITY RATIO: 0.33
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
 Count Date Time Peak Hour



STREET NAME: Airway Blvd.

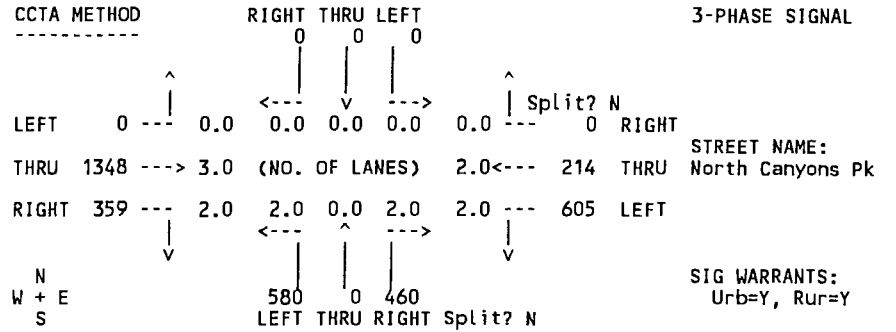
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	425	64 *	3127	0.0205	
NB LEFT (L)	1174	1174	3127	0.3754	0.3754
EB RIGHT (R)	210	0 *	3127	0.0000	
EB THRU (T)	544	544	5160	0.1054	0.1054
WB THRU (T)	570	570	3440	0.1657	
WB LEFT (L)	656	656	3127	0.2098	0.2098

TOTAL VOLUME-TO-CAPACITY RATIO: 0.69
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
 Count Date Time Peak Hour



STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	460	127 *	3127	0.0406	
NB LEFT (L)	580	580	3127	0.1855	0.1855
EB RIGHT (R)	359	40 *	3127	0.0128	
EB THRU (T)	1348	1348	5160	0.2612	0.2612
WB THRU (T)	214	214	3440	0.0622	
WB LEFT (L)	605	605	3127	0.1935	0.1935

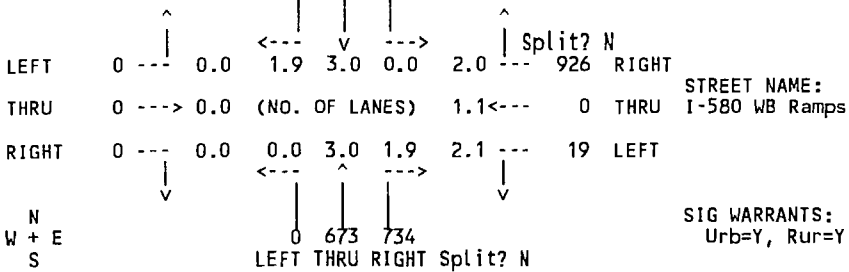
TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 24 Airway Blvd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 ----- 713 154 0



STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	734	734	1800	0.4078	
THRU (T)	673	673	5400	0.1246	0.1246
SB RIGHT (R)	713	713	1800	0.3961	
THRU (T)	154	154	5400	0.0285	
WB RIGHT (R)	926	926	3273	0.2829	0.2829
THRU (T)	0	0	1800	0.0000	
LEFT (L)	19	19	3273	0.0058	
T + L		19	3273	0.0058	

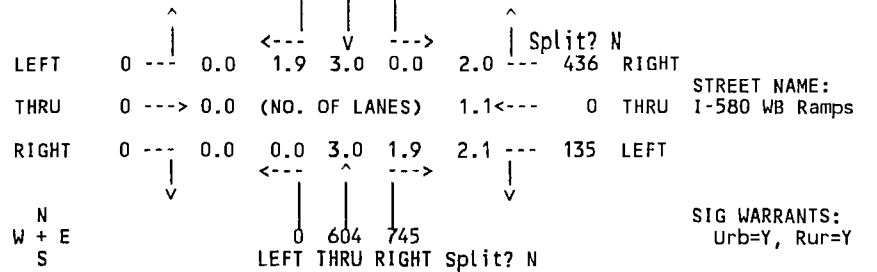
TOTAL VOLUME-TO-CAPACITY RATIO: 0.41
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 24 Airway Blvd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 ----- 665 299 0



STREET NAME: Airway Blvd.

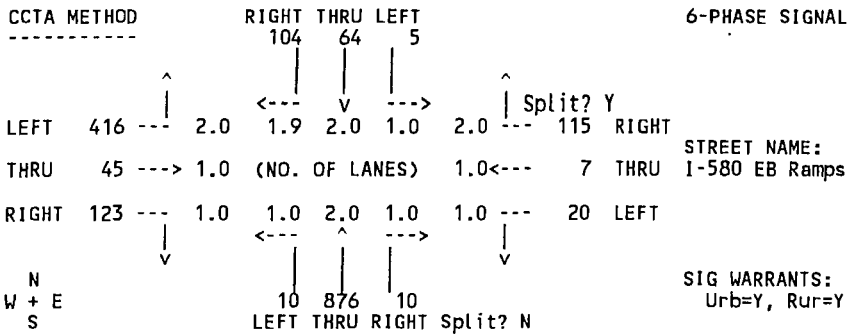
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	745	745	1800	0.4139	
THRU (T)	604	604	5400	0.1119	0.1119
SB RIGHT (R)	665	665	1800	0.3694	
THRU (T)	299	299	5400	0.0554	
WB RIGHT (R)	436	436	3273	0.1332	0.1332
THRU (T)	0	0	1800	0.0000	
LEFT (L)	135	135	3273	0.0412	
T + L		135	3273	0.0412	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.25
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 25 Airway Blvd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Airway Blvd.

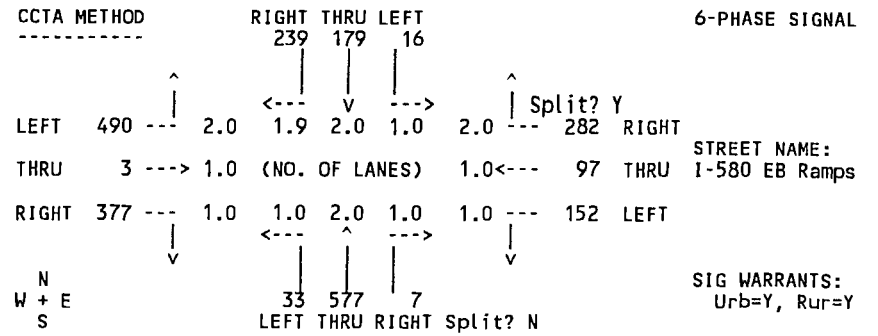
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	876	876	3300	0.2655	0.2655
LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	104	104	1650	0.0630	
THRU (T)	64	64	3300	0.0194	
LEFT (L)	5	5	1650	0.0030	0.0030
EB RIGHT (R)	123	113 *	1650	0.0685	
THRU (T)	45	45	1650	0.0273	
LEFT (L)	416	416	3000	0.1387	0.1387
WB RIGHT (R)	115	110 *	3000	0.0367	0.0367
THRU (T)	7	7	1650	0.0042	
LEFT (L)	20	20	1650	0.0121	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.44
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 25 Airway Blvd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



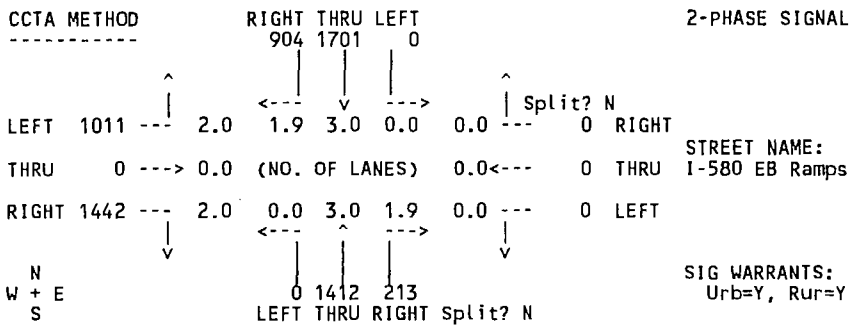
STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	7	0 *	1650	0.0000	
THRU (T)	577	577	3300	0.1748	0.1748
LEFT (L)	33	33	1650	0.0200	
SB RIGHT (R)	239	239	1650	0.1448	
THRU (T)	179	179	3300	0.0542	
LEFT (L)	16	16	1650	0.0097	0.0097
EB RIGHT (R)	377	344 *	1650	0.2085	0.2085
THRU (T)	3	3	1650	0.0018	
LEFT (L)	490	490	3000	0.1633	
WB RIGHT (R)	282	266 *	3000	0.0887	
THRU (T)	97	97	1650	0.0588	
LEFT (L)	152	152	1650	0.0921	0.0921

TOTAL VOLUME-TO-CAPACITY RATIO: 0.49
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



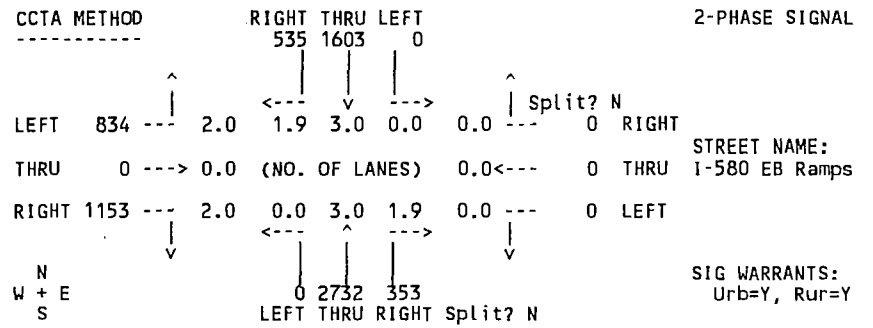
STREET NAME: Hopyard Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	213	213	1800	0.1183	
THRU (T)	1412	1412	5400	0.2615	
SB RIGHT (R)	904	904	1800	0.5022	
THRU (T)	1701	1701	5400	0.3150	0.3150
EB RIGHT (R)	1442	1442	3273	0.4406	0.4406
LEFT (L)	1011	1011	3273	0.3089	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hopyard Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	353	353	1800	0.1961	
THRU (T)	2732	2732	5400	0.5059	0.5059
SB RIGHT (R)	535	535	1800	0.2972	
THRU (T)	1603	1603	5400	0.2969	
EB RIGHT (R)	1153	1153	3273	0.3523	0.3523
LEFT (L)	834	834	3273	0.2548	

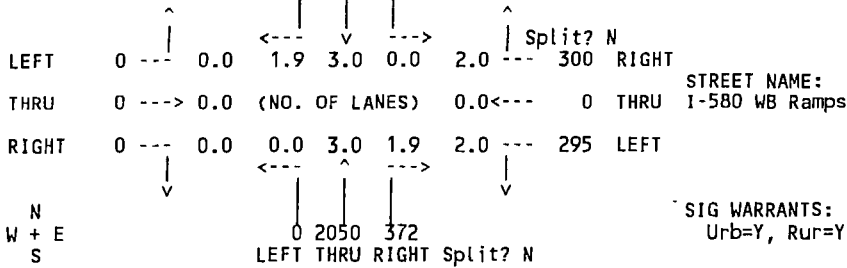
TOTAL VOLUME-TO-CAPACITY RATIO: 0.86
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 ----- 734 2310 0



STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	372	372	1800	0.2067	
THRU (T)	2050	2050	5400	0.3796	
SB RIGHT (R)	734	734	1800	0.4078	
THRU (T)	2310	2310	5400	0.4278	0.4278
WB RIGHT (R)	300	300	3273	0.0917	0.0917
LEFT (L)	295	295	3273	0.0901	

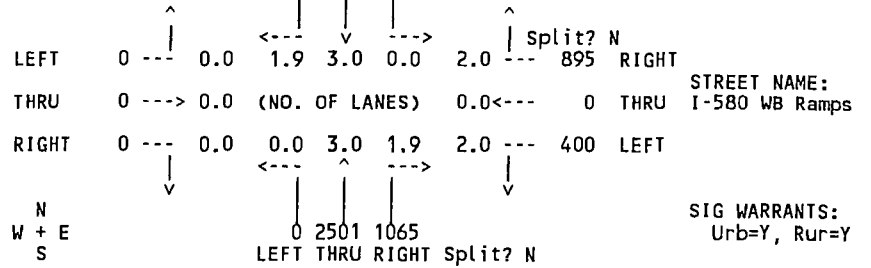
TOTAL VOLUME-TO-CAPACITY RATIO: 0.52
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 ----- 955 1738 0



STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1065	1065	1800	0.5917	
THRU (T)	2501	2501	5400	0.4631	0.4631
SB RIGHT (R)	955	955	1800	0.5306	
THRU (T)	1738	1738	5400	0.3219	
WB RIGHT (R)	895	895	3273	0.2734	0.2734
LEFT (L)	400	400	3273	0.1222	

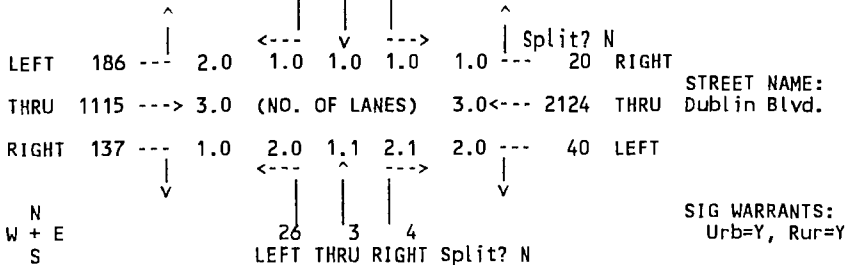
TOTAL VOLUME-TO-CAPACITY RATIO: 0.74
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout- AM Peak 04/05/05

INTERSECTION 28 Arnold Rd./Dublin Blvd. City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Arnold Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	4	0 *	3000	0.0000	
THRU (T)	3	3	1650	0.0018	
LEFT (L)	26	26	3000	0.0087	0.0087
T + R		3	3000	0.0010	
SB RIGHT (R)	202	100 *	1650	0.0606	0.0606
THRU (T)	7	7	1650	0.0042	
LEFT (L)	1	1	1650	0.0006	
EB RIGHT (R)	137	123 *	1650	0.0745	
THRU (T)	1115	1115	4950	0.2253	
LEFT (L)	186	186	3000	0.0620	0.0620
WB RIGHT (R)	20	19 *	1650	0.0115	
THRU (T)	2124	2124	4950	0.4291	0.4291
LEFT (L)	40	40	3000	0.0133	

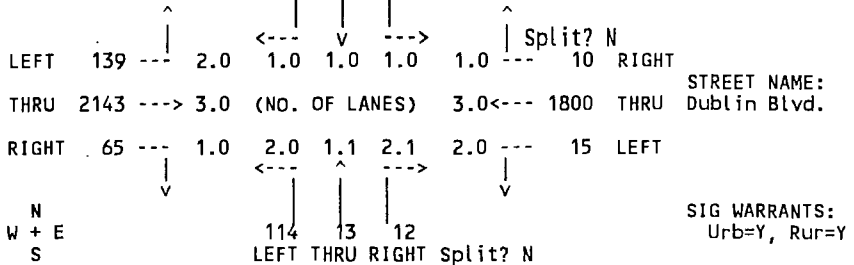
TOTAL VOLUME-TO-CAPACITY RATIO: 0.56
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP4.AMV,CAP=...LOSCAP.TAB

Condition: Buildout- PM Peak 04/05/05

INTERSECTION 28 Arnold Rd./Dublin Blvd. City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Arnold Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	12	4 *	3000	0.0013	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	114	114	3000	0.0380	0.0380
T + R		17	3000	0.0057	
SB RIGHT (R)	357	281 *	1650	0.1703	0.1703
THRU (T)	15	15	1650	0.0091	
LEFT (L)	10	10	1650	0.0061	
EB RIGHT (R)	65	2 *	1650	0.0012	
THRU (T)	2143	2143	4950	0.4329	0.4329
LEFT (L)	139	139	3000	0.0463	
WB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	1800	1800	4950	0.3636	
LEFT (L)	15	15	3000	0.0050	0.0050

TOTAL VOLUME-TO-CAPACITY RATIO: 0.65
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=BDAP1.PMV,CAP=...LOSCAP.TAB

**APPENDIX E – LEVEL OF SERVICE WORKSHEETS: BUILDOUT
PLUS PROJECT CONDITIONS**

TABLE 1: YEAR 2025 PLUS PROJECT LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50333	432	1356	1356	410	22	48	48	0	0	0	0	0
50301	0	0	0	0	0	0	0	0	0	0	0	0
50725	466	1491	1491	466	0	74	74	0	0	0	0	0
50763	0	0	0	0	0	303	227	0	0	0	0	76
50760	1500	3000	3000	0	1500	2185	0	2185	0	0	0	0
50327	300	600	600	0	300	6685	85	6600	0	0	0	0
50740	0	0	0	0	0	0	0	0	0	0	0	0
50764	205	410	410	0	205	278	77	0	0	0	28	173
50319	271	542	542	0	271	7	7	0	0	0	0	0
50739	0	0	0	0	0	0	0	0	0	0	0	0
50322	0	0	0	0	0	0	0	0	0	0	0	0
50323	697	2230	2230	697	0	0	0	0	0	0	0	0
50727	246	492	492	0	246	0	0	0	0	0	0	0
50602	304	608	608	0	304	1308	430	878	0	0	0	0
50730	0	0	0	0	0	540	210	330	0	0	0	0
50307	0	0	0	0	0	2573	1750	534	0	0	0	289
50731	0	0	0	0	0	419	419	0	0	0	0	0
50308	0	0	0	0	0	1526	1456	70	0	0	0	0
50331	0	0	0	0	0	593	110	483	0	0	0	0
50732	0	0	0	0	0	523	523	0	0	0	0	0
50310	211	638	638	180	31	157	0	157	0	0	0	0
50304	546	1514	1514	352	194	136	0	136	0	0	0	0
50311	378	1209	1209	378	0	0	0	0	0	0	0	0
50303	469	1500	1500	469	0	53	7	38	0	0	0	8
50312	277	886	886	277	0	142	142	0	0	0	0	0
50317	667	2134	2134	667	0	0	0	0	0	0	0	0
50738	240	480	480	0	240	0	0	0	0	0	0	0
50320	728	1663	1663	173	555	0	0	0	0	0	0	0
50321	1112	2398	2398	145	967	0	0	0	0	0	0	0
50302	292	846	846	219	73	0	0	0	0	0	0	0
50728	380	1216	1216	380	0	0	0	0	0	0	0	0
50316	505	1616	1616	505	0	1	1	0	0	0	0	0
50736	0	0	0	0	0	187	187	0	0	0	0	0
50314	492	1574	1574	492	0	48	43	5	0	0	0	0
50726	370	1184	1184	370	0	0	0	0	0	0	0	0
50313	637	2007	2007	611	26	0	0	0	0	0	0	0
50729	0	0	0	0	0	447	0	329	0	0	118	0

TABLE 1: YEAR 2025 PLUS PROJECT LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50306	0	0	0	0	0	500	141	359	0	0	0	0
50305	455	1019	1019	91	364	509	230	279	0	0	0	0
50733	0	0	0	0	0	437	390	47	0	0	0	0
50734	0	0	0	0	0	229	224	5	0	0	0	0
50330	0	0	0	0	0	594	301	293	0	0	0	0
50318	0	0	0	0	0	2618	329	231	0	0	1322	736
50737	0	0	0	0	0	173	145	28	0	0	0	0
50309	0	0	0	0	0	590	472	104	0	0	0	14
50328	0	0	0	0	0	572	200	0	0	0	339	33
50329	0	0	0	0	0	337	215	0	0	0	0	122
50315	11	35	35	11	0	0	0	0	0	0	0	0
50735	175	560	560	175	0	28	0	28	0	0	0	0
50793	0	0	0	0	0	1519	556	963	0	0	0	0
50794	0	0	0	0	0	1417	519	898	0	0	0	0
50789	263	841	841	263	0	2167	793	1374	0	0	0	0
50796	0	0	0	0	0	2839	0	2839	0	0	0	0
50795	0	0	0	0	0	4294	0	4294	0	0	0	0
50778	907	2902	2902	907	0	289	289	0	0	0	0	0
50780	489	978	978	0	489	368	368	0	0	0	0	0
50781	252	806	806	252	0	0	0	0	0	0	0	0
50775	1202	2730	2730	272	930	0	0	0	0	0	0	0
50783	0	0	0	0	0	694	694	0	0	0	0	0
50779	420	1344	1344	420	0	0	0	0	0	0	0	0
50785	540	1080	1080	0	540	0	0	0	0	0	0	0
50774	121	387	387	121	0	0	0	0	0	0	0	0
50782	117	374	374	117	0	0	0	0	0	0	0	0
50784	168	537	537	168	0	0	0	0	0	0	0	0
50765	204	652	652	204	0	0	0	0	0	0	0	0
50332	314	1004	1004	314	0	0	0	0	0	0	0	0
50750	0	0	0	0	0	0	0	0	0	0	0	0
50748	259	828	828	259	0	0	0	0	0	0	0	0
50749	0	0	0	0	0	2210	0	2210	0	0	0	0
50746	0	0	0	0	0	0	0	0	0	0	0	0
50772	202	646	646	202	0	0	0	0	0	0	0	0
50771	0	0	0	0	0	0	0	0	0	0	0	0
50788	371	1187	1187	371	0	0	0	0	0	0	0	0
50773	205	656	656	205	0	0	0	0	0	0	0	0
50769	363	1161	1161	363	0	0	0	0	0	0	0	0

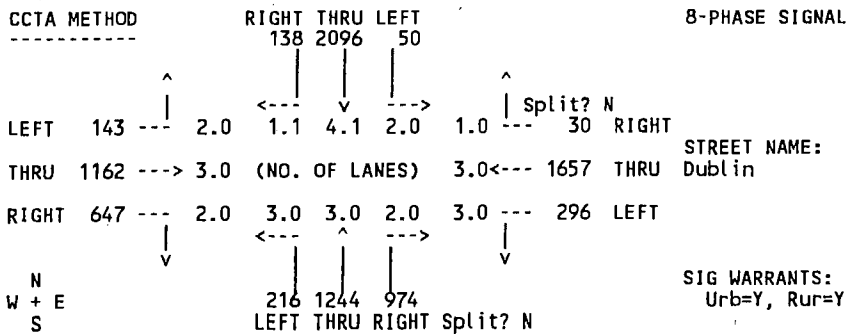
TABLE 1: YEAR 2025 PLUS PROJECT LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50334	666	2131	2131	666	0	0	0	0	0	0	0	0
50790	853	2206	2206	417	436	0	0	0	0	0	0	0
50787	623	1993	1993	623	0	0	0	0	0	0	0	0
50766	422	1350	1350	422	0	0	0	0	0	0	0	0
50786	111	355	355	111	0	0	0	0	0	0	0	0
50767	110	352	352	110	0	0	0	0	0	0	0	0
50768	250	800	800	250	0	0	0	0	0	0	0	0
50325	0	0	0	0	0	0	0	0	0	0	0	0
50324	0	0	0	0	0	0	0	0	0	0	0	0
50770	227	584	584	109	118	0	0	0	0	0	0	0
50744	356	872	872	134	222	168	168	0	0	0	0	0
50757	0	0	0	0	0	367	367	0	0	0	0	0
50758	0	0	0	0	0	2140	171	1969	0	0	0	0
50336	0	0	0	0	0	2825	2825	0	0	0	0	0
50759	0	0	0	0	0	271	271	0	0	0	0	0
50326	0	0	0	0	0	1179	1179	0	0	0	0	0
50751	277	738	738	154	123	0	0	0	0	0	0	0
50756	324	648	648	0	324	0	0	0	0	0	0	0
50755	368	736	736	0	368	0	0	0	0	0	0	0
50753	88	224	224	40	48	0	0	0	0	0	0	0
50747	0	0	0	0	0	0	0	0	0	0	0	0
50741	0	0	0	0	0	3122	0	3122	0	0	0	0
50761	0	0	0	0	0	1293	1293	0	0	0	0	0
50762	0	0	0	0	0	1414	0	1414	0	0	0	0
50798	0	0	0	0	0	0	0	0	0	0	0	0
50742	0	0	0	0	0	1430	0	1430	0	0	0	0
50743	0	0	0	0	0	1386	0	1386	0	0	0	0
50754	390	780	780	0	390	383	383	0	0	0	0	0
50752	295	761	761	143	152	0	0	0	0	0	0	0
50745	120	240	240	0	120	0	0	0	0	0	0	0
50797	0	0	0	0	0	1072	1072	0	0	0	0	0
50791	332	664	664	0	332	239	239	0	0	0	0	0
50799	0	0	0	0	0	1706	1706	0	0	0	0	0
50792	0	0	0	0	0	538	538	0	0	0	0	0
50777	378	1209	1209	378	0	0	0	0	0	0	0	0
50776	0	0	0	0	0	389	389	0	0	0	0	0

Notes: TOTHH=Total Households, HHPOP=Household Population, TOTPOP=Total Population, SFDU=No. of Households In Single Family Dwelling Units
 MFDU= No. of Households In Multi Family Dwelling Units, TOTEMP=Total Employment, RETEMP=Retail Employment, SEREMP=Service Employment
 OTHEMP=Other Employment, AGREMP=Agricultural Employment, MFGEMP=Manufacturing Employment, TRDEMP=Wholesale Employment

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 1 Dougherty/Dublin City of Dublin
Count Date Time Peak Hour



STREET NAME: Dougherty

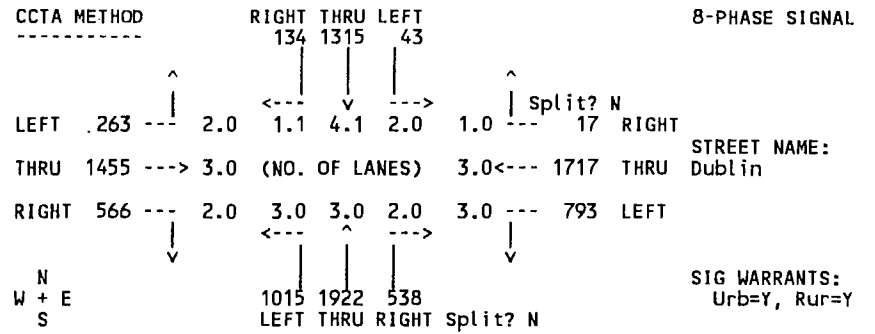
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	974	861 *	3000	0.2870	
THRU (T)	1244	1244	4950	0.2513	
LEFT (L)	216	216	4304	0.0502	0.0502
SB RIGHT (R)	138	138	1650	0.0836	
THRU (T)	2096	2096	6600	0.3176	
LEFT (L)	50	50	3000	0.0167	
T + R		2234	6600	0.3385	0.3385
EB RIGHT (R)	647	564 *	3000	0.1880	
THRU (T)	1162	1162	4950	0.2347	
LEFT (L)	143	143	3000	0.0477	0.0477
WB RIGHT (R)	30	3 *	1650	0.0018	
THRU (T)	1657	1657	4950	0.3347	0.3347
LEFT (L)	296	296	4304	0.0688	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.77
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 1 Dougherty/Dublin City of Dublin
Count Date Time Peak Hour



STREET NAME: Dougherty

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	538	234 *	3000	0.0780	
THRU (T)	1922	1922	4950	0.3883	
LEFT (L)	1015	1015	4304	0.2358	0.2358
SB RIGHT (R)	134	134	1650	0.0812	
THRU (T)	1315	1315	6600	0.1992	
LEFT (L)	43	43	3000	0.0143	
T + R		1449	6600	0.2195	0.2195
EB RIGHT (R)	566	177 *	3000	0.0590	
THRU (T)	1455	1455	4950	0.2939	0.2939
LEFT (L)	263	263	3000	0.0877	
WB RIGHT (R)	17	0 *	1650	0.0000	
THRU (T)	1717	1717	4950	0.3469	
LEFT (L)	793	793	4304	0.1842	0.1842

TOTAL VOLUME-TO-CAPACITY RATIO: 0.93
INTERSECTION LEVEL OF SERVICE: E

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 223 2696 0

LEFT 1441 --- 3.1 <--- 1.9 3.0 0.0 0.0 --- Split? N
 THRU 0 ---> 0.0 (NO. OF LANES) 0.0<--- 0 THRU STREET NAME:
 RIGHT 756 --- 3.1 0.0 3.0 1.9 0.0 --- 0 LEFT I-580 EB Ramps

N
 W + E SIG WARRANTS:
 S 0 1130 312 Urb=Y, Rur=Y
 LEFT THRU RIGHT Split? N

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	312	312	1800	0.1733	
THRU (T)	1130	1130	5400	0.2093	
SB RIGHT (R)	223	223	1800	0.1239	
THRU (T)	2696	2696	5400	0.4993	0.4993
EB RIGHT (R)	756	756	4695	0.1610	
LEFT (L)	1441	1441	4695	0.3069	0.3069
T + R + L		2197	7590	0.2895	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
 679 2454 0

LEFT 648 --- 3.1 <--- 1.9 3.0 0.0 0.0 --- Split? N
 THRU 0 ---> 0.0 (NO. OF LANES) 0.0<--- 0 THRU STREET NAME:
 RIGHT 357 --- 3.1 0.0 3.0 1.9 0.0 --- 0 LEFT I-580 EB Ramps

N
 W + E SIG WARRANTS:
 S 0 2490 657 Urb=Y, Rur=Y
 LEFT THRU RIGHT Split? N

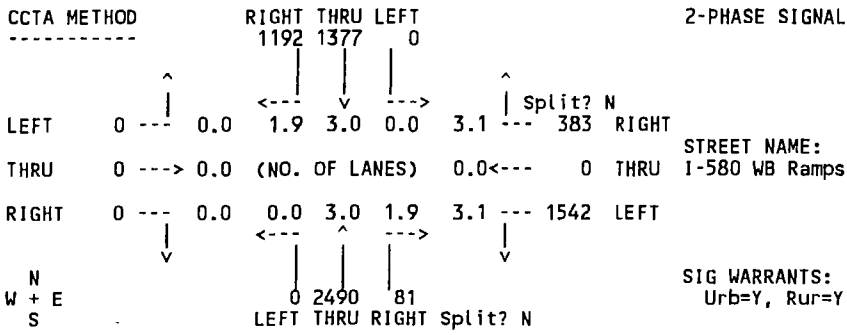
STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	657	657	1800	0.3650	
THRU (T)	2490	2490	5400	0.4611	0.4611
SB RIGHT (R)	679	679	1800	0.3772	
THRU (T)	2454	2454	5400	0.4544	
EB RIGHT (R)	357	357	4695	0.0760	
LEFT (L)	648	648	4695	0.1380	0.1380
T + R + L		1005	7590	0.1324	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.60
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



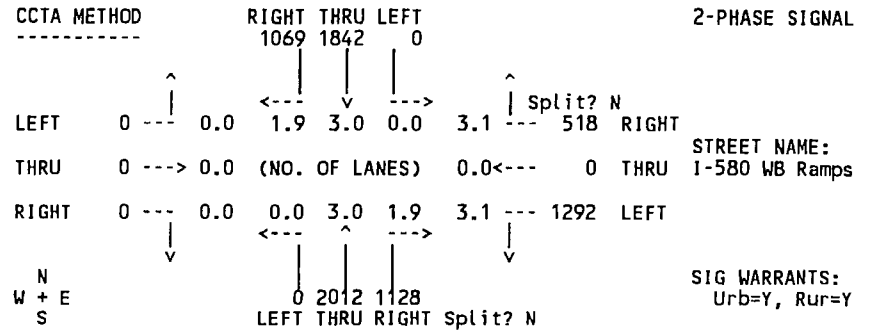
STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	81	81	1800	0.0450	
NB THRU (T)	2490	2490	5400	0.4611	0.4611
SB RIGHT (R)	1192	1192	1800	0.6622	
SB THRU (T)	1377	1377	5400	0.2550	
WB RIGHT (R)	383	383	4695	0.0816	
WB LEFT (L)	1542	1542	4695	0.3284	0.3284
T + R + L		1925	7590	0.2536	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.79
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	518	518	1800	0.6267	
NB THRU (T)	2012	2012	5400	0.3726	0.3726
SB RIGHT (R)	1069	1069	1800	0.5939	
SB THRU (T)	1842	1842	5400	0.3411	
WB RIGHT (R)	518	518	4695	0.1103	
WB LEFT (L)	1292	1292	4695	0.2752	0.2752
T + R + L		1810	7590	0.2385	

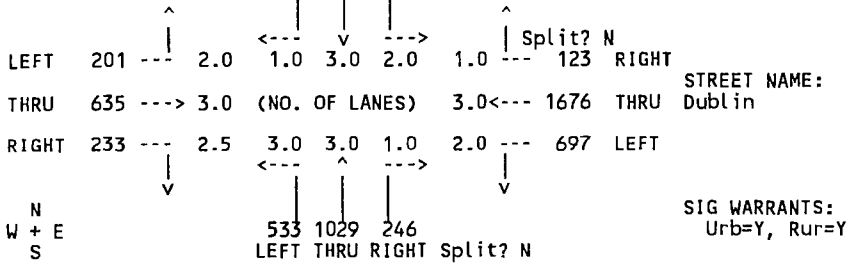
TOTAL VOLUME-TO-CAPACITY RATIO: 0.65
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 4 Hacienda Dr./Dublin City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
343 1616 38



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	246	0 *	1650	0.0000	
THRU (T)	1029	1029	4950	0.2079	
LEFT (L)	533	533	4304	0.1238	0.1238
SB RIGHT (R)	343	232 *	1650	0.1406	
THRU (T)	1616	1616	4950	0.3265	0.3265
LEFT (L)	38	38	3000	0.0127	
EB RIGHT (R)	233	0 *	3000	0.0000	
THRU (T)	635	635	4950	0.1283	
LEFT (L)	201	201	3000	0.0670	0.0670
WB RIGHT (R)	123	102 *	1650	0.0618	
THRU (T)	1676	1676	4950	0.3386	0.3386
LEFT (L)	697	697	3000	0.2323	

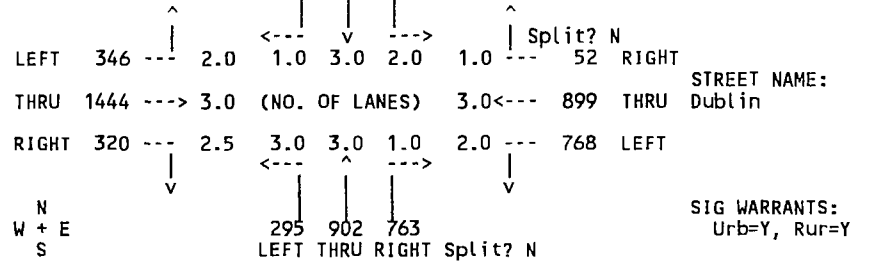
TOTAL VOLUME-TO-CAPACITY RATIO: 0.86
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 4 Hacienda Dr./Dublin City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
275 547 253



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	763	341 *	1650	0.2067	0.2067
THRU (T)	902	902	4950	0.1822	
LEFT (L)	295	295	4304	0.0685	
SB RIGHT (R)	275	85 *	1650	0.0515	
THRU (T)	547	547	4950	0.1105	
LEFT (L)	253	253	3000	0.0843	0.0843
EB RIGHT (R)	320	114 *	3000	0.0380	
THRU (T)	1444	1444	4950	0.2917	0.2917
LEFT (L)	346	346	3000	0.1153	
WB RIGHT (R)	52	0 *	1650	0.0000	
THRU (T)	899	899	4950	0.1816	
LEFT (L)	768	768	3000	0.2560	0.2560

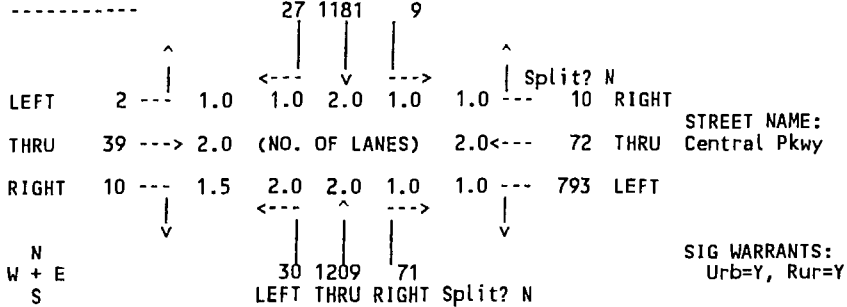
TOTAL VOLUME-TO-CAPACITY RATIO: 0.84
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	71	0 *	1650	0.0000	
THRU (T)	1209	1209	3300	0.3664	0.3664
LEFT (L)	30	30	3000	0.0100	
SB RIGHT (R)	27	25 *	1650	0.0152	
THRU (T)	1181	1181	3300	0.3579	
LEFT (L)	9	9	1650	0.0055	0.0055
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	39	39	3300	0.0118	0.0118
LEFT (L)	2	2	1650	0.0012	
WB RIGHT (R)	10	1 *	1650	0.0006	
THRU (T)	72	72	3300	0.0218	
LEFT (L)	793	793	1650	0.4806	0.4806

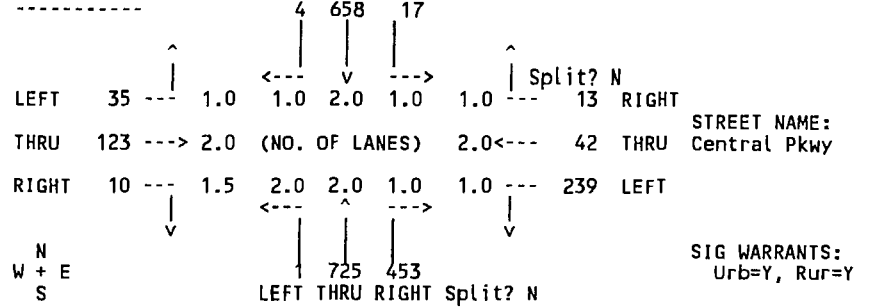
TOTAL VOLUME-TO-CAPACITY RATIO: 0.86
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	453	214 *	1650	0.1297	
THRU (T)	725	725	3300	0.2197	0.2197
LEFT (L)	1	1	3000	0.0003	
SB RIGHT (R)	4	0 *	1650	0.0000	
THRU (T)	658	658	3300	0.1994	
LEFT (L)	17	17	1650	0.0103	0.0103
EB RIGHT (R)	10	9 *	1650	0.0055	
THRU (T)	123	123	3300	0.0373	0.0373
LEFT (L)	35	35	1650	0.0212	
WB RIGHT (R)	13	0 *	1650	0.0000	
THRU (T)	42	42	3300	0.0127	
LEFT (L)	239	239	1650	0.1448	0.1448

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41
 INTERSECTION LEVEL OF SERVICE: A

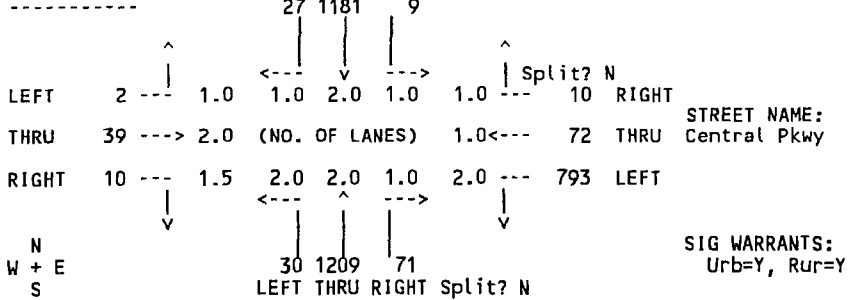
* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Prj All Exts-A.M.Peak_Mit 07/06/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	71	0 *	1650	0.0000	0.3664
THRU (T)	1209	1209	3300	0.3664	
LEFT (L)	30	30	3000	0.0100	
SB RIGHT (R)	27	25 *	1650	0.0152	0.0055
THRU (T)	1181	1181	3300	0.3579	
LEFT (L)	9	9	1650	0.0055	
EB RIGHT (R)	10	0 *	1650	0.0000	0.0118
THRU (T)	39	39	3300	0.0118	
LEFT (L)	2	2	1650	0.0012	
WB RIGHT (R)	10	1 *	1650	0.0006	0.2643
THRU (T)	72	72	1650	0.0436	
LEFT (L)	793	793	3000	0.2643	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.65
 INTERSECTION LEVEL OF SERVICE: B

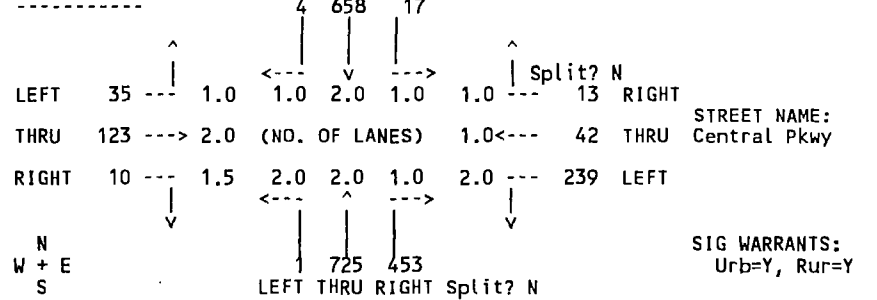
* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Prj All Exts-P.M.Peak_Mit 07/06/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	453	322 *	1650	0.1952	0.2197
THRU (T)	725	725	3300	0.2197	
LEFT (L)	1	1	3000	0.0003	
SB RIGHT (R)	4	0 *	1650	0.0000	0.0103
THRU (T)	658	658	3300	0.1994	
LEFT (L)	17	17	1650	0.0103	
EB RIGHT (R)	10	9 *	1650	0.0055	0.0373
THRU (T)	123	123	3300	0.0373	
LEFT (L)	35	35	1650	0.0212	
WB RIGHT (R)	13	0 *	1650	0.0000	0.0797
THRU (T)	42	42	1650	0.0255	
LEFT (L)	239	239	3000	0.0797	

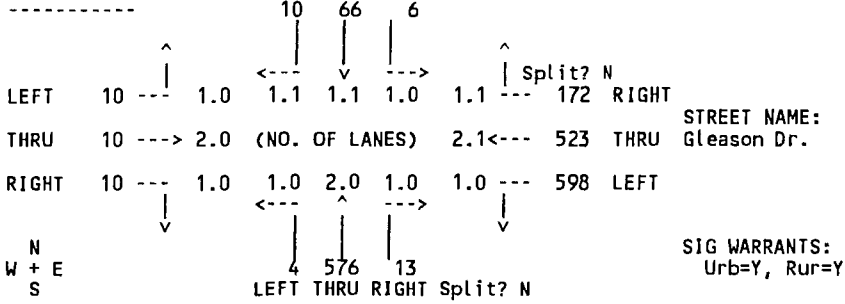
TOTAL VOLUME-TO-CAPACITY RATIO: 0.35
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	13	0 *	1650	0.0000	
NB THRU (T)	576	576	3300	0.1745	0.1745
NB LEFT (L)	4	4	1650	0.0024	
SB RIGHT (R)	10	10	1650	0.0061	
SB THRU (T)	66	66	1650	0.0400	
SB LEFT (L)	6	6	1650	0.0036	0.0036
SB T + R		76	1650	0.0461	
EB RIGHT (R)	10	6 *	1650	0.0036	0.0036
EB THRU (T)	10	10	3300	0.0030	
EB LEFT (L)	10	10	1650	0.0061	
WB RIGHT (R)	172	172	1650	0.1042	
WB THRU (T)	523	523	3300	0.1585	
WB LEFT (L)	598	598	1650	0.3624	0.3624
WB T + R		695	3300	0.2106	

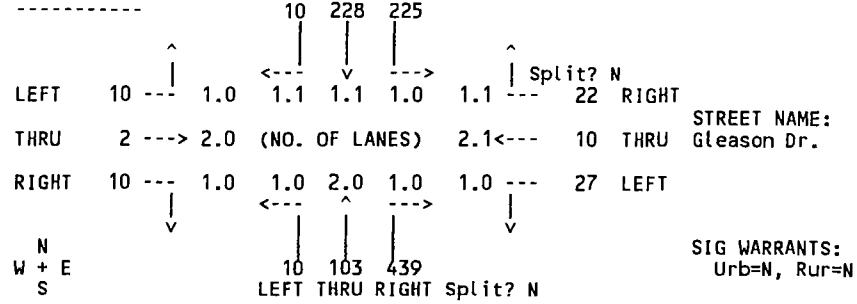
TOTAL VOLUME-TO-CAPACITY RATIO: 0.54
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	439	412 *	1650	0.2497	0.2497
NB THRU (T)	103	103	3300	0.0312	
NB LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	10	10	1650	0.0061	
SB THRU (T)	228	228	1650	0.1382	
SB LEFT (L)	225	225	1650	0.1364	0.1364
SB T + R		238	1650	0.1442	
EB RIGHT (R)	10	0 *	1650	0.0000	
EB THRU (T)	2	2	3300	0.0006	
EB LEFT (L)	10	10	1650	0.0061	0.0061
WB RIGHT (R)	22	22	1650	0.0133	0.0133
WB THRU (T)	10	10	3300	0.0030	
WB LEFT (L)	27	27	1650	0.0164	
WB T + R		32	3300	0.0097	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Project-AM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL
 466 2010 240
 LEFT 601 --- 2.0 <--- 1.9 2.0 1.0 2.5 --- 417 RIGHT Split? N
 THRU 135 ---> 1.0 (NO. OF LANES) 0.0<--- 0 THRU I-580 EB Ramps STREET NAME:
 RIGHT 516 --- 1.9 0.0 4.1 1.1 2.0 --- 142 LEFT I-580 EB Ramps
 N
 W + E 0 1869 364 SIG WARRANTS:
 S LEFT THRU RIGHT Split? N Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1869	1869	6600	0.2832	
T + R		2233	6600	0.3383	
SB RIGHT (R)	466	466	1650	0.2824	
THRU (T)	2010	2010	3300	0.6091	0.6091
LEFT (L)	240	240	1650	0.1455	
EB RIGHT (R)	516	516	1650	0.3127	
THRU (T)	135	135	1650	0.0818	
LEFT (L)	601	601	3000	0.2003	0.2003
WB RIGHT (R)	417	0 *	3000	0.0000	0.0000
LEFT (L)	142	142	3000	0.0473	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.81
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Project-PM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL
 926 1791 270
 LEFT 1057 --- 2.0 <--- 1.9 2.0 1.0 2.5 --- 515 RIGHT Split? N
 THRU 79 ---> 1.0 (NO. OF LANES) 0.0<--- 0 THRU I-580 EB Ramps STREET NAME:
 RIGHT 65 --- 1.9 0.0 4.1 1.1 2.0 --- 126 LEFT I-580 EB Ramps
 N
 W + E 0 2596 203 SIG WARRANTS:
 S LEFT THRU RIGHT Split? N Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

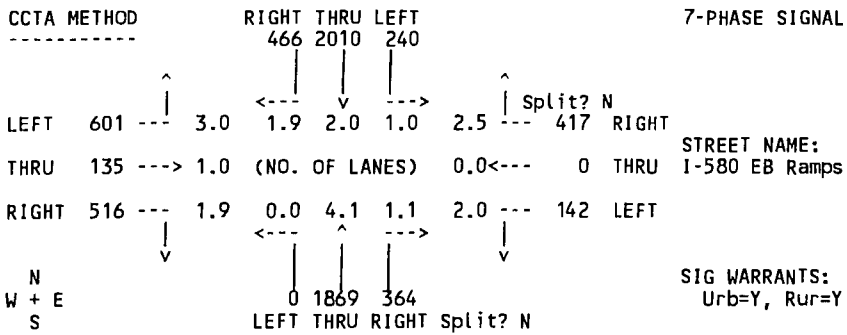
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	203	203	1650	0.1230	
THRU (T)	2596	2596	6600	0.3933	
T + R		2799	6600	0.4241	0.4241
SB RIGHT (R)	926	926	1650	0.5612	
THRU (T)	1791	1791	3300	0.5427	
LEFT (L)	270	270	1650	0.1636	0.1636
EB RIGHT (R)	65	65	1650	0.0394	
THRU (T)	79	79	1650	0.0479	
LEFT (L)	1057	1057	3000	0.3523	0.3523
WB RIGHT (R)	515	24 *	3000	0.0080	0.0080
LEFT (L)	126	126	3000	0.0420	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.95
 INTERSECTION LEVEL OF SERVICE: E

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Project-AM Peak_Mit 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

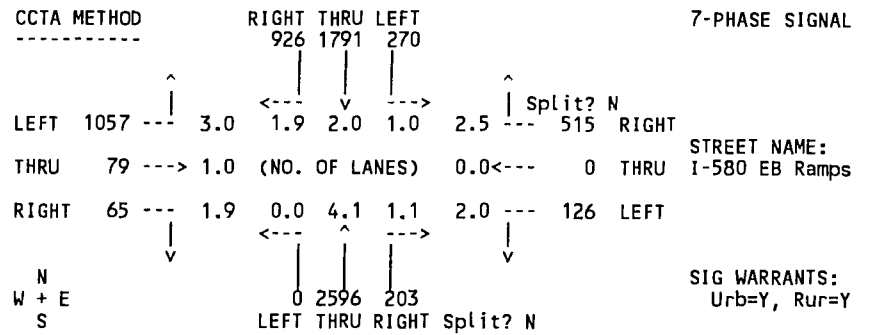
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1869	1869	6600	0.2832	
T + R		2233	6600	0.3383	
SB RIGHT (R)	466	466	1650	0.2824	
THRU (T)	2010	2010	3300	0.6091	0.6091
LEFT (L)	240	240	1650	0.1455	
EB RIGHT (R)	516	516	1650	0.3127	
THRU (T)	135	135	1650	0.0818	
LEFT (L)	601	601	4304	0.1396	0.1396
WB RIGHT (R)	417	0 *	3000	0.0000	0.0000
LEFT (L)	142	142	3000	0.0473	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Project-PM Peak_Mit 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	203	203	1650	0.1230	
THRU (T)	2596	2596	6600	0.3933	
T + R		2799	6600	0.4241	0.4241
SB RIGHT (R)	926	926	1650	0.5612	
THRU (T)	1791	1791	3300	0.5427	
LEFT (L)	270	270	1650	0.1636	0.1636
EB RIGHT (R)	65	65	1650	0.0394	
THRU (T)	79	79	1650	0.0479	
LEFT (L)	1057	1057	4304	0.2456	0.2456
WB RIGHT (R)	515	24 *	3000	0.0080	0.0080
LEFT (L)	126	126	3000	0.0420	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED

Condition: Buildout+Project-AM Peak 07/15/05

INTERSECTION	8 Tassajara Rd/I-580 WB Ramps	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	2-PHASE SIGNAL
	1855 1740 0	
LEFT	0.0	802
THRU	0.0	0
RIGHT	0.0	976
STREET NAME: I-580 WB Ramps		
SIG WARRANTS: Urb=Y, Rur=Y		

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	474	474	1800	0.2633	
THRU (T)	1743	1743	5400	0.3228	
T + R		2217	5400	0.4106	0.4106
SB RIGHT (R)	1855	1855	1800	1.0306 **	
THRU (T)	1740	1740	5400	0.3222	
WB RIGHT (R)	802	802	3273	0.2450	
LEFT (L)	976	976	3273	0.2982	0.2982

TOTAL VOLUME-TO-CAPACITY RATIO: 0.71
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED ** APPROACHING OR EXCEEDING CAPACITY
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Project-PM Peak 07/15/05

INTERSECTION	8 Tassajara Rd/I-580 WB Ramps	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	2-PHASE SIGNAL
	1646 2423 0	
LEFT	0.0	575
THRU	0.0	0
RIGHT	0.0	563
STREET NAME: I-580 WB Ramps		
SIG WARRANTS: Urb=Y, Rur=Y		

STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	448	448	1800	0.2489	
THRU (T)	2455	2455	5400	0.4546	
T + R		2903	5400	0.5376	0.5376
SB RIGHT (R)	1646	1646	1800	0.9144 **	
THRU (T)	2423	2423	5400	0.4487	
WB RIGHT (R)	575	575	3273	0.1757	0.1757
LEFT (L)	563	563	3273	0.1720	

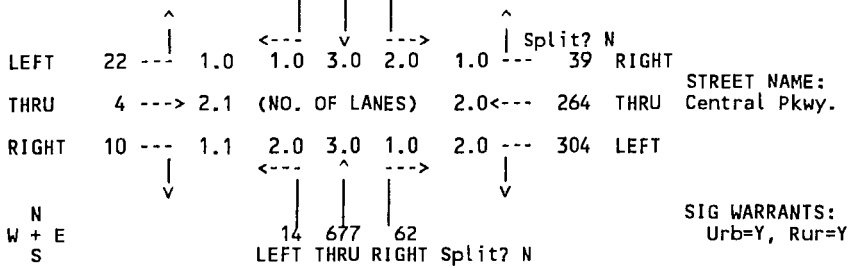
TOTAL VOLUME-TO-CAPACITY RATIO: 0.71
 INTERSECTION LEVEL OF SERVICE: C

*

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 10 Tassajara Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 ----- 477 2293 69



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	62	0 *	1650	0.0000	
NB THRU (T)	677	677	4950	0.1368	
NB LEFT (L)	14	14	3000	0.0047	0.0047
SB RIGHT (R)	477	455 *	1650	0.2758	
SB THRU (T)	2293	2293	4950	0.4632	0.4632
SB LEFT (L)	69	69	3000	0.0230	
EB RIGHT (R)	10	10	1650	0.0061	0.0061
EB THRU (T)	4	4	3300	0.0012	
EB LEFT (L)	22	22	1650	0.0133	
EB T + R		14	3300	0.0042	
WB RIGHT (R)	39	1 *	1650	0.0006	
WB THRU (T)	264	264	3300	0.0800	
WB LEFT (L)	304	304	3000	0.1013	0.1013

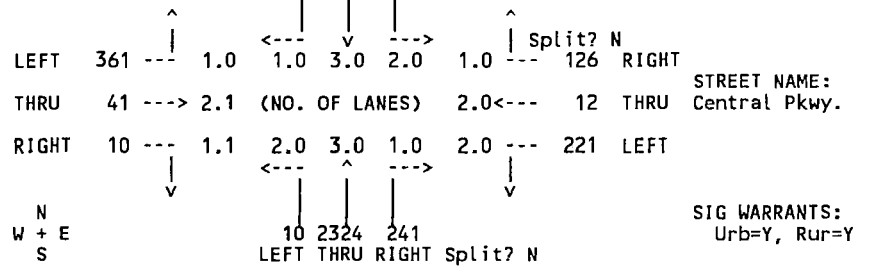
TOTAL VOLUME-TO-CAPACITY RATIO: 0.58
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 10 Tassajara Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 ----- 80 1824 79



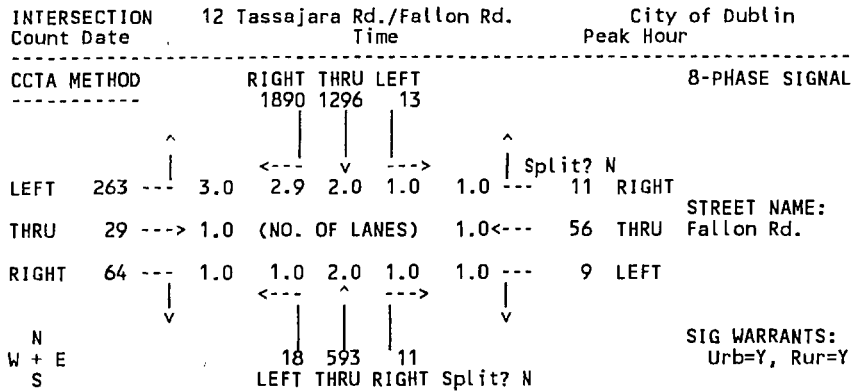
STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	241	119 *	1650	0.0721	
NB THRU (T)	2324	2324	4950	0.4695	0.4695
NB LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	80	0 *	1650	0.0000	
SB THRU (T)	1824	1824	4950	0.3685	
SB LEFT (L)	79	79	3000	0.0263	0.0263
EB RIGHT (R)	10	10	1650	0.0061	
EB THRU (T)	41	41	3300	0.0124	
EB LEFT (L)	361	361	1650	0.2188	0.2188
EB T + R		51	3300	0.0155	
WB RIGHT (R)	126	83 *	1650	0.0503	0.0503
WB THRU (T)	12	12	3300	0.0036	
WB LEFT (L)	221	221	3000	0.0737	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

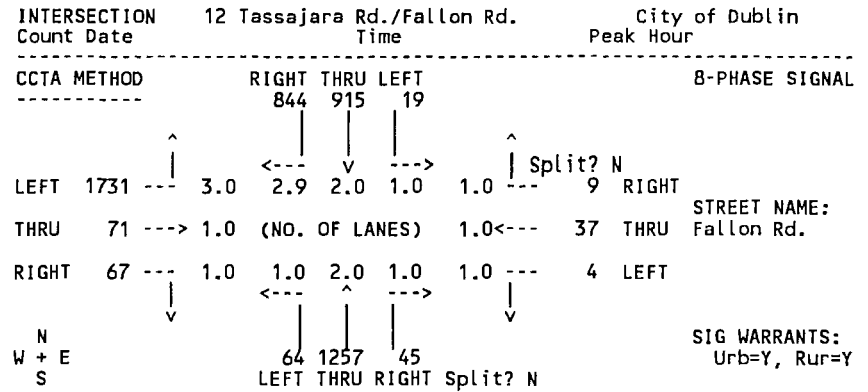


STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	11	2 *	1650	0.0012	
THRU (T)	593	593	3300	0.1797	
LEFT (L)	18	18	1650	0.0109	0.0109
SB RIGHT (R)	1890	1890	3000	0.6300	
THRU (T)	1296	1296	3300	0.3927	0.3927
LEFT (L)	13	13	1650	0.0079	
EB RIGHT (R)	64	46 *	1650	0.0279	
THRU (T)	29	29	1650	0.0176	
LEFT (L)	263	263	4304	0.0611	0.0611
WB RIGHT (R)	11	0 *	1650	0.0000	
THRU (T)	56	56	1650	0.0339	0.0339
LEFT (L)	9	9	1650	0.0055	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.50	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

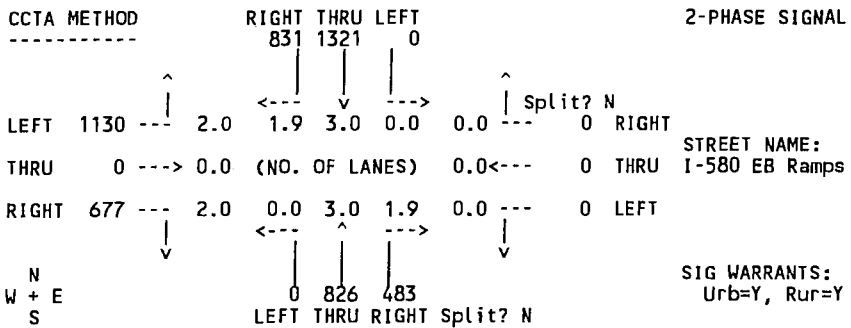


STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	45	41 *	1650	0.0248	
THRU (T)	1257	1257	3300	0.3809	0.3809
LEFT (L)	64	64	1650	0.0388	
SB RIGHT (R)	844	844	3000	0.2813	
THRU (T)	915	915	3300	0.2773	
LEFT (L)	19	19	1650	0.0115	0.0115
EB RIGHT (R)	67	3 *	1650	0.0018	
THRU (T)	71	71	1650	0.0430	
LEFT (L)	1731	1731	4304	0.4022	0.4022
WB RIGHT (R)	9	0 *	1650	0.0000	
THRU (T)	37	37	1650	0.0224	0.0224
LEFT (L)	4	4	1650	0.0024	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.82	
INTERSECTION LEVEL OF SERVICE:				D	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



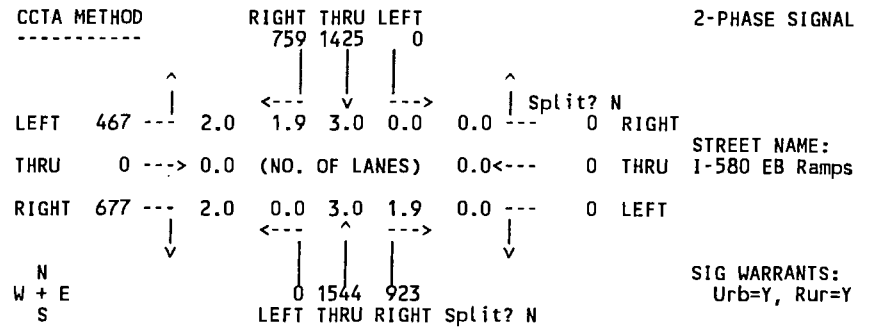
STREET NAME: El Charro Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	483	483	1800	0.2683	
THRU (T)	826	826	5400	0.1530	
SB RIGHT (R)	831	831	1800	0.4617	
THRU (T)	1321	1321	5400	0.2446	0.2446
EB RIGHT (R)	677	677	3273	0.2068	
LEFT (L)	1130	1130	3273	0.3452	0.3452

TOTAL VOLUME-TO-CAPACITY RATIO: 0.59
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: El Charro Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	923	923	1800	0.5128	
THRU (T)	1544	1544	5400	0.2859	0.2859
SB RIGHT (R)	759	759	1800	0.4217	
THRU (T)	1425	1425	5400	0.2639	
EB RIGHT (R)	677	677	3273	0.2068	0.2068
LEFT (L)	467	467	3273	0.1427	

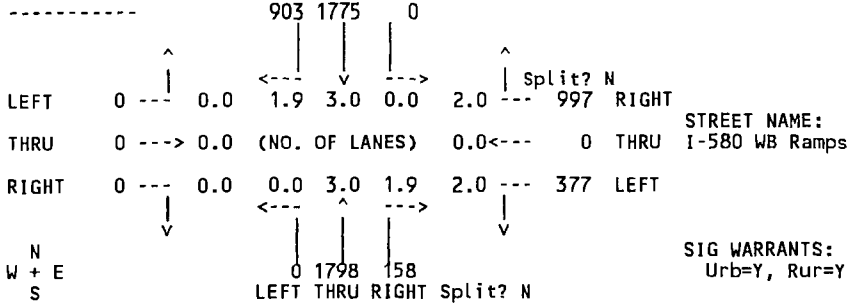
TOTAL VOLUME-TO-CAPACITY RATIO: 0.49
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	158	158	1800	0.0878	
THRU (T)	1798	1798	5400	0.3330	0.3330
SB RIGHT (R)	903	903	1800	0.5017	
THRU (T)	1775	1775	5400	0.3287	
WB RIGHT (R)	997	997	3273	0.3046	0.3046
LEFT (L)	377	377	3273	0.1152	

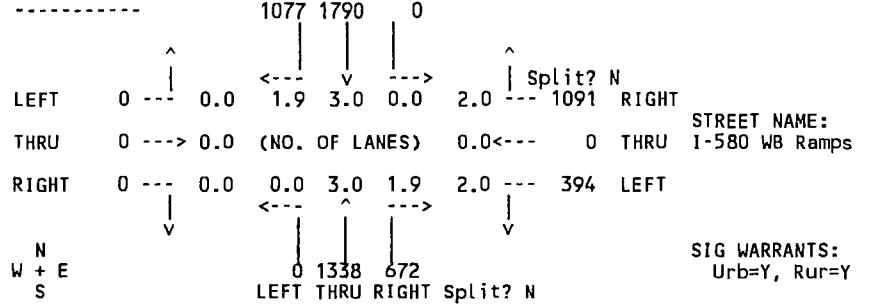
TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL



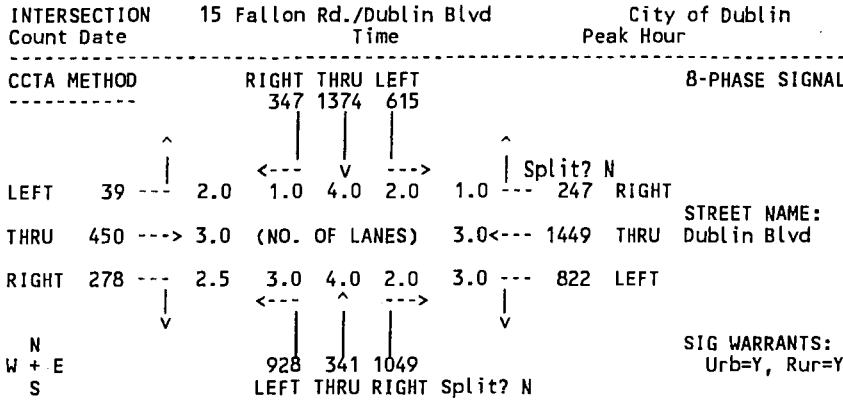
STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	672	672	1800	0.3733	
THRU (T)	1338	1338	5400	0.2478	
SB RIGHT (R)	1077	1077	1800	0.5983	
THRU (T)	1790	1790	5400	0.3315	0.3315
WB RIGHT (R)	1091	1091	3273	0.3333	0.3333
LEFT (L)	394	394	3273	0.1204	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.66
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05



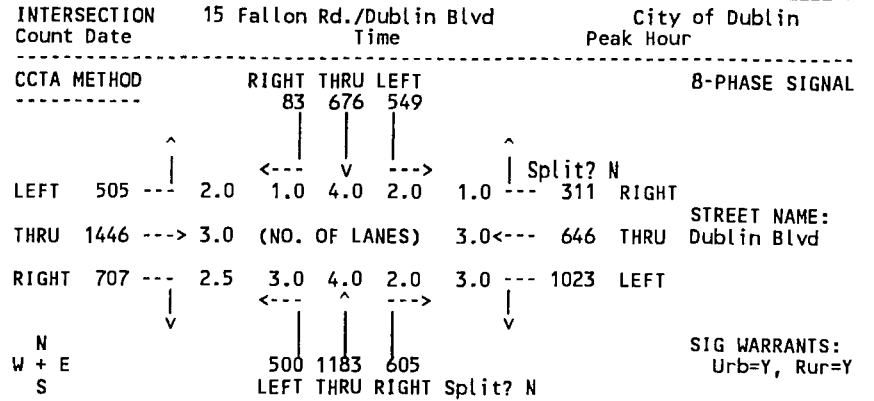
STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1049	734 *	3000	0.2447	0.2447
NB THRU (T)	341	341	6600	0.0517	
NB LEFT (L)	928	928	4304	0.2156	
SB RIGHT (R)	347	326 *	1650	0.1976	
SB THRU (T)	1374	1374	6600	0.2082	
SB LEFT (L)	615	615	3000	0.2050	0.2050
EB RIGHT (R)	278	0 *	3000	0.0000	
EB THRU (T)	450	450	4950	0.0909	
EB LEFT (L)	39	39	3000	0.0130	0.0130
WB RIGHT (R)	247	0 *	1650	0.0000	
WB THRU (T)	1449	1449	4950	0.2927	0.2927
WB LEFT (L)	822	822	4304	0.1910	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	605	213 *	3000	0.0710	
NB THRU (T)	1183	1183	6600	0.1792	0.1792
NB LEFT (L)	500	500	4304	0.1162	
SB RIGHT (R)	83	0 *	1650	0.0000	
SB THRU (T)	676	676	6600	0.1024	
SB LEFT (L)	549	549	3000	0.1830	0.1830
EB RIGHT (R)	707	358 *	3000	0.1193	
EB THRU (T)	1446	1446	4950	0.2921	0.2921
EB LEFT (L)	505	505	3000	0.1683	
WB RIGHT (R)	311	9 *	1650	0.0055	
WB THRU (T)	646	646	4950	0.1305	
WB LEFT (L)	1023	1023	4304	0.2377	0.2377

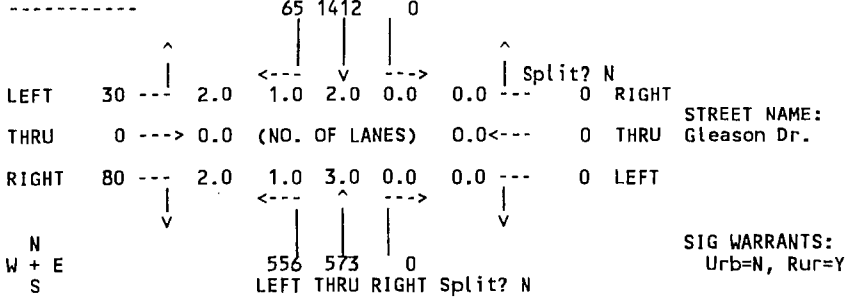
TOTAL VOLUME-TO-CAPACITY RATIO: 0.89
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 16 Fallon Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	573	573	5160	0.1110	
NB LEFT (L)	556	556	1720	0.3233	0.3233
SB RIGHT (R)	65	48 *	1720	0.0279	
SB THRU (T)	1412	1412	3440	0.4105	0.4105
EB RIGHT (R)	80	0 *	3127	0.0000	
EB LEFT (L)	30	30	3127	0.0096	0.0096

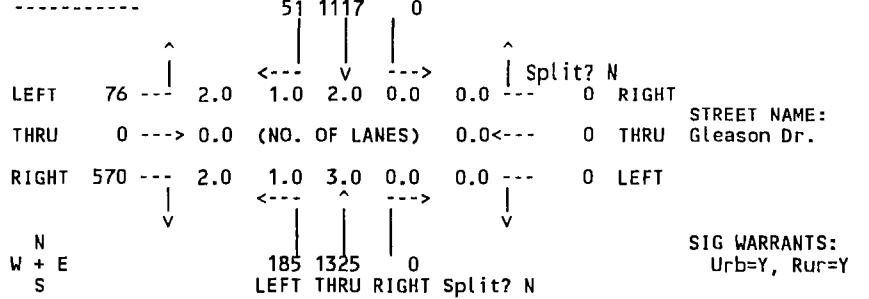
TOTAL VOLUME-TO-CAPACITY RATIO: 0.74
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 16 Fallon Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1325	1325	5160	0.2568	
NB LEFT (L)	185	185	1720	0.1076	0.1076
SB RIGHT (R)	51	9 *	1720	0.0052	
SB THRU (T)	1117	1117	3440	0.3247	0.3247
EB RIGHT (R)	570	385 *	3127	0.1231	0.1231
EB LEFT (L)	76	76	3127	0.0243	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.56
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

INTERSECTION 17 Fallon Rd./Antone Way City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL
 4 1406 0

LEFT 4 1.0 1.0 2.0 0.0 0.0 Split? N
 THRU 0 0.0 (NO. OF LANES) 0.0<--- 0 THRU STREET NAME:
 RIGHT 71 1.0 1.0 2.0 0.0 0.0<--- 0 LEFT Antone Way

N
 W + E
 S

23 580 0
 LEFT THRU RIGHT Split? N

SIG WARRANTS:
 Urb=N, Rur=N

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	580	580	3440	0.1686	
LEFT (L)	23	23	1720	0.0134	0.0134
SB RIGHT (R)	4	0 *	1720	0.0000	
THRU (T)	1406	1406	3440	0.4087	0.4087
EB RIGHT (R)	71	48 *	1720	0.0279	0.0279
LEFT (L)	4	4	1720	0.0023	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.45
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

INTERSECTION 17 Fallon Rd./Antone Way City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL
 5 998 0

LEFT 7 1.0 1.0 2.0 0.0 0.0 Split? N
 THRU 0 0.0 (NO. OF LANES) 0.0<--- 0 THRU STREET NAME:
 RIGHT 169 1.0 1.0 2.0 0.0 0.0<--- 0 LEFT Antone Way

N
 W + E
 S

60 1341 0
 LEFT THRU RIGHT Split? N

SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

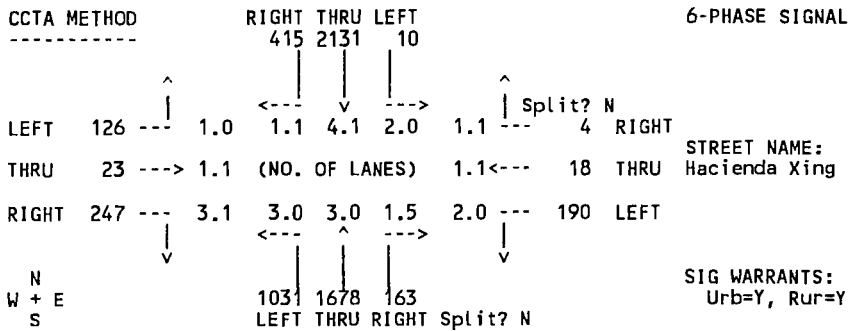
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1341	1341	3440	0.3898	0.3898
LEFT (L)	60	60	1720	0.0349	
SB RIGHT (R)	5	0 *	1720	0.0000	
THRU (T)	998	998	3440	0.2901	
EB RIGHT (R)	169	109 *	1720	0.0634	0.0634
LEFT (L)	7	7	1720	0.0041	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.45
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr

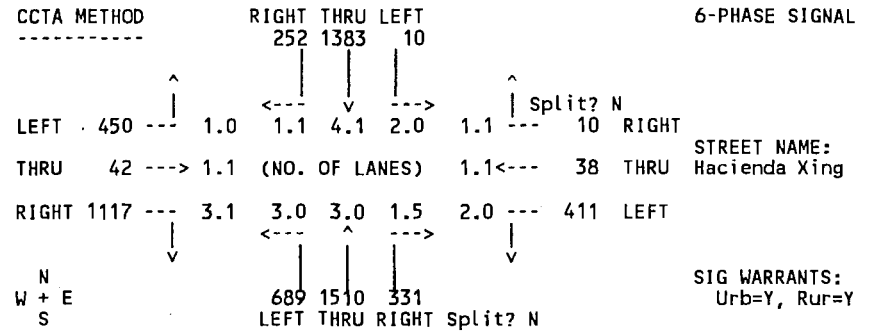
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	163	59 *	1650	0.0358	
THRU (T)	1678	1678	4950	0.3390	
LEFT (L)	1031	1031	4304	0.2395	0.2395
SB RIGHT (R)	415	415	1650	0.2515	
THRU (T)	2131	2131	6600	0.3229	
LEFT (L)	10	10	3000	0.0033	
T + R		2546	6600	0.3858	0.3858
EB RIGHT (R)	247	0 *	4304	0.0000	
THRU (T)	23	23	1650	0.0139	
LEFT (L)	126	126	1650	0.0764	0.0764
T + R		23	4304	0.0053	
WB RIGHT (R)	4	4	1650	0.0024	
THRU (T)	18	18	1650	0.0109	
LEFT (L)	190	190	3000	0.0633	
T + R		22	1650	0.0133	0.0133

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
 Count Date Time Peak Hour



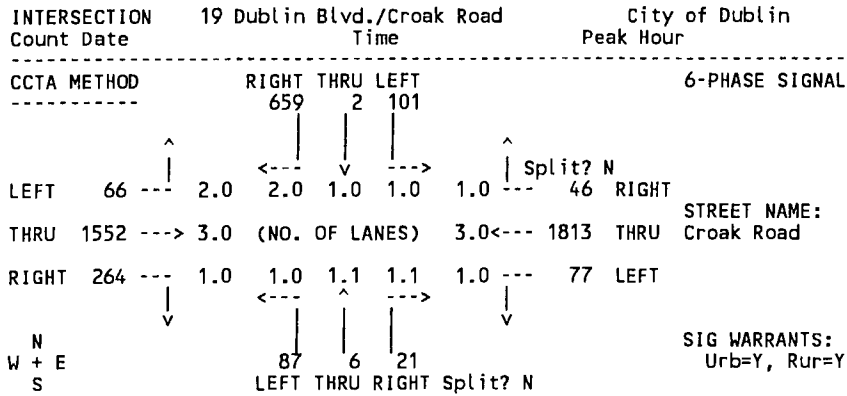
STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	331	105 *	1650	0.0636	
THRU (T)	1510	1510	4950	0.3051	
LEFT (L)	689	689	4304	0.1601	0.1601
SB RIGHT (R)	252	252	1650	0.1527	
THRU (T)	1383	1383	6600	0.2095	
LEFT (L)	10	10	3000	0.0033	
T + R		1635	6600	0.2477	0.2477
EB RIGHT (R)	1117	853 *	4304	0.1982	
THRU (T)	42	42	1650	0.0255	
LEFT (L)	450	450	1650	0.2727	
T + R		895	4304	0.2079	0.2079
WB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	38	38	1650	0.0230	
LEFT (L)	411	411	3000	0.1370	0.1370
T + R		48	1650	0.0291	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.75
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
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Condition: Buildout+Project-AM Peak 07/18/05

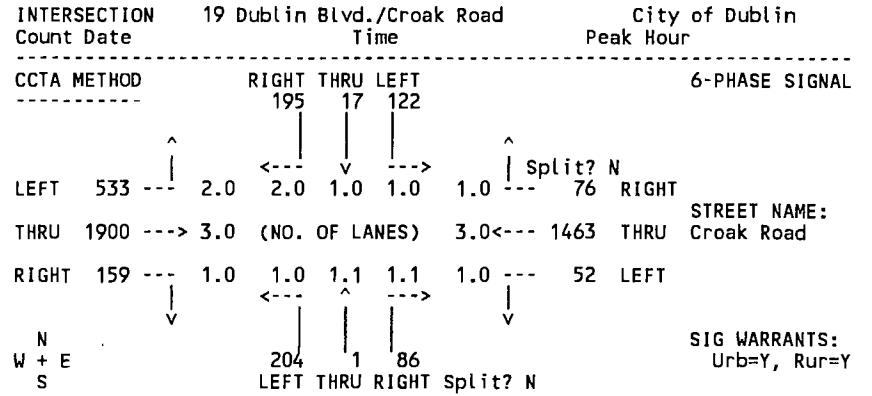


STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	21	21	1650	0.0127	
THRU (T)	6	6	1650	0.0036	
LEFT (L)	87	87	1650	0.0527	0.0527
T + R		27	1650	0.0164	
SB RIGHT (R)	659	623 *	3000	0.2077	0.2077
THRU (T)	2	2	1650	0.0012	
LEFT (L)	101	101	1650	0.0612	
EB RIGHT (R)	264	177 *	1650	0.1073	
THRU (T)	1552	1552	4950	0.3135	
LEFT (L)	66	66	3000	0.0220	0.0220
WB RIGHT (R)	46	0 *	1650	0.0000	
THRU (T)	1813	1813	4950	0.3663	0.3663
LEFT (L)	77	77	1650	0.0467	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.65	
INTERSECTION LEVEL OF SERVICE:				B	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Project-PM Peak 07/18/05



STREET NAME: Dublin Blvd.

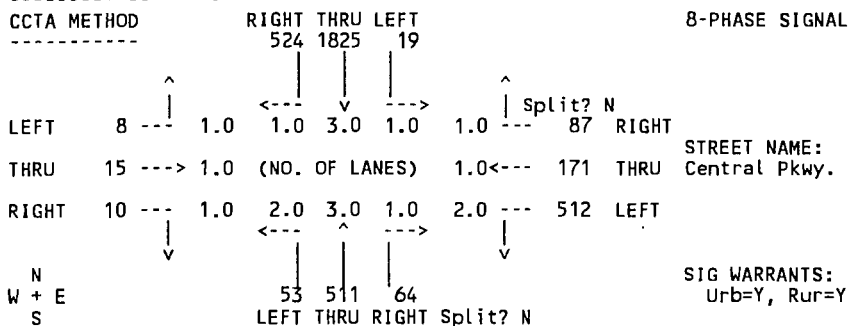
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	86	86	1650	0.0521	
THRU (T)	1	1	1650	0.0006	
LEFT (L)	204	204	1650	0.1236	0.1236
T + R		87	1650	0.0527	
SB RIGHT (R)	195	0 *	3000	0.0000	
THRU (T)	17	17	1650	0.0103	0.0103
LEFT (L)	122	122	1650	0.0739	
EB RIGHT (R)	159	0 *	1650	0.0000	
THRU (T)	1900	1900	4950	0.3838	
LEFT (L)	533	533	3000	0.1777	0.1777
WB RIGHT (R)	76	0 *	1650	0.0000	
THRU (T)	1463	1463	4950	0.2956	0.2956
LEFT (L)	52	52	1650	0.0315	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.61	
INTERSECTION LEVEL OF SERVICE:				B	

* ADJUSTED FOR RIGHT TURN ON RED

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Project-AM Peak 07/15/05

INTERSECTION 20 Fallon Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	64	0 *	1650	0.0000	
THRU (T)	511	511	4950	0.1032	
LEFT (L)	53	53	3000	0.0177	0.0177
SB RIGHT (R)	524	516 *	1650	0.3127	
THRU (T)	1825	1825	4950	0.3687	0.3687
LEFT (L)	19	19	1650	0.0115	
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	15	15	1650	0.0091	0.0091
LEFT (L)	8	8	1650	0.0048	
WB RIGHT (R)	87	68 *	1650	0.0412	
THRU (T)	171	171	1650	0.1036	
LEFT (L)	512	512	3000	0.1707	0.1707

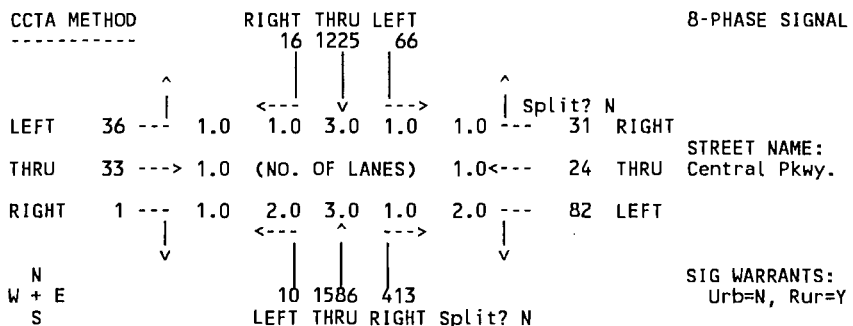
TOTAL VOLUME-TO-CAPACITY RATIO: 0.57
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Project-PM Peak 07/15/05

INTERSECTION 20 Fallon Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour

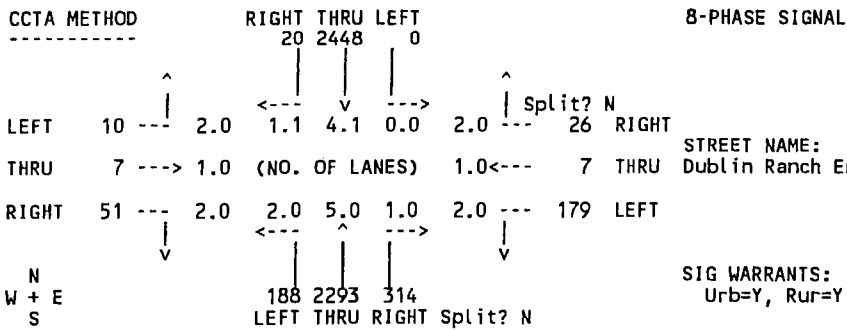


STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	413	368 *	1650	0.2230	
THRU (T)	1586	1586	4950	0.3204	0.3204
LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	16	0 *	1650	0.0000	
THRU (T)	1225	1225	4950	0.2475	
LEFT (L)	66	66	1650	0.0400	0.0400
EB RIGHT (R)	1	0 *	1650	0.0000	
THRU (T)	33	33	1650	0.0200	0.0200
LEFT (L)	36	36	1650	0.0218	
WB RIGHT (R)	31	0 *	1650	0.0000	
THRU (T)	24	24	1650	0.0145	
LEFT (L)	82	82	3000	0.0273	0.0273

TOTAL VOLUME-TO-CAPACITY RATIO: 0.41
 INTERSECTION LEVEL OF SERVICE: A

INTERSECTION 21 Fallon Rd./Dublin Ranch Ent City of Dublin
 Count Date Time Peak Hour



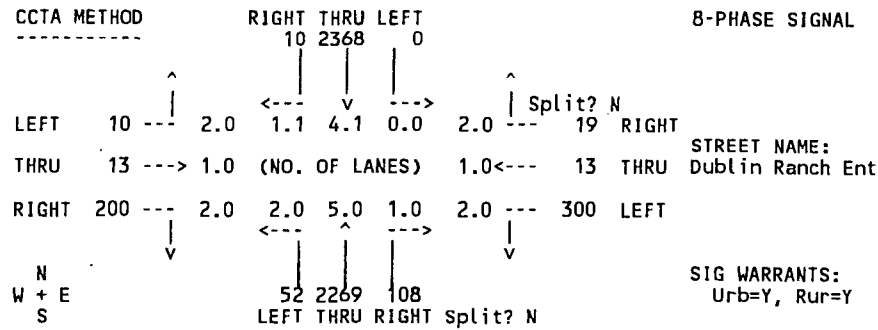
STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	314	216 *	1650	0.1309	
THRU (T)	2293	2293	8250	0.2779	
LEFT (L)	188	188	3000	0.0627	0.0627
SB RIGHT (R)	20	20	1650	0.0121	
THRU (T)	2448	2448	6600	0.3709	
T + R		2468	6600	0.3739	0.3739
EB RIGHT (R)	51	0 *	3000	0.0000	
THRU (T)	7	7	1650	0.0042	0.0042
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	26	26	3000	0.0087	
THRU (T)	7	7	1650	0.0042	
LEFT (L)	179	179	3000	0.0597	0.0597

TOTAL VOLUME-TO-CAPACITY RATIO: 0.50
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

INTERSECTION 21 Fallon Rd./Dublin Ranch Ent City of Dublin
 Count Date Time Peak Hour



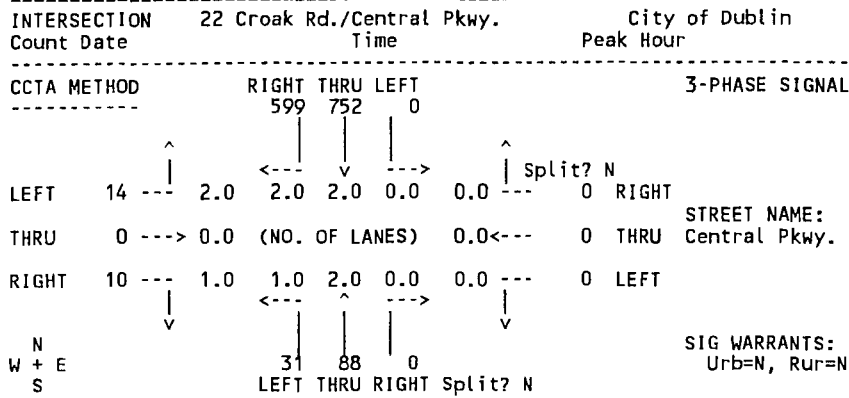
STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	108	0 *	1650	0.0000	
THRU (T)	2269	2269	8250	0.2750	
LEFT (L)	52	52	3000	0.0173	0.0173
SB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	2368	2368	6600	0.3588	
T + R		2378	6600	0.3603	0.3603
EB RIGHT (R)	200	171 *	3000	0.0570	0.0570
THRU (T)	13	13	1650	0.0079	
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	19	19	3000	0.0063	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	300	300	3000	0.1000	0.1000

TOTAL VOLUME-TO-CAPACITY RATIO: 0.53
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Project-AM Peak 07/15/05



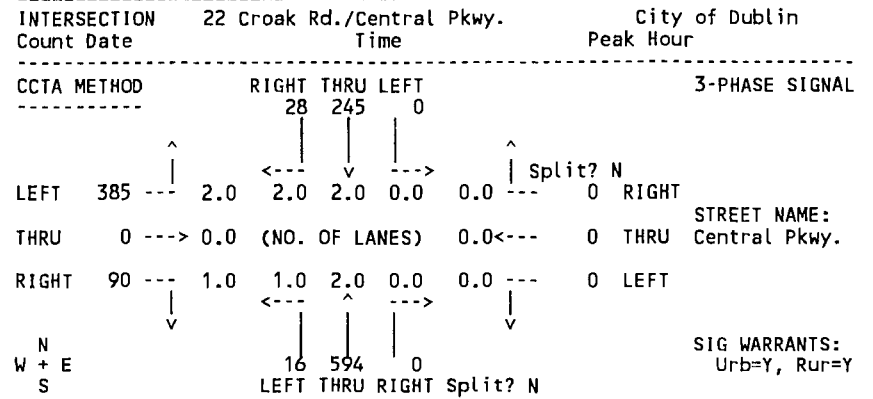
STREET NAME: Croak Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	88	88	3440	0.0256	
LEFT (L)	31	31	1720	0.0180	0.0180
SB RIGHT (R)	599	591 *	3127	0.1890	
THRU (T)	752	752	3440	0.2186	0.2186
EB RIGHT (R)	10	0 *	1720	0.0000	
LEFT (L)	14	14	3127	0.0045	0.0045

TOTAL VOLUME-TO-CAPACITY RATIO: 0.24
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Project-PM Peak 07/15/05



STREET NAME: Croak Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	594	594	3440	0.1727	0.1727
LEFT (L)	16	16	1720	0.0093	
SB RIGHT (R)	28	0 *	3127	0.0000	
THRU (T)	245	245	3440	0.0712	
EB RIGHT (R)	90	74 *	1720	0.0430	
LEFT (L)	385	385	3127	0.1231	0.1231

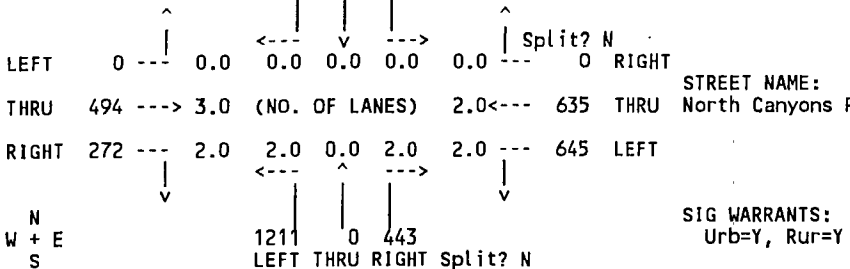
TOTAL VOLUME-TO-CAPACITY RATIO: 0.30
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	443	88 *	3127	0.0281	
NB LEFT (L)	1211	1211	3127	0.3873	0.3873
EB RIGHT (R)	272	0 *	3127	0.0000	
EB THRU (T)	494	494	5160	0.0957	0.0957
WB THRU (T)	635	635	3440	0.1846	
WB LEFT (L)	645	645	3127	0.2063	0.2063

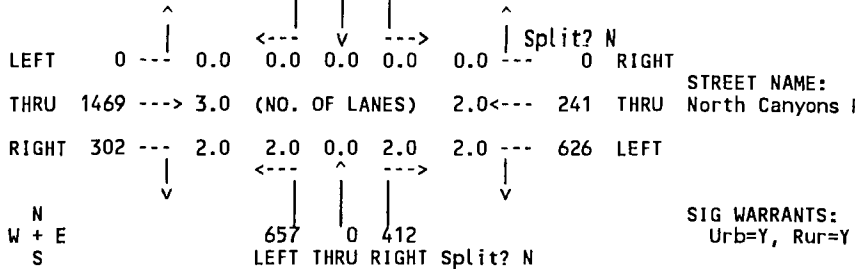
TOTAL VOLUME-TO-CAPACITY RATIO: 0.69
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



STREET NAME: Airway Blvd.

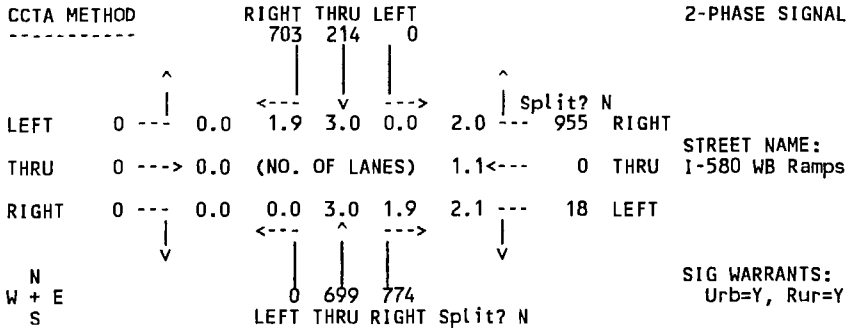
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	412	68 *	3127	0.0217	
NB LEFT (L)	657	657	3127	0.2101	0.2101
EB RIGHT (R)	302	0 *	3127	0.0000	
EB THRU (T)	1469	1469	5160	0.2847	0.2847
WB THRU (T)	241	241	3440	0.0701	
WB LEFT (L)	626	626	3127	0.2002	0.2002

TOTAL VOLUME-TO-CAPACITY RATIO: 0.70
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 24 Airway Blvd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Airway Blvd.

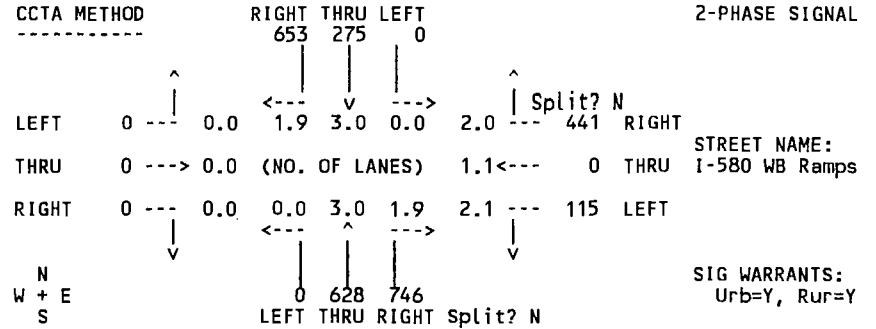
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	774	774	1800	0.4300	
THRU (T)	699	699	5400	0.1294	0.1294
SB RIGHT (R)	703	703	1800	0.3906	
THRU (T)	214	214	5400	0.0396	
WB RIGHT (R)	955	955	3273	0.2918	0.2918
THRU (T)	0	0	1800	0.0000	
LEFT (L)	18	18	3273	0.0055	
T + L		18	3273	0.0055	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.42
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDP JAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 24 Airway Blvd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

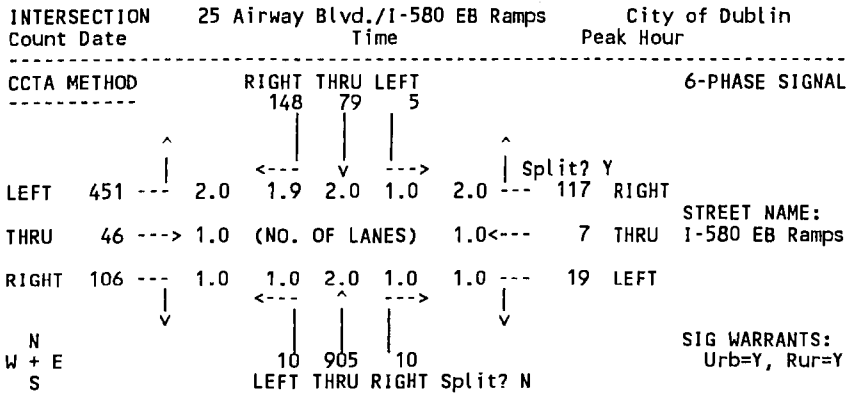


STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	746	746	1800	0.4144	
THRU (T)	628	628	5400	0.1163	0.1163
SB RIGHT (R)	653	653	1800	0.3628	
THRU (T)	275	275	5400	0.0509	
WB RIGHT (R)	441	441	3273	0.1347	0.1347
THRU (T)	0	0	1800	0.0000	
LEFT (L)	115	115	3273	0.0351	
T + L		115	3273	0.0351	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.25
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDP JAP1.PMV,CAP=...LOSCAP.TAB

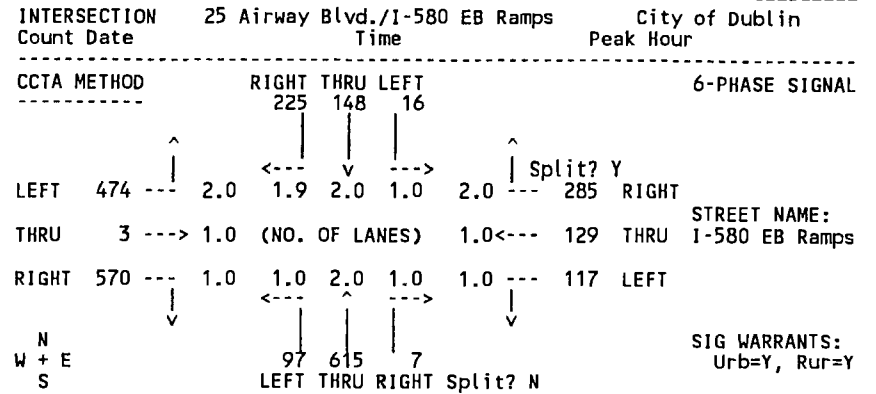


STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	905	905	3300	0.2742	0.2742
LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	148	148	1650	0.0897	
THRU (T)	79	79	3300	0.0239	
LEFT (L)	5	5	1650	0.0030	0.0030
EB RIGHT (R)	106	96 *	1650	0.0582	
THRU (T)	46	46	1650	0.0279	
LEFT (L)	451	451	3000	0.1503	0.1503
WB RIGHT (R)	117	112 *	3000	0.0373	0.0373
THRU (T)	7	7	1650	0.0042	
LEFT (L)	19	19	1650	0.0115	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.46
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB



STREET NAME: Airway Blvd.

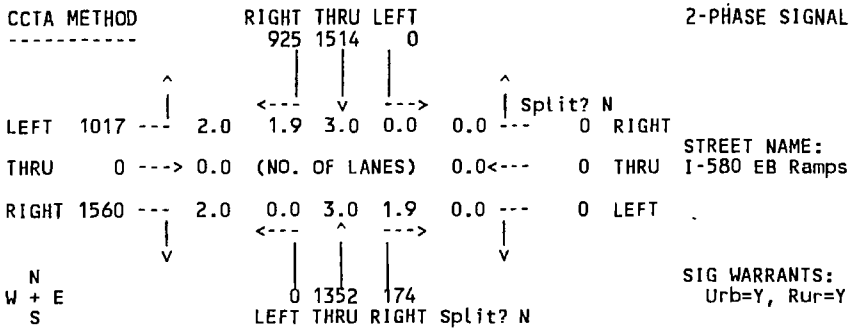
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	7	0 *	1650	0.0000	
THRU (T)	615	615	3300	0.1864	0.1864
LEFT (L)	97	97	1650	0.0588	
SB RIGHT (R)	225	225	1650	0.1364	
THRU (T)	148	148	3300	0.0448	
LEFT (L)	16	16	1650	0.0097	0.0097
EB RIGHT (R)	570	473 *	1650	0.2867	0.2867
THRU (T)	3	3	1650	0.0018	
LEFT (L)	474	474	3000	0.1580	
WB RIGHT (R)	285	269 *	3000	0.0897	0.0897
THRU (T)	129	129	1650	0.0782	
LEFT (L)	117	117	1650	0.0709	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.57
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hopyard Rd.

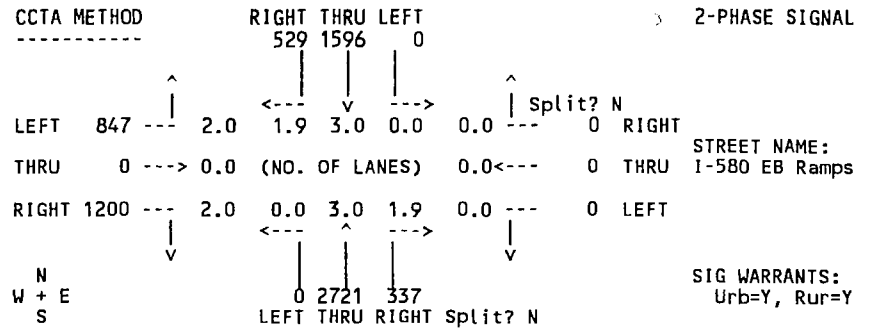
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	174	174	1800	0.0967	
THRU (T)	1352	1352	5400	0.2504	
SB RIGHT (R)	925	925	1800	0.5139	
THRU (T)	1514	1514	5400	0.2804	0.2804
EB RIGHT (R)	1560	1560	3273	0.4766	0.4766
LEFT (L)	1017	1017	3273	0.3107	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hopyard Rd.

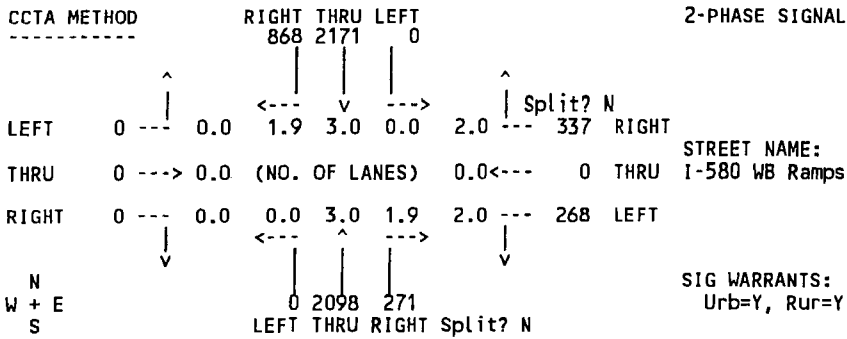
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	337	337	1800	0.1872	
THRU (T)	2721	2721	5400	0.5039	0.5039
SB RIGHT (R)	529	529	1800	0.2939	
THRU (T)	1596	1596	5400	0.2956	
EB RIGHT (R)	1200	1200	3273	0.3666	0.3666
LEFT (L)	847	847	3273	0.2588	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.87
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Dougherty Rd.

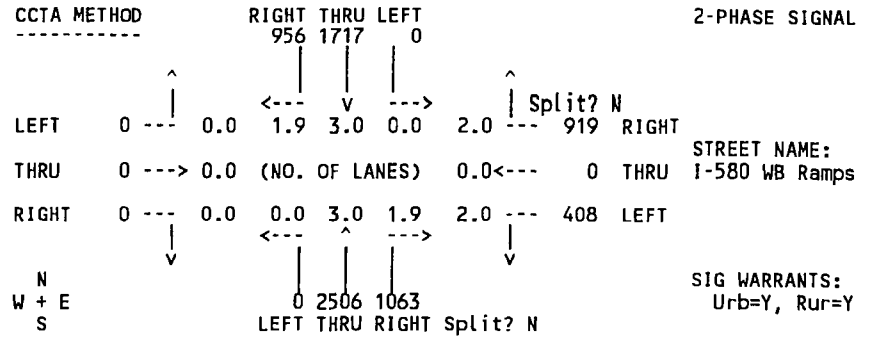
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	271	271	1800	0.1506	
THRU (T)	2098	2098	5400	0.3885	
SB RIGHT (R)	868	868	1800	0.4822	
THRU (T)	2171	2171	5400	0.4020	0.4020
WB RIGHT (R)	337	337	3273	0.1030	0.1030
LEFT (L)	268	268	3273	0.0819	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.51
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	919	919	1800	0.5906	
THRU (T)	2506	2506	5400	0.4641	0.4641
SB RIGHT (R)	956	956	1800	0.5311	
THRU (T)	1717	1717	5400	0.3180	
WB RIGHT (R)	408	408	3273	0.1247	0.2808
LEFT (L)	919	919	3273	0.2808	

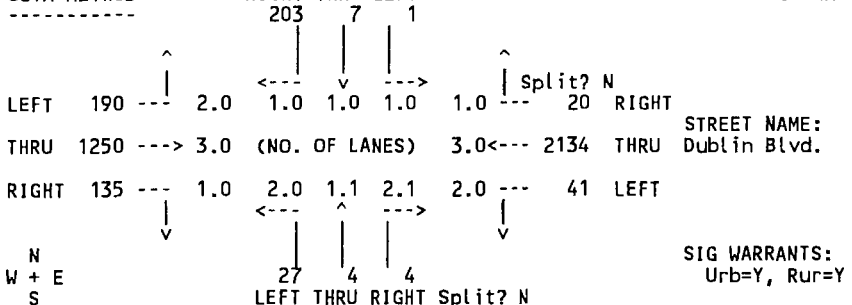
TOTAL VOLUME-TO-CAPACITY RATIO: 0.74
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-A.M.Peak 07/06/05

INTERSECTION 28 Arnold Rd./Dublin Blvd. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Arnold Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	4	0 *	3000	0.0000	
THRU (T)	4	4	1650	0.0024	
LEFT (L)	27	27	3000	0.0090	0.0090
T + R		4	3000	0.0013	
SB RIGHT (R)	203	99 *	1650	0.0600	0.0600
THRU (T)	7	7	1650	0.0042	
LEFT (L)	1	1	1650	0.0006	
EB RIGHT (R)	135	120 *	1650	0.0727	
THRU (T)	1250	1250	4950	0.2525	
LEFT (L)	190	190	3000	0.0633	0.0633
WB RIGHT (R)	20	19 *	1650	0.0115	
THRU (T)	2134	2134	4950	0.4311	0.4311
LEFT (L)	41	41	3000	0.0137	

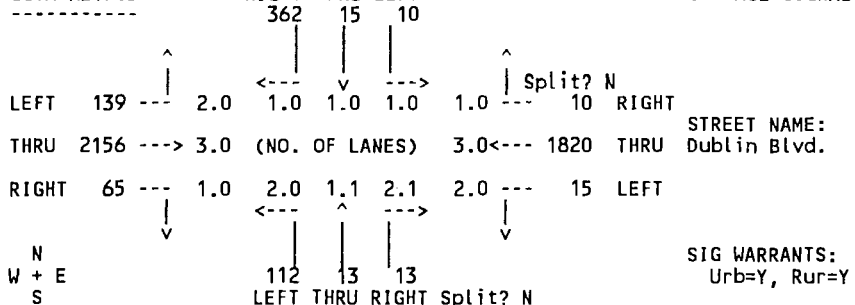
TOTAL VOLUME-TO-CAPACITY RATIO: 0.56
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+Prj All Exts-P.M.Peak 07/06/05

INTERSECTION 28 Arnold Rd./Dublin Blvd. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



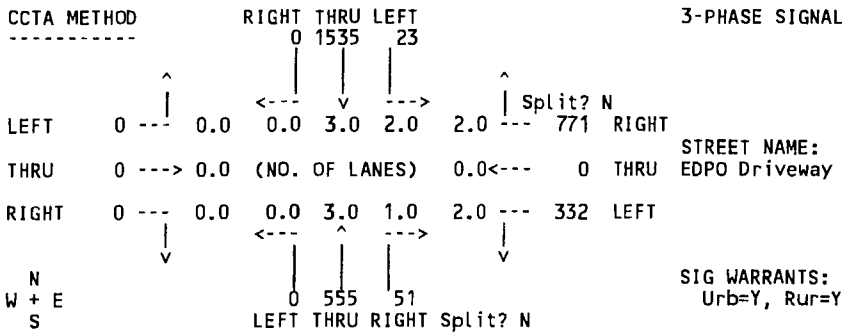
STREET NAME: Arnold Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	13	5 *	3000	0.0017	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	112	112	3000	0.0373	0.0373
T + R		18	3000	0.0060	
SB RIGHT (R)	362	286 *	1650	0.1733	0.1733
THRU (T)	15	15	1650	0.0091	
LEFT (L)	10	10	1650	0.0061	
EB RIGHT (R)	65	3 *	1650	0.0018	
THRU (T)	2156	2156	4950	0.4356	0.4356
LEFT (L)	139	139	3000	0.0463	
WB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	1820	1820	4950	0.3677	
LEFT (L)	15	15	3000	0.0050	0.0050

TOTAL VOLUME-TO-CAPACITY RATIO: 0.65
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.PMV,CAP=...LOSCAP.TAB

INTERSECTION 29 Fallon Rd./EDPO Driveway City of Dublin
 Count Date Time Peak Hour

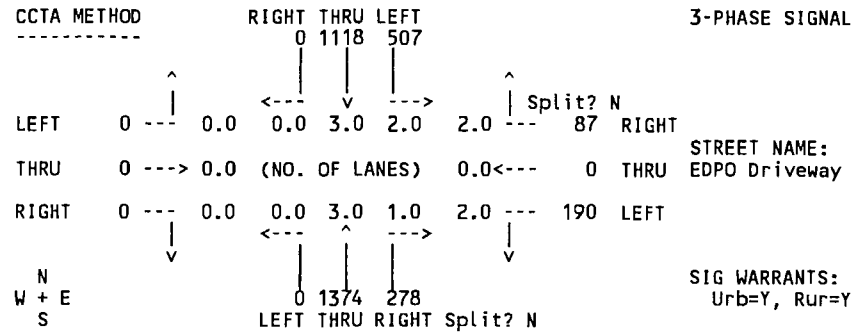


STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	51	0 *	1720	0.0000	
THRU (T)	555	555	5160	0.1076	
SB THRU (T)	1535	1535	5160	0.2975	0.2975
LEFT (L)	23	23	3127	0.0074	
WB RIGHT (R)	771	758 *	3127	0.2424	0.2424
LEFT (L)	332	332	3127	0.1062	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.54	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=BDPJAP1.AMV,CAP=...LOSCAP.TAB

INTERSECTION 29 Fallon Rd./EDPO Driveway City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	278	173 *	1720	0.1006	
THRU (T)	1374	1374	5160	0.2663	0.2663
SB THRU (T)	1118	1118	5160	0.2167	
LEFT (L)	507	507	3127	0.1621	0.1621
WB RIGHT (R)	87	0 *	3127	0.0000	
LEFT (L)	190	190	3127	0.0608	0.0608
TOTAL VOLUME-TO-CAPACITY RATIO:				0.49	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDR

**APPENDIX F – LEVEL OF SERVICE WORKSHEETS: BUILDOUT PLUS
75% PROJECT CONDITIONS**

TABLE 1: YEAR 2025 PLUS 75% PROJECT LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50333	432	1356	1356	410	22	48	48	0	0	0	0	0
50301	0	0	0	0	0	0	0	0	0	0	0	0
50725	466	1491	1491	466	0	74	74	0	0	0	0	0
50763	0	0	0	0	0	303	227	0	0	0	0	76
50760	1500	3000	3000	0	1500	2185	0	2185	0	0	0	0
50327	300	600	600	0	300	6685	85	6600	0	0	0	0
50740	0	0	0	0	0	0	0	0	0	0	0	0
50764	205	410	410	0	205	278	77	0	0	0	28	173
50319	271	542	542	0	271	7	7	0	0	0	0	0
50739	0	0	0	0	0	0	0	0	0	0	0	0
50322	0	0	0	0	0	0	0	0	0	0	0	0
50323	697	2230	2230	697	0	0	0	0	0	0	0	0
50727	246	492	492	0	246	0	0	0	0	0	0	0
50602	304	608	608	0	304	1308	430	878	0	0	0	0
50730	0	0	0	0	0	540	210	330	0	0	0	0
50307	0	0	0	0	0	2573	1750	534	0	0	0	289
50731	0	0	0	0	0	419	419	0	0	0	0	0
50308	0	0	0	0	0	1526	1456	70	0	0	0	0
50331	0	0	0	0	0	593	110	483	0	0	0	0
50732	0	0	0	0	0	523	523	0	0	0	0	0
50310	211	638	638	180	31	157	0	157	0	0	0	0
50304	546	1514	1514	352	194	136	0	136	0	0	0	0
50311	378	1209	1209	378	0	0	0	0	0	0	0	0
50303	469	1500	1500	469	0	53	7	38	0	0	0	8
50312	277	886	886	277	0	142	142	0	0	0	0	0
50317	667	2134	2134	667	0	0	0	0	0	0	0	0
50738	240	480	480	0	240	0	0	0	0	0	0	0
50320	728	1663	1663	173	555	0	0	0	0	0	0	0
50321	1112	2398	2398	145	967	0	0	0	0	0	0	0
50302	292	846	846	219	73	0	0	0	0	0	0	0
50728	380	1216	1216	380	0	0	0	0	0	0	0	0
50316	505	1616	1616	505	0	1	1	0	0	0	0	0
50736	0	0	0	0	0	187	187	0	0	0	0	0
50314	492	1574	1574	492	0	48	43	5	0	0	0	0
50726	370	1184	1184	370	0	0	0	0	0	0	0	0
50313	637	2007	2007	611	26	0	0	0	0	0	0	0
50729	0	0	0	0	0	447	0	329	0	0	118	0
50306	0	0	0	0	0	500	141	359	0	0	0	0
50305	455	1019	1019	91	364	509	230	279	0	0	0	0
50733	0	0	0	0	0	437	390	47	0	0	0	0
50734	0	0	0	0	0	229	224	5	0	0	0	0
50330	0	0	0	0	0	594	301	293	0	0	0	0
50318	0	0	0	0	0	2618	329	231	0	0	1322	736

TABLE 1: YEAR 2025 PLUS 75% PROJECT LAND USE BY TAZ

CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	AGREMP	MFGEMP	TRDEMP
50737	0	0	0	0	0	173	145	28	0	0	0	0
50309	0	0	0	0	0	590	472	104	0	0	0	14
50328	0	0	0	0	0	572	200	0	0	0	339	33
50329	0	0	0	0	0	337	215	0	0	0	0	122
50315	11	35	35	11	0	0	0	0	0	0	0	0
50735	175	560	560	175	0	28	0	28	0	0	0	0
50793	0	0	0	0	0	1139	417	722	0	0	0	0
50794	0	0	0	0	0	1062	389	673	0	0	0	0
50789	197	630	630	197	0	1625	595	1030	0	0	0	0
50796	0	0	0	0	0	2839	0	2839	0	0	0	0
50795	0	0	0	0	0	4294	0	4294	0	0	0	0
50778	907	2902	2902	907	0	289	289	0	0	0	0	0
50780	489	978	978	0	489	368	368	0	0	0	0	0
50781	252	806	806	252	0	0	0	0	0	0	0	0
50775	1202	2730	2730	272	930	0	0	0	0	0	0	0
50783	0	0	0	0	0	694	694	0	0	0	0	0
50779	420	1344	1344	420	0	0	0	0	0	0	0	0
50785	540	1080	1080	0	540	0	0	0	0	0	0	0
50774	121	387	387	121	0	0	0	0	0	0	0	0
50782	117	374	374	117	0	0	0	0	0	0	0	0
50784	168	537	537	168	0	0	0	0	0	0	0	0
50765	204	652	652	204	0	0	0	0	0	0	0	0
50332	314	1004	1004	314	0	0	0	0	0	0	0	0
50750	0	0	0	0	0	0	0	0	0	0	0	0
50748	259	828	828	259	0	0	0	0	0	0	0	0
50749	0	0	0	0	0	2210	0	2210	0	0	0	0
50746	0	0	0	0	0	0	0	0	0	0	0	0
50772	202	646	646	202	0	0	0	0	0	0	0	0
50771	0	0	0	0	0	0	0	0	0	0	0	0
50788	278	889	889	278	0	0	0	0	0	0	0	0
50773	205	656	656	205	0	0	0	0	0	0	0	0
50769	363	1161	1161	363	0	0	0	0	0	0	0	0
50334	499	1596	1596	499	0	0	0	0	0	0	0	0
50790	639	1652	1652	312	327	0	0	0	0	0	0	0
50787	467	1494	1494	467	0	0	0	0	0	0	0	0
50766	422	1350	1350	422	0	0	0	0	0	0	0	0
50786	111	355	355	111	0	0	0	0	0	0	0	0
50767	110	352	352	110	0	0	0	0	0	0	0	0
50768	250	800	800	250	0	0	0	0	0	0	0	0
50325	0	0	0	0	0	0	0	0	0	0	0	0
50324	0	0	0	0	0	0	0	0	0	0	0	0
50770	227	584	584	109	118	0	0	0	0	0	0	0
50744	356	872	872	134	222	168	168	0	0	0	0	0

TABLE 1: YEAR 2025 PLUS 75% PROJECT LAND USE BY TAZ

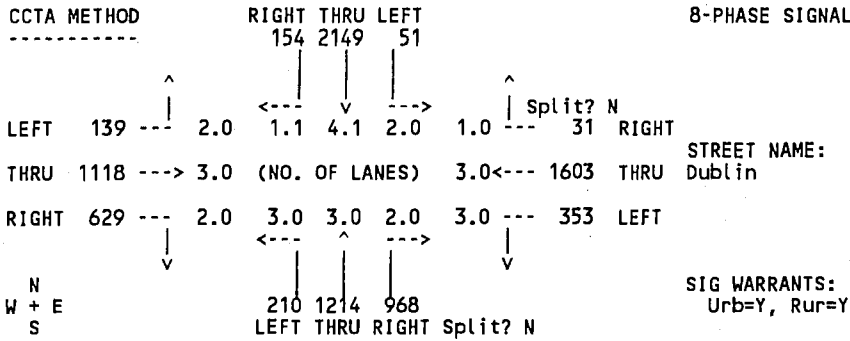
CCTA_TAZ	TOTHH	HHPOP	TOTPOP	SFDU	MFDU	TOTEMP	RETEMP	SEREMP	OTHEMP	ARGEMP	MFGEMP	TRDEMP
50757	0	0	0	0	0	367	367	0	0	0	0	0
50758	0	0	0	0	0	2140	171	1969	0	0	0	0
50336	0	0	0	0	0	2825	2825	0	0	0	0	0
50759	0	0	0	0	0	271	271	0	0	0	0	0
50326	0	0	0	0	0	1179	1179	0	0	0	0	0
50751	277	738	738	154	123	0	0	0	0	0	0	0
50756	324	648	648	0	324	0	0	0	0	0	0	0
50755	368	736	736	0	368	0	0	0	0	0	0	0
50753	88	224	224	40	48	0	0	0	0	0	0	0
50747	0	0	0	0	0	0	0	0	0	0	0	0
50741	0	0	0	0	0	3122	0	3122	0	0	0	0
50761	0	0	0	0	0	1293	1293	0	0	0	0	0
50762	0	0	0	0	0	1414	0	1414	0	0	0	0
50798	0	0	0	0	0	0	0	0	0	0	0	0
50742	0	0	0	0	0	1430	0	1430	0	0	0	0
50743	0	0	0	0	0	1386	0	1386	0	0	0	0
50754	390	780	780	0	390	383	383	0	0	0	0	0
50752	295	761	761	143	152	0	0	0	0	0	0	0
50745	120	240	240	0	120	0	0	0	0	0	0	0
50797	0	0	0	0	0	1072	1072	0	0	0	0	0
50791	249	498	498	0	249	179	179	0	0	0	0	0
50799	0	0	0	0	0	1280	1280	0	0	0	0	0
50792	0	0	0	0	0	404	404	0	0	0	0	0
50777	378	1209	1209	378	0	0	0	0	0	0	0	0
50776	0	0	0	0	0	389	389	0	0	0	0	0

Notes: TOTHH=Total Households, HHPOP=Household Population, TOTPOP=Total Population, SFDU=No. of Households In Single Family Dwelling Units
MFDU= No. of Households In Multi Family Dwelling Units, TOTEMP=Total Employment, RETEMP=Retail Employment, SEREMP=Service Employment
OTHEMP=Other Employment, ARGEMP=Agricultural Employment, MFGEMP=Manufacturing Employment, TRDEMP=Wholesale Employment

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_AM Peak 07/02/05

INTERSECTION 1 Dougherty/Dublin City of Dublin
Count Date Time Peak Hour



STREET NAME: Dougherty

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	968	833 *	3000	0.2777	
THRU (T)	1214	1214	4950	0.2453	
LEFT (L)	210	210	4304	0.0488	0.0488
SB RIGHT (R)	154	154	1650	0.0933	
THRU (T)	2149	2149	6600	0.3256	
LEFT (L)	51	51	3000	0.0170	
T + R		2303	6600	0.3489	0.3489
EB RIGHT (R)	629	548 *	3000	0.1827	
THRU (T)	1118	1118	4950	0.2259	
LEFT (L)	139	139	3000	0.0463	0.0463
WB RIGHT (R)	31	3 *	1650	0.0018	
THRU (T)	1603	1603	4950	0.3238	0.3238
LEFT (L)	353	353	4304	0.0820	

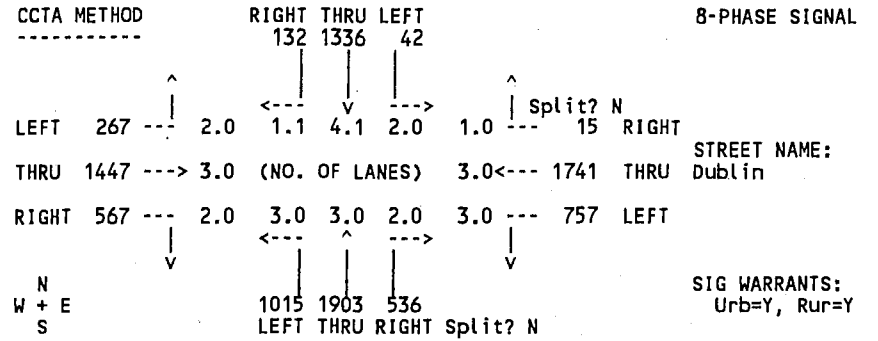
TOTAL VOLUME-TO-CAPACITY RATIO: 0.77
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV. INT, VOL=PERCENT.AMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_PM Peak 07/02/05

INTERSECTION 1 Dougherty/Dublin City of Dublin
Count Date Time Peak Hour



STREET NAME: Dougherty

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	536	246 *	3000	0.0820	
THRU (T)	1903	1903	4950	0.3844	
LEFT (L)	1015	1015	4304	0.2358	0.2358
SB RIGHT (R)	132	132	1650	0.0800	
THRU (T)	1336	1336	6600	0.2024	
LEFT (L)	42	42	3000	0.0140	
T + R		1468	6600	0.2224	0.2224
EB RIGHT (R)	567	178 *	3000	0.0593	
THRU (T)	1447	1447	4950	0.2923	0.2923
LEFT (L)	267	267	3000	0.0890	
WB RIGHT (R)	15	0 *	1650	0.0000	
THRU (T)	1741	1741	4950	0.3517	
LEFT (L)	757	757	4304	0.1759	0.1759

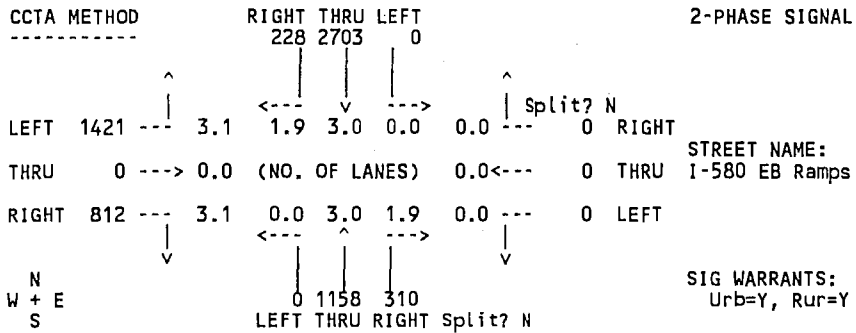
TOTAL VOLUME-TO-CAPACITY RATIO: 0.93
INTERSECTION LEVEL OF SERVICE: E

* ADJUSTED FOR RIGHT TURN ON RED
INT=

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project AM Peak 05/19/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	310	310	1800	0.1722	
THRU (T)	1158	1158	5400	0.2144	
SB RIGHT (R)	228	228	1800	0.1267	
THRU (T)	2703	2703	5400	0.5006	0.5006
EB RIGHT (R)	812	812	4695	0.1729	
LEFT (L)	1421	1421	4695	0.3027	0.3027
T + R + L		2233	7590	0.2942	

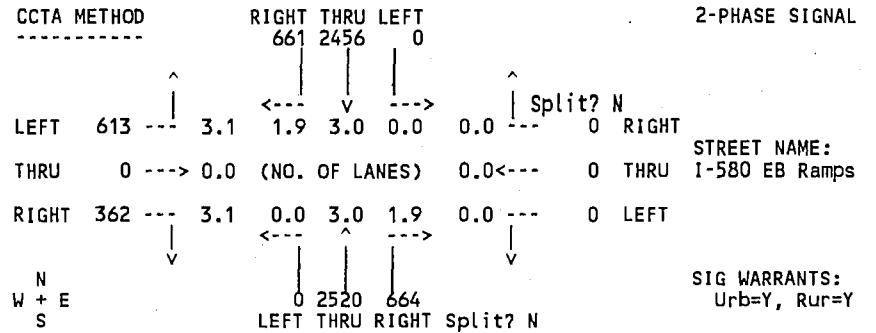
TOTAL VOLUME-TO-CAPACITY RATIO: 0.80
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project PM Peak 05/19/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	664	664	1800	0.3689	
THRU (T)	2520	2520	5400	0.4667	0.4667
SB RIGHT (R)	661	661	1800	0.3672	
THRU (T)	2456	2456	5400	0.4548	
EB RIGHT (R)	362	362	4695	0.0771	
LEFT (L)	613	613	4695	0.1306	0.1306
T + R + L		975	7590	0.1285	

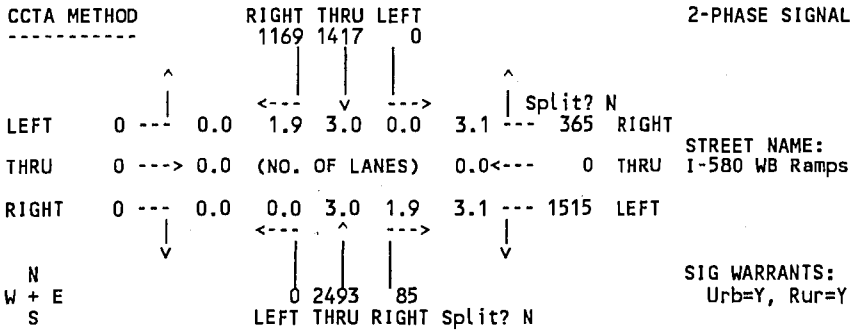
TOTAL VOLUME-TO-CAPACITY RATIO: 0.60
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project AM Peak 05/19/05

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	85	85	1800	0.0472	
THRU (T)	2493	2493	5400	0.4617	0.4617
SB RIGHT (R)	1169	1169	1800	0.6494	
THRU (T)	1417	1417	5400	0.2624	
WB RIGHT (R)	365	365	4695	0.0777	
LEFT (L)	1515	1515	4695	0.3227	0.3227
T + R + L		1880	7590	0.2477	

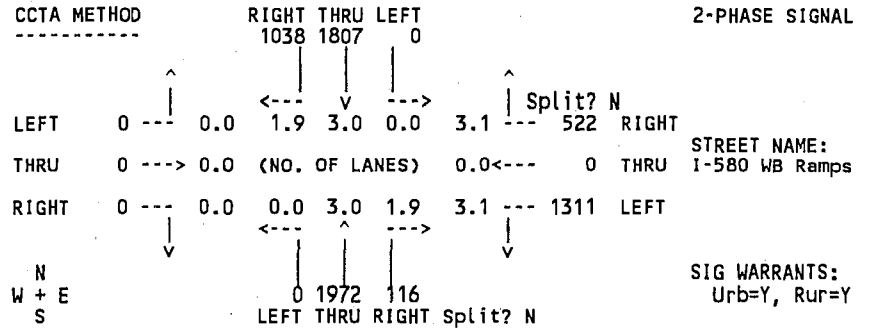
TOTAL VOLUME-TO-CAPACITY RATIO: 0.78
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project PM Peak 05/19/05

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	116	116	1800	0.0644	
THRU (T)	1972	1972	5400	0.3652	0.3652
SB RIGHT (R)	1038	1038	1800	0.5767	
THRU (T)	1807	1807	5400	0.3346	
WB RIGHT (R)	522	522	4695	0.1112	
LEFT (L)	1311	1311	4695	0.2792	0.2792
T + R + L		1833	7590	0.2415	

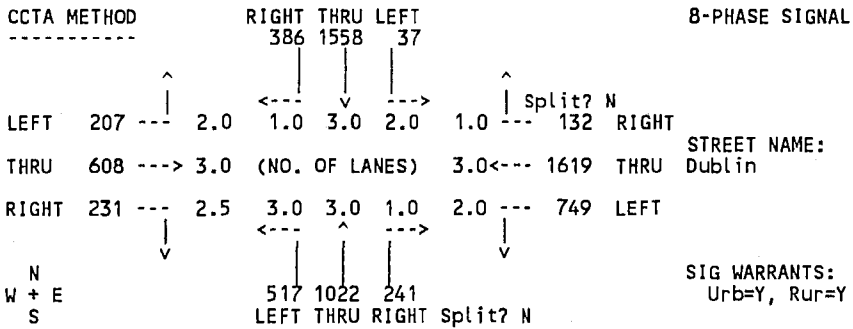
TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 4 Hacienda Dr./Dublin City of Dublin
Count Date Time Peak Hour



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	241	0 *	1650	0.0000	
THRU (T)	1022	1022	4950	0.2065	
LEFT (L)	517	517	4304	0.1201	0.1201
SB RIGHT (R)	386	272 *	1650	0.1648	
THRU (T)	1558	1558	4950	0.3147	0.3147
LEFT (L)	37	37	3000	0.0123	
EB RIGHT (R)	231	0 *	3000	0.0000	
THRU (T)	608	608	4950	0.1228	
LEFT (L)	207	207	3000	0.0690	0.0690
WB RIGHT (R)	132	112 *	1650	0.0679	
THRU (T)	1619	1619	4950	0.3271	0.3271
LEFT (L)	749	749	3000	0.2497	

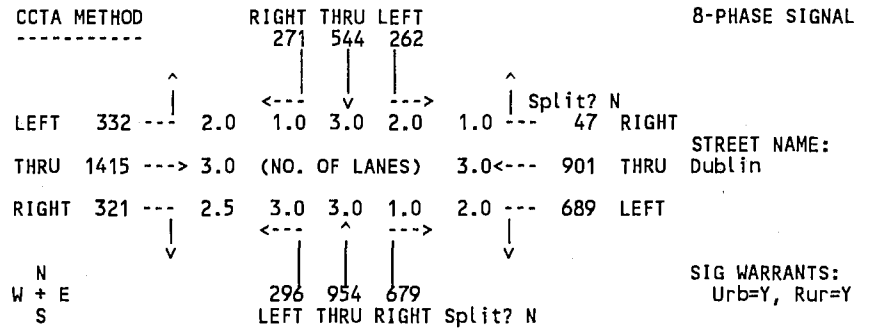
TOTAL VOLUME-TO-CAPACITY RATIO: 0.83
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 4 Hacienda Dr./Dublin City of Dublin
Count Date Time Peak Hour



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	271	88 *	1650	0.0533	
THRU (T)	544	544	4950	0.1099	
LEFT (L)	262	262	3000	0.0873	0.0873
SB RIGHT (R)	321	115 *	3000	0.0383	
THRU (T)	1415	1415	4950	0.2859	0.2859
LEFT (L)	332	332	3000	0.1107	
EB RIGHT (R)	47	0 *	1650	0.0000	
THRU (T)	901	901	4950	0.1820	
LEFT (L)	689	689	3000	0.2297	0.2297

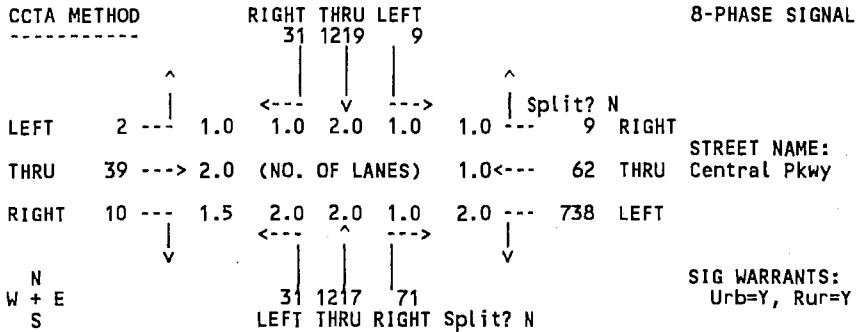
TOTAL VOLUME-TO-CAPACITY RATIO: 0.80
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_AM Peak_Mit 07/02/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	71	0 *	1650	0.0000	
NB THRU (T)	1217	1217	3300	0.3688	
NB LEFT (L)	31	31	3000	0.0103	0.0103
SB RIGHT (R)	31	29 *	1650	0.0176	
SB THRU (T)	1219	1219	3300	0.3694	0.3694
SB LEFT (L)	9	9	1650	0.0055	
EB RIGHT (R)	10	0 *	1650	0.0000	
EB THRU (T)	39	39	3300	0.0118	0.0118
EB LEFT (L)	2	2	1650	0.0012	
WB RIGHT (R)	9	0 *	1650	0.0000	
WB THRU (T)	62	62	1650	0.0376	
WB LEFT (L)	738	738	3000	0.2460	0.2460

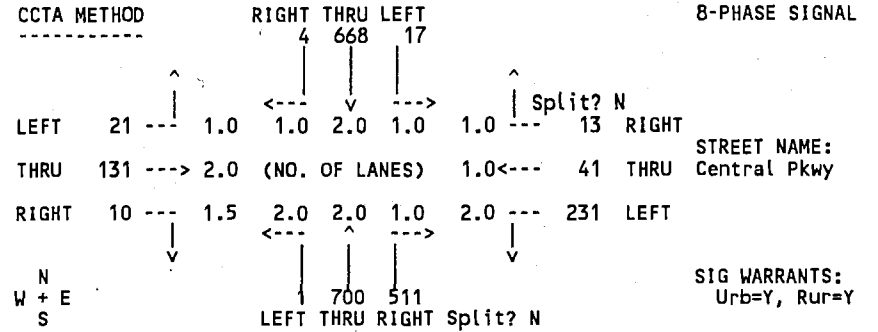
TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_PM Peak_Mit 07/02/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

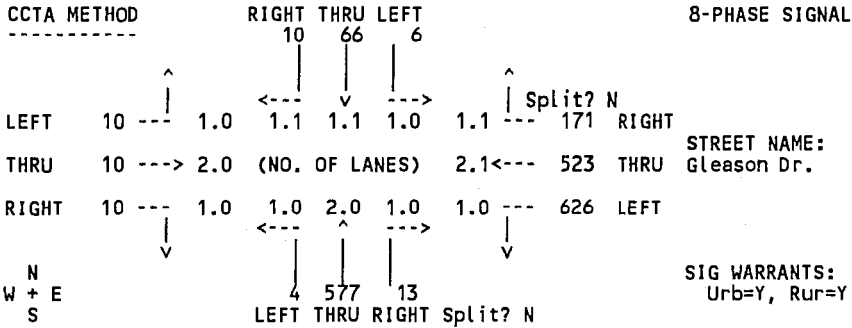
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	511	384 *	1650	0.2327	0.2327
NB THRU (T)	700	700	3300	0.2121	
NB LEFT (L)	1	1	3000	0.0003	
SB RIGHT (R)	4	0 *	1650	0.0000	
SB THRU (T)	668	668	3300	0.2024	
SB LEFT (L)	17	17	1650	0.0103	0.0103
EB RIGHT (R)	10	9 *	1650	0.0055	
EB THRU (T)	131	131	3300	0.0397	0.0397
EB LEFT (L)	21	21	1650	0.0127	
WB RIGHT (R)	13	0 *	1650	0.0000	
WB THRU (T)	41	41	1650	0.0248	
WB LEFT (L)	231	231	3000	0.0770	0.0770

TOTAL VOLUME-TO-CAPACITY RATIO: 0.36
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+75% Project_AM Peak 07/02/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

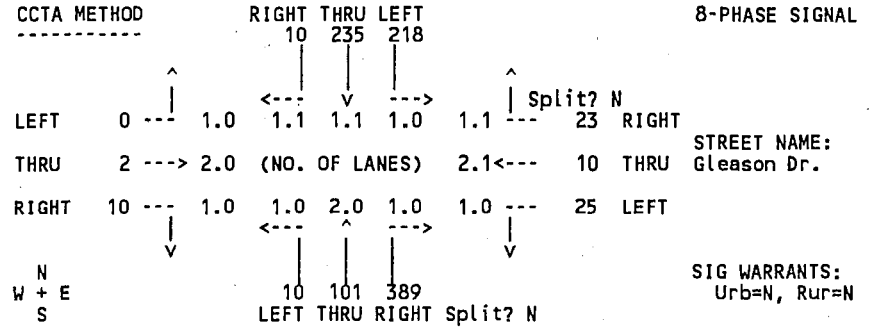
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	13	0 *	1650	0.0000	
NB THRU (T)	577	577	3300	0.1748	0.1748
NB LEFT (L)	4	4	1650	0.0024	
SB RIGHT (R)	10	10	1650	0.0061	
SB THRU (T)	66	66	1650	0.0400	
SB LEFT (L)	6	6	1650	0.0036	0.0036
T + R		76	1650	0.0461	
EB RIGHT (R)	10	6 *	1650	0.0036	0.0036
EB THRU (T)	10	10	3300	0.0030	
EB LEFT (L)	10	10	1650	0.0061	
WB RIGHT (R)	171	171	1650	0.1036	
WB THRU (T)	523	523	3300	0.1585	
WB LEFT (L)	626	626	1650	0.3794	0.3794
T + R		694	3300	0.2103	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.56
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+75% Project_PM Peak 07/02/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	0	0 *	1650	0.0000	
NB THRU (T)	235	235	3300	0.0712	
NB LEFT (L)	218	218	1650	0.1321	0.1321
T + R		245	1650	0.1485	
SB RIGHT (R)	10	10	1650	0.0061	
SB THRU (T)	235	235	1650	0.1424	
SB LEFT (L)	218	218	1650	0.1321	0.1321
T + R		245	1650	0.1485	
EB RIGHT (R)	10	0 *	1650	0.0000	
EB THRU (T)	2	2	3300	0.0006	0.0006
EB LEFT (L)	0	0	1650	0.0000	
WB RIGHT (R)	23	23	1650	0.0139	
WB THRU (T)	10	10	3300	0.0030	
WB LEFT (L)	25	25	1650	0.0152	0.0152
T + R		33	3300	0.0100	

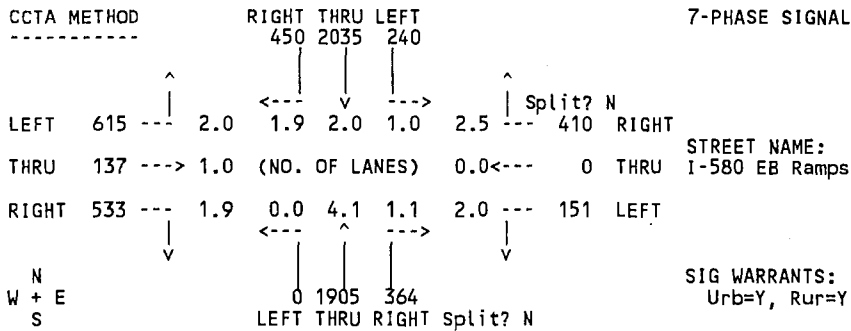
TOTAL VOLUME-TO-CAPACITY RATIO: 0.37
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-AM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1905	1905	6600	0.2886	
T + R		2269	6600	0.3438	
SB RIGHT (R)	450	450	1650	0.2727	
THRU (T)	2035	2035	3300	0.6167	0.6167
LEFT (L)	240	240	1650	0.1455	
EB RIGHT (R)	533	533	1650	0.3230	
THRU (T)	137	137	1650	0.0830	
LEFT (L)	615	615	3000	0.2050	0.2050
WB RIGHT (R)	410	0 *	3000	0.0000	0.0000
LEFT (L)	151	151	3000	0.0503	

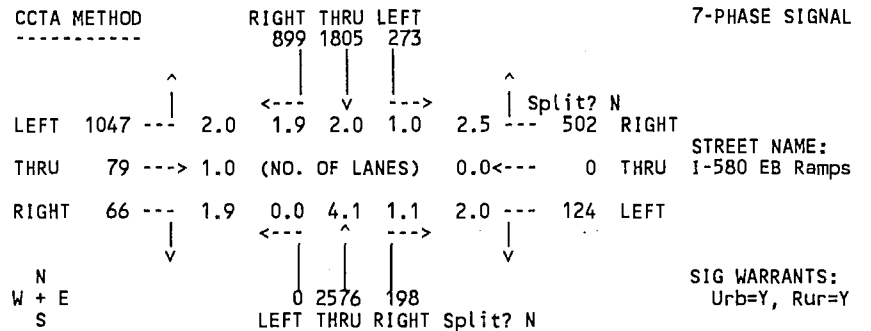
TOTAL VOLUME-TO-CAPACITY RATIO: 0.82
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-PM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	198	198	1650	0.1200	
THRU (T)	2576	2576	6600	0.3903	
T + R		2774	6600	0.4203	0.4203
SB RIGHT (R)	899	899	1650	0.5448	
THRU (T)	1805	1805	3300	0.5470	
LEFT (L)	273	273	1650	0.1655	0.1655
EB RIGHT (R)	66	66	1650	0.0400	
THRU (T)	79	79	1650	0.0479	
LEFT (L)	1047	1047	3000	0.3490	0.3490
WB RIGHT (R)	502	6 *	3000	0.0020	0.0020
LEFT (L)	124	124	3000	0.0413	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.94
 INTERSECTION LEVEL OF SERVICE: E

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LDS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-AM Peak_Mit 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL
----- 450 2035 240
LEFT 615 --- 3.0 1.9 2.0 1.0 2.5 --- 410 RIGHT
THRU 137 ---> 1.0 (NO. OF LANES) 0.0<--- 0 THRU I-580 EB Ramps
RIGHT 533 --- 1.9 0.0 4.1 1.1 2.0 --- 151 LEFT
N
W + E
S
0 1905 364
LEFT THRU RIGHT Split? N
SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1905	1905	6600	0.2886	
T + R		2269	6600	0.3438	
SB RIGHT (R)	450	450	1650	0.2727	
THRU (T)	2035	2035	3300	0.6167	0.6167
LEFT (L)	240	240	1650	0.1455	
EB RIGHT (R)	533	533	1650	0.3230	
THRU (T)	137	137	1650	0.0830	
LEFT (L)	615	615	4304	0.1429	0.1429
WB RIGHT (R)	410	0 *	3000	0.0000	0.0000
LEFT (L)	151	151	3000	0.0503	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LDS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-PM Peak_Mit 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 7-PHASE SIGNAL
----- 899 1805 273
LEFT 1047 --- 3.0 1.9 2.0 1.0 2.5 --- 502 RIGHT
THRU 79 ---> 1.0 (NO. OF LANES) 0.0<--- 0 THRU I-580 EB Ramps
RIGHT 66 --- 1.9 0.0 4.1 1.1 2.0 --- 124 LEFT
N
W + E
S
0 2576 198
LEFT THRU RIGHT Split? N
SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	198	198	1650	0.1200	
THRU (T)	2576	2576	6600	0.3903	
T + R		2774	6600	0.4203	0.4203
SB RIGHT (R)	899	899	1650	0.5448	
THRU (T)	1805	1805	3300	0.5470	
LEFT (L)	273	273	1650	0.1655	0.1655
EB RIGHT (R)	66	66	1650	0.0400	
THRU (T)	79	79	1650	0.0479	
LEFT (L)	1047	1047	4304	0.2433	0.2433
WB RIGHT (R)	502	6 *	3000	0.0020	0.0020
LEFT (L)	124	124	3000	0.0413	

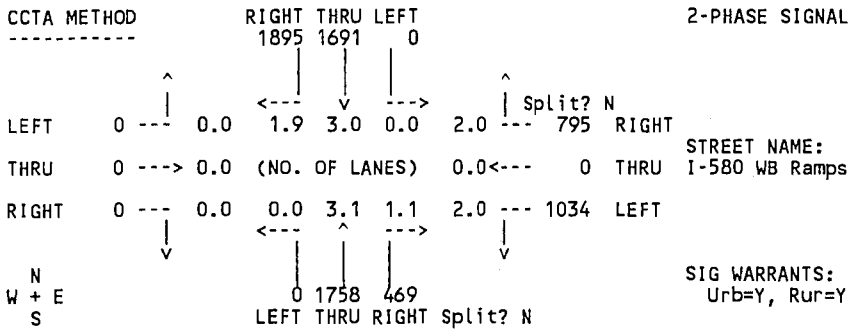
TOTAL VOLUME-TO-CAPACITY RATIO: 0.83
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-AM Peak 07/15/05

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	469	469	1800	0.2606	
THRU (T)	1758	1758	5400	0.3256	
T + R		2227	5400	0.4124	0.4124
SB RIGHT (R)	1895	1895	1800	1.0528 **	
THRU (T)	1691	1691	5400	0.3131	
WB RIGHT (R)	795	795	3273	0.2429	
LEFT (L)	1034	1034	3273	0.3159	0.3159

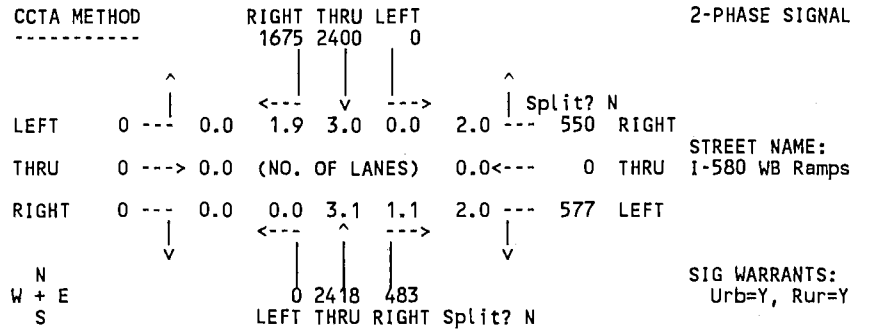
TOTAL VOLUME-TO-CAPACITY RATIO: 0.73
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED ** APPROACHING OR EXCEEDING CAPACITY
 INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-PM Peak 07/15/05

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd

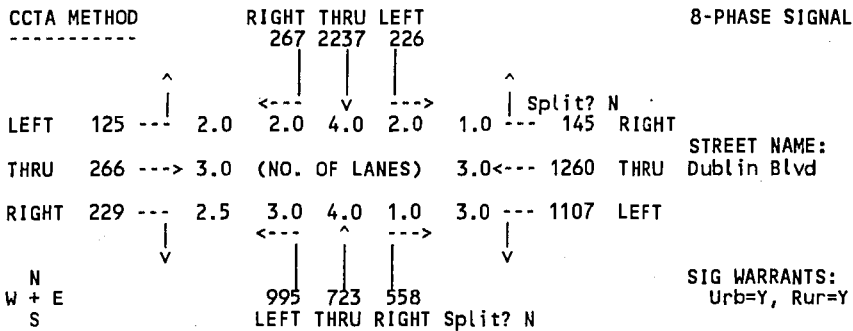
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	483	483	1800	0.2683	
THRU (T)	2418	2418	5400	0.4478	
T + R		2901	5400	0.5372	0.5372
SB RIGHT (R)	1675	1675	1800	0.9306 **	
THRU (T)	2400	2400	5400	0.4444	
WB RIGHT (R)	550	550	3273	0.1680	
LEFT (L)	577	577	3273	0.1763	0.1763

TOTAL VOLUME-TO-CAPACITY RATIO: 0.71
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED ** APPROACHING OR EXCEEDING CAPACITY
 INT=BDREV.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+75% Project_AM Peak 07/02/05

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour



STREET NAME: Tassajara Rd

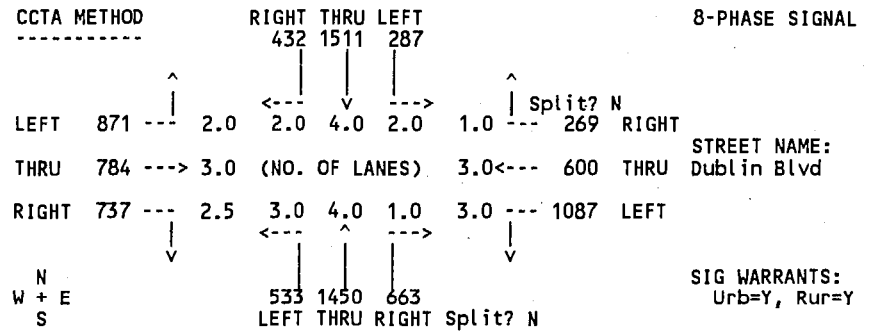
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	558	134 *	1650	0.0812	
THRU (T)	723	723	6600	0.1095	
LEFT (L)	995	995	4304	0.2312	0.2312
SB RIGHT (R)	267	198 *	3000	0.0660	
THRU (T)	2237	2237	6600	0.3389	0.3389
LEFT (L)	226	226	3000	0.0753	
EB RIGHT (R)	229	0 *	3000	0.0000	
THRU (T)	266	266	4950	0.0537	0.0537
LEFT (L)	125	125	3000	0.0417	
WB RIGHT (R)	145	21 *	1650	0.0127	
THRU (T)	1260	1260	4950	0.2545	
LEFT (L)	1107	1107	4304	0.2572	0.2572

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+75% Project_PM Peak 07/02/05

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	663	246 *	1650	0.1491	
THRU (T)	1450	1450	6600	0.2197	
LEFT (L)	533	533	4304	0.1238	0.1238
SB RIGHT (R)	432	0 *	3000	0.0000	
THRU (T)	1511	1511	6600	0.2289	0.2289
LEFT (L)	287	287	3000	0.0957	
EB RIGHT (R)	737	365 *	3000	0.1217	
THRU (T)	784	784	4950	0.1584	
LEFT (L)	871	871	3000	0.2903	0.2903
WB RIGHT (R)	269	111 *	1650	0.0673	
THRU (T)	600	600	4950	0.1212	0.1212
LEFT (L)	1087	1087	4304	0.2526	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
INTERSECTION LEVEL OF SERVICE: C

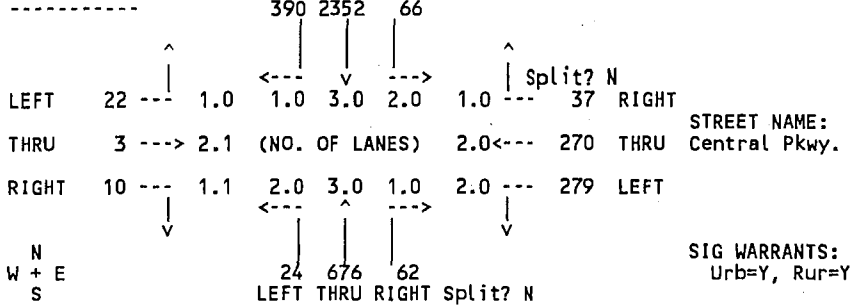
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_AM Peak 07/02/05

INTERSECTION 10 Tassajara Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	62	0 *	1650	0.0000	
THRU (T)	676	676	4950	0.1366	
LEFT (L)	24	24	3000	0.0080	0.0080
SB RIGHT (R)	390	368 *	1650	0.2230	
THRU (T)	2352	2352	4950	0.4752	0.4752
LEFT (L)	66	66	3000	0.0220	
EB RIGHT (R)	10	10	1650	0.0061	0.0061
THRU (T)	3	3	3300	0.0009	
LEFT (L)	22	22	1650	0.0133	
T + R		13	3300	0.0039	
WB RIGHT (R)	37	1 *	1650	0.0006	
THRU (T)	270	270	3300	0.0818	
LEFT (L)	279	279	3000	0.0930	0.0930

TOTAL VOLUME-TO-CAPACITY RATIO: 0.58
 INTERSECTION LEVEL OF SERVICE: A

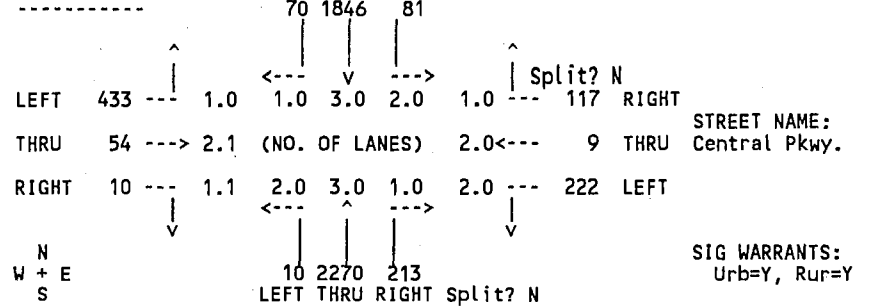
* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_PM Peak 07/02/05

INTERSECTION 10 Tassajara Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	213	91 *	1650	0.0552	
THRU (T)	2270	2270	4950	0.4586	0.4586
LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	70	0 *	1650	0.0000	
THRU (T)	1846	1846	4950	0.3729	
LEFT (L)	81	81	3000	0.0270	0.0270
EB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	54	54	3300	0.0164	
LEFT (L)	433	433	1650	0.2624	0.2624
T + R		64	3300	0.0194	
WB RIGHT (R)	117	72 *	1650	0.0436	0.0436
THRU (T)	9	9	3300	0.0027	
LEFT (L)	222	222	3000	0.0740	

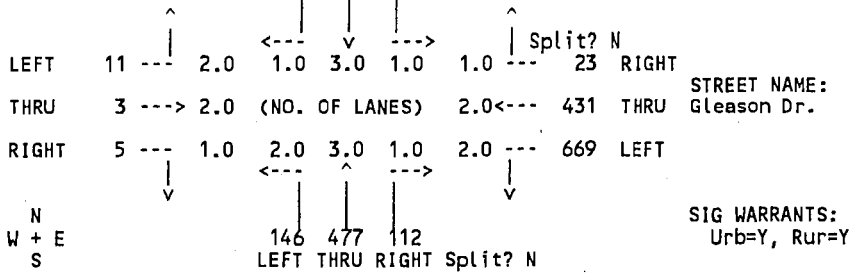
TOTAL VOLUME-TO-CAPACITY RATIO: 0.79
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 11 Tassajara Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 724 2133 41



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	112	0 *	1650	0.0000	
THRU (T)	477	477	4950	0.0964	
LEFT (L)	146	146	3000	0.0487	0.0487
SB RIGHT (R)	724	718 *	1650	0.4352	0.4352
THRU (T)	2133	2133	4950	0.4309	
LEFT (L)	41	41	1650	0.0248	
EB RIGHT (R)	5	0 *	1650	0.0000	
THRU (T)	3	3	3300	0.0009	0.0009
LEFT (L)	11	11	3000	0.0037	
WB RIGHT (R)	23	0 *	1650	0.0000	
THRU (T)	431	431	3300	0.1306	
LEFT (L)	669	669	3000	0.2230	0.2230

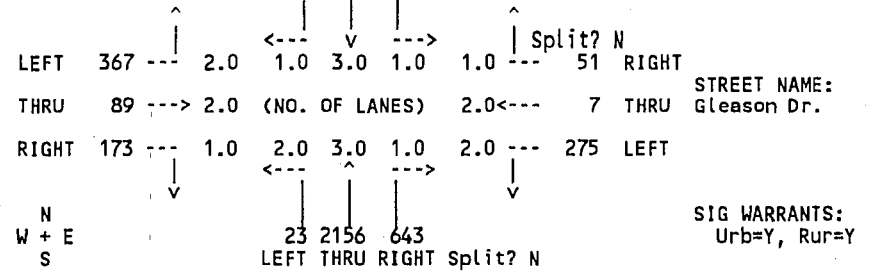
TOTAL VOLUME-TO-CAPACITY RATIO: 0.71
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 11 Tassajara Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 26 1549 31



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	643	492 *	1650	0.2982	
THRU (T)	2156	2156	4950	0.4356	0.4356
LEFT (L)	23	23	3000	0.0077	
SB RIGHT (R)	26	0 *	1650	0.0000	
THRU (T)	1549	1549	4950	0.3129	
LEFT (L)	31	31	1650	0.0188	0.0188
EB RIGHT (R)	173	160 *	1650	0.0970	0.0970
THRU (T)	89	89	3300	0.0270	
LEFT (L)	367	367	3000	0.1223	
WB RIGHT (R)	51	20 *	1650	0.0121	
THRU (T)	7	7	3300	0.0021	
LEFT (L)	275	275	3000	0.0917	0.0917

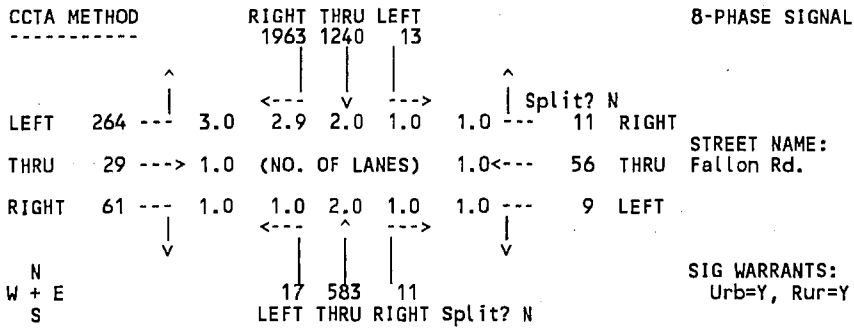
TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_AM Peak 07/02/05

INTERSECTION 12 Tassajara Rd./Fallon Rd. City of Dublin
Count Date Time Peak Hour



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	11	2 *	1650	0.0012	
THRU (T)	583	583	3300	0.1767	
LEFT (L)	17	17	1650	0.0103	0.0103
SB RIGHT (R)	1963	1963	3000	0.6543	
THRU (T)	1240	1240	3300	0.3758	0.3758
LEFT (L)	13	13	1650	0.0079	
EB RIGHT (R)	61	44 *	1650	0.0267	
THRU (T)	29	29	1650	0.0176	
LEFT (L)	264	264	4304	0.0613	0.0613
WB RIGHT (R)	11	0 *	1650	0.0000	
THRU (T)	56	56	1650	0.0339	0.0339
LEFT (L)	9	9	1650	0.0055	

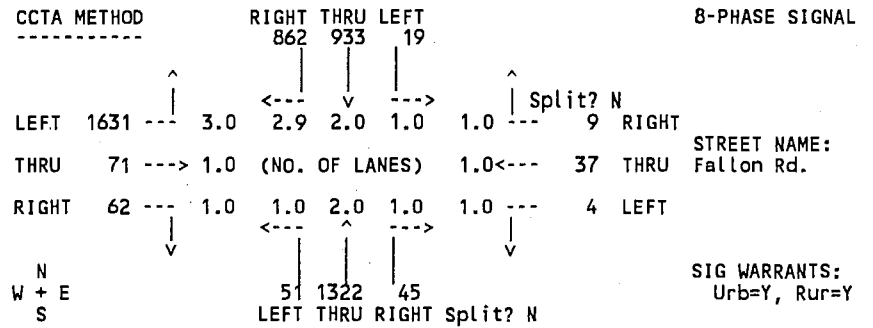
TOTAL VOLUME-TO-CAPACITY RATIO: 0.48
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_PM Peak 07/02/05

INTERSECTION 12 Tassajara Rd./Fallon Rd. City of Dublin
Count Date Time Peak Hour



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	45	41 *	1650	0.0248	
THRU (T)	1322	1322	3300	0.4006	0.4006
LEFT (L)	51	51	1650	0.0309	
SB RIGHT (R)	862	862	3000	0.2873	
THRU (T)	933	933	3300	0.2827	
LEFT (L)	19	19	1650	0.0115	0.0115
EB RIGHT (R)	62	11 *	1650	0.0067	
THRU (T)	71	71	1650	0.0430	
LEFT (L)	1631	1631	4304	0.3789	0.3789
WB RIGHT (R)	9	0 *	1650	0.0000	
THRU (T)	37	37	1650	0.0224	0.0224
LEFT (L)	4	4	1650	0.0024	

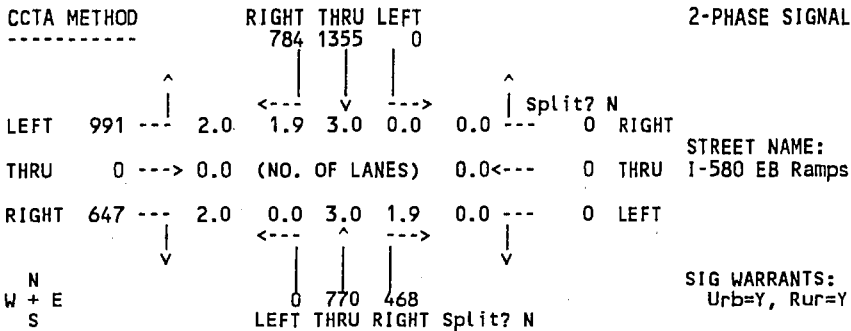
TOTAL VOLUME-TO-CAPACITY RATIO: 0.81
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project AM Peak 07/02/05

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: El Charro Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	468	468	1800	0.2600	
THRU (T)	770	770	5400	0.1426	
SB RIGHT (R)	784	784	1800	0.4356	
THRU (T)	1355	1355	5400	0.2509	0.2509
EB RIGHT (R)	647	647	3273	0.1977	
LEFT (L)	991	991	3273	0.3028	0.3028

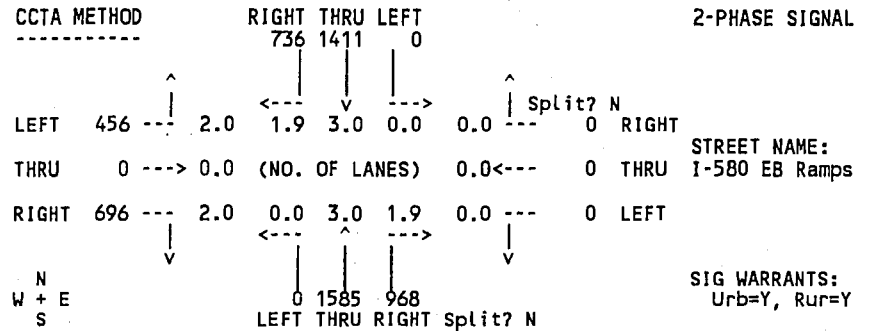
TOTAL VOLUME-TO-CAPACITY RATIO: 0.55
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project PM Peak 07/02/05

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: El Charro Rd

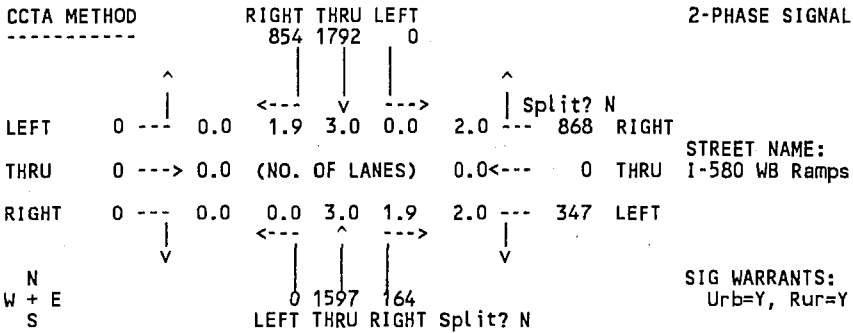
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	968	968	1800	0.5378	
THRU (T)	1585	1585	5400	0.2935	0.2935
SB RIGHT (R)	736	736	1800	0.4089	
THRU (T)	1411	1411	5400	0.2613	
EB RIGHT (R)	696	696	3273	0.2126	0.2126
LEFT (L)	456	456	3273	0.1393	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.51
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+75% Project_AM Peak 07/02/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

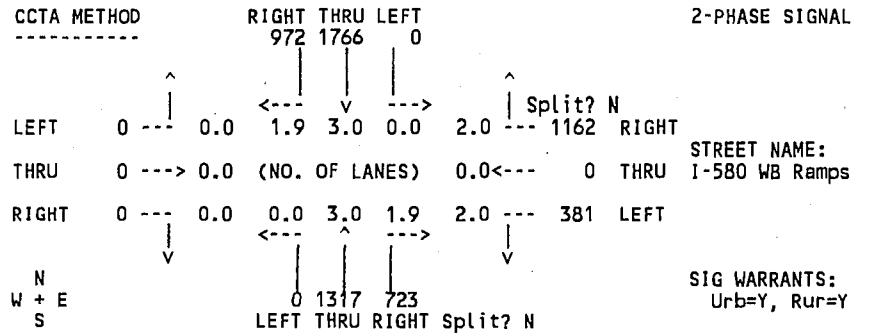
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	164	164	1800	0.0911	
THRU (T)	1597	1597	5400	0.2957	
SB RIGHT (R)	854	854	1800	0.4744	
THRU (T)	1792	1792	5400	0.3319	0.3319
WB RIGHT (R)	868	868	3273	0.2652	0.2652
LEFT (L)	347	347	3273	0.1060	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.60
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+75% Project_PM Peak 07/02/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	723	723	1800	0.4017	
THRU (T)	1317	1317	5400	0.2439	
SB RIGHT (R)	972	972	1800	0.5400	
THRU (T)	1766	1766	5400	0.3270	0.3270
WB RIGHT (R)	1162	1162	3273	0.3550	0.3550
LEFT (L)	381	381	3273	0.1164	

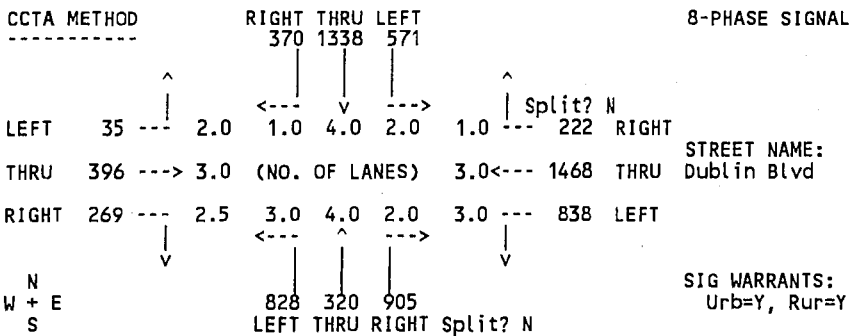
TOTAL VOLUME-TO-CAPACITY RATIO: 0.68
 INTERSECTION LEVEL OF SERVICE: B

*

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 15 Fallon Rd./Dublin Blvd City of Dublin
 Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	905	584 *	3000	0.1947	
NB THRU (T)	320	320	6600	0.0485	
NB LEFT (L)	828	828	4304	0.1924	0.1924
SB RIGHT (R)	370	351 *	1650	0.2127	0.2127
SB THRU (T)	1338	1338	6600	0.2027	
SB LEFT (L)	571	571	3000	0.1903	
EB RIGHT (R)	269	0 *	3000	0.0000	
EB THRU (T)	396	396	4950	0.0800	
EB LEFT (L)	35	35	3000	0.0117	0.0117
WB RIGHT (R)	222	0 *	1650	0.0000	
WB THRU (T)	1468	1468	4950	0.2966	0.2966
WB LEFT (L)	838	838	4304	0.1947	

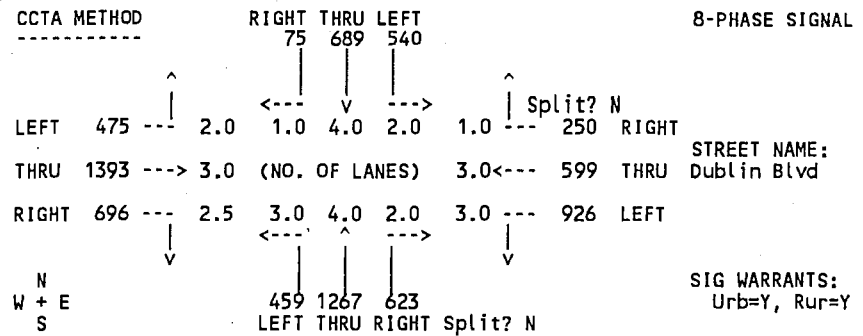
TOTAL VOLUME-TO-CAPACITY RATIO: 0.71
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT, INT, VOL=PERCENT.AMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 15 Fallon Rd./Dublin Blvd City of Dublin
 Count Date Time Peak Hour



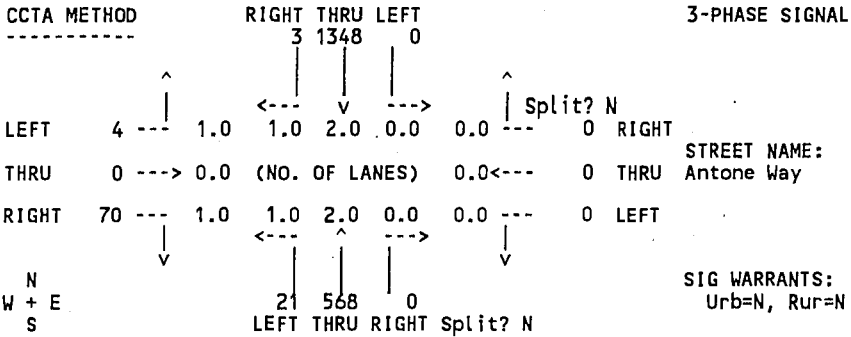
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	623	268 *	3000	0.0893	
NB THRU (T)	1267	1267	6600	0.1920	0.1920
NB LEFT (L)	459	459	4304	0.1066	
SB RIGHT (R)	75	0 *	1650	0.0000	
SB THRU (T)	689	689	6600	0.1044	
SB LEFT (L)	540	540	3000	0.1800	0.1800
EB RIGHT (R)	696	376 *	3000	0.1253	
EB THRU (T)	1393	1393	4950	0.2814	0.2814
EB LEFT (L)	475	475	3000	0.1583	
WB RIGHT (R)	250	0 *	1650	0.0000	
WB THRU (T)	599	599	4950	0.1210	
WB LEFT (L)	926	926	4304	0.2151	0.2151

TOTAL VOLUME-TO-CAPACITY RATIO: 0.87
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT, INT, VOL=PERCENT.PMV, CAP=...LOSCAP.TAB

Condition: Buildout+75% Project_AM Peak 07/02/05

INTERSECTION 17 Fallon Rd./Antone Way City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

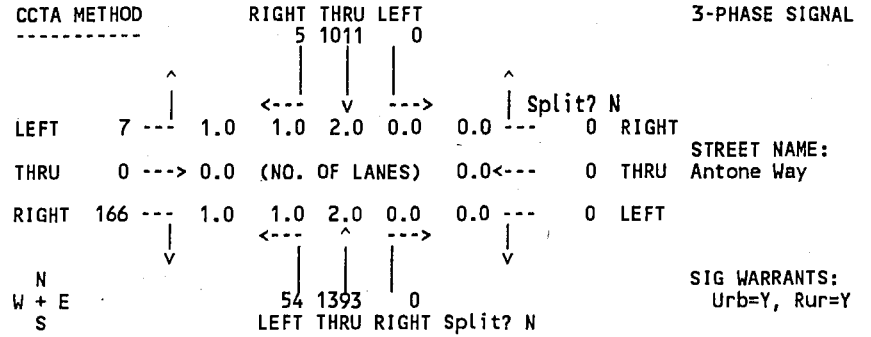
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	568	568	3440	0.1651	
LEFT (L)	21	21	1720	0.0122	0.0122
SB RIGHT (R)	3	0 *	1720	0.0000	
THRU (T)	1348	1348	3440	0.3919	0.3919
EB RIGHT (R)	70	49 *	1720	0.0285	0.0285
LEFT (L)	4	4	1720	0.0023	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.43
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+75% Project_PM Peak 07/02/05

INTERSECTION 17 Fallon Rd./Antone Way City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1393	1393	3440	0.4049	0.4049
LEFT (L)	54	54	1720	0.0314	
SB RIGHT (R)	5	0 *	1720	0.0000	
THRU (T)	1011	1011	3440	0.2939	
EB RIGHT (R)	166	112 *	1720	0.0651	0.0651
LEFT (L)	7	7	1720	0.0041	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.47
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL
388 2150 10

LEFT 123 --- 1.0 1.1 4.1 2.0 1.1 --- Split? N 3 RIGHT
THRU 23 ---> 1.1 (NO. OF LANES) 1.1<--- 18 THRU Hacienda Xing
RIGHT 246 --- 3.1 3.0 3.0 1.5 2.0 --- 190 LEFT

N
W + E
S

1041 1655 162
LEFT THRU RIGHT Split? N

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	162	58 *	1650	0.0352	
THRU (T)	1655	1655	4950	0.3343	
LEFT (L)	1041	1041	4304	0.2419	0.2419
SB RIGHT (R)	388	388	1650	0.2352	
THRU (T)	2150	2150	6600	0.3258	
LEFT (L)	10	10	3000	0.0033	
T + R		2538	6600	0.3845	0.3845
EB RIGHT (R)	246	0 *	4304	0.0000	
THRU (T)	23	23	1650	0.0139	
LEFT (L)	123	123	1650	0.0745	0.0745
T + R		23	4304	0.0053	
WB RIGHT (R)	3	3	1650	0.0018	
THRU (T)	18	18	1650	0.0109	
LEFT (L)	190	190	3000	0.0633	
T + R		21	1650	0.0127	0.0127

TOTAL VOLUME-TO-CAPACITY RATIO: 0.71
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT,INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL
249 1305 10

LEFT 450 --- 1.0 1.1 4.1 2.0 1.1 --- Split? N 10 RIGHT
THRU 42 ---> 1.1 (NO. OF LANES) 1.1<--- 38 THRU Hacienda Xing
RIGHT 1126 --- 3.1 3.0 3.0 1.5 2.0 --- 413 LEFT

N
W + E
S

684 1480 330
LEFT THRU RIGHT Split? N

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	330	103 *	1650	0.0624	
THRU (T)	1480	1480	4950	0.2990	
LEFT (L)	684	684	4304	0.1589	0.1589
SB RIGHT (R)	249	249	1650	0.1509	
THRU (T)	1305	1305	6600	0.1977	
LEFT (L)	10	10	3000	0.0033	
T + R		1554	6600	0.2355	0.2355
EB RIGHT (R)	1126	864 *	4304	0.2007	
THRU (T)	42	42	1650	0.0255	
LEFT (L)	450	450	1650	0.2727	
T + R		906	4304	0.2105	0.2105
WB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	38	38	1650	0.0230	
LEFT (L)	413	413	3000	0.1377	0.1377
T + R		48	1650	0.0291	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.74
INTERSECTION LEVEL OF SERVICE: C

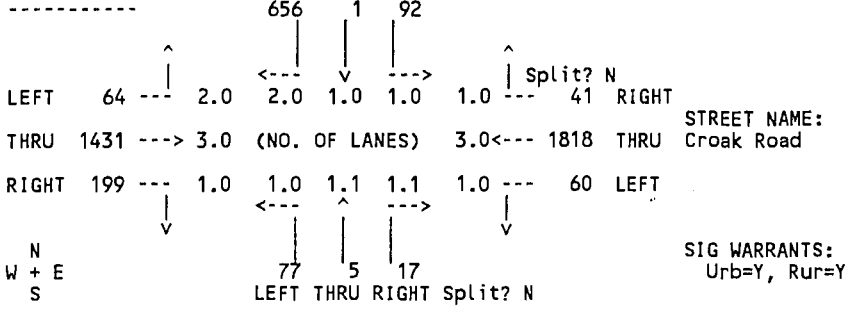
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT,INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-AM Peak 07/18/05

INTERSECTION 19 Dublin Blvd./Croak Road City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL



STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	17	17	1650	0.0103	
THRU (T)	5	5	1650	0.0030	
LEFT (L)	77	77	1650	0.0467	0.0467
T + R		22	1650	0.0133	
SB RIGHT (R)	656	621 *	3000	0.2070	0.2070
THRU (T)	1	1	1650	0.0006	
LEFT (L)	92	92	1650	0.0558	
EB RIGHT (R)	199	122 *	1650	0.0739	
THRU (T)	1431	1431	4950	0.2891	
LEFT (L)	64	64	3000	0.0213	0.0213
WB RIGHT (R)	41	0 *	1650	0.0000	
THRU (T)	1818	1818	4950	0.3673	0.3673
LEFT (L)	60	60	1650	0.0364	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
INTERSECTION LEVEL OF SERVICE: B

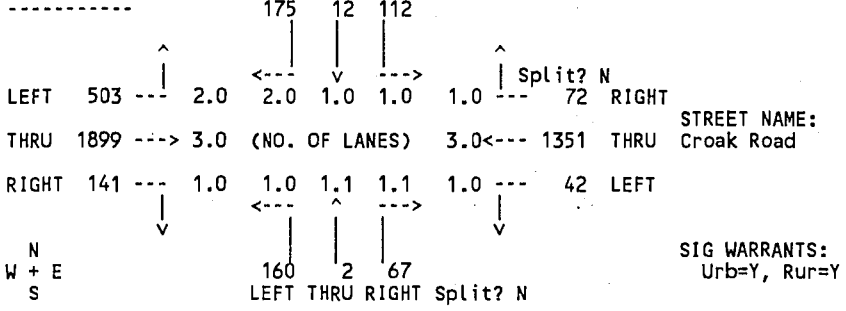
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-PM Peak 07/18/05

INTERSECTION 19 Dublin Blvd./Croak Road City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 6-PHASE SIGNAL



STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	67	67	1650	0.0406	
THRU (T)	2	2	1650	0.0012	
LEFT (L)	160	160	1650	0.0970	
T + R		69	1650	0.0418	0.0418
SB RIGHT (R)	175	0 *	3000	0.0000	
THRU (T)	12	12	1650	0.0073	
LEFT (L)	112	112	1650	0.0679	0.0679
EB RIGHT (R)	141	0 *	1650	0.0000	
THRU (T)	1899	1899	4950	0.3836	
LEFT (L)	503	503	3000	0.1677	0.1677
WB RIGHT (R)	72	0 *	1650	0.0000	
THRU (T)	1351	1351	4950	0.2729	0.2729
LEFT (L)	42	42	1650	0.0255	

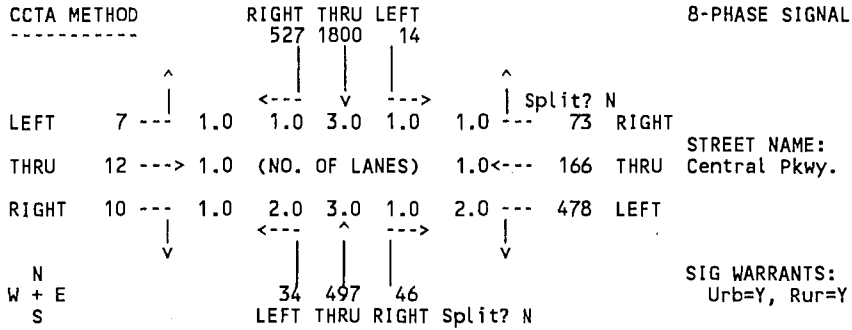
TOTAL VOLUME-TO-CAPACITY RATIO: 0.55
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-AM Peak 07/15/05

INTERSECTION 20 Fallon Rd./Central Pkwy. City of Dublin
Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	46	0 *	1650	0.0000	
THRU (T)	497	497	4950	0.1004	
LEFT (L)	34	34	3000	0.0113	0.0113
SB RIGHT (R)	527	520 *	1650	0.3152	
THRU (T)	1800	1800	4950	0.3636	0.3636
LEFT (L)	14	14	1650	0.0085	
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	12	12	1650	0.0073	0.0073
LEFT (L)	7	7	1650	0.0042	
WB RIGHT (R)	73	59 *	1650	0.0358	
THRU (T)	166	166	1650	0.1006	
LEFT (L)	478	478	3000	0.1593	0.1593

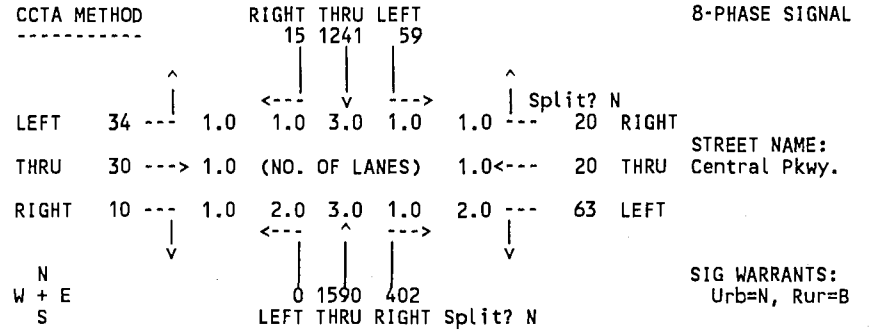
TOTAL VOLUME-TO-CAPACITY RATIO: 0.54
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-PM Peak 07/15/05

INTERSECTION 20 Fallon Rd./Central Pkwy. City of Dublin
Count Date Time Peak Hour



STREET NAME: Fallon Rd.

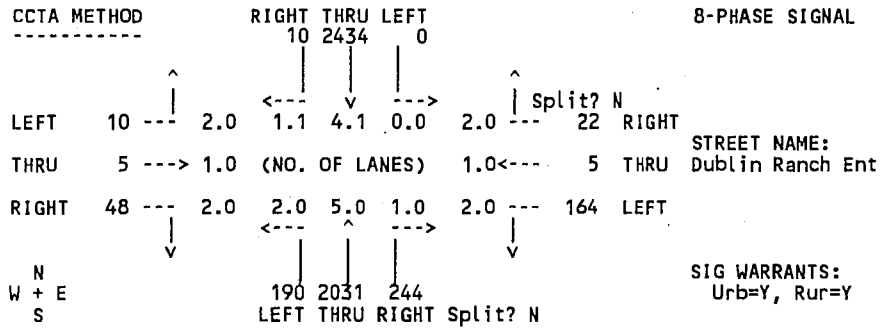
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	402	367 *	1650	0.2224	
THRU (T)	1590	1590	4950	0.3212	0.3212
LEFT (L)	0	0	3000	0.0000	
SB RIGHT (R)	15	0 *	1650	0.0000	
THRU (T)	1241	1241	4950	0.2507	
LEFT (L)	59	59	1650	0.0358	0.0358
EB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	30	30	1650	0.0182	0.0182
LEFT (L)	34	34	1650	0.0206	
WB RIGHT (R)	20	0 *	1650	0.0000	
THRU (T)	20	20	1650	0.0121	
LEFT (L)	63	63	3000	0.0210	0.0210

TOTAL VOLUME-TO-CAPACITY RATIO: 0.40
INTERSECTION LEVEL OF SERVICE: A

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_AM Peak 07/02/05

INTERSECTION 21 Fallon Rd./Dublin Ranch Ent City of Dublin
Count Date Time Peak Hour



STREET NAME:
Dublin Ranch Ent

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	244	154 *	1650	0.0933	
NB THRU (T)	2031	2031	8250	0.2462	
NB LEFT (L)	190	190	3000	0.0633	0.0633
SB RIGHT (R)	10	10	1650	0.0061	
SB THRU (T)	2434	2434	6600	0.3688	
SB T + R		2444	6600	0.3703	0.3703
EB RIGHT (R)	48	0 *	3000	0.0000	
EB THRU (T)	5	5	1650	0.0030	0.0030
EB LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	22	22	3000	0.0073	
WB THRU (T)	5	5	1650	0.0030	
WB LEFT (L)	164	164	3000	0.0547	0.0547

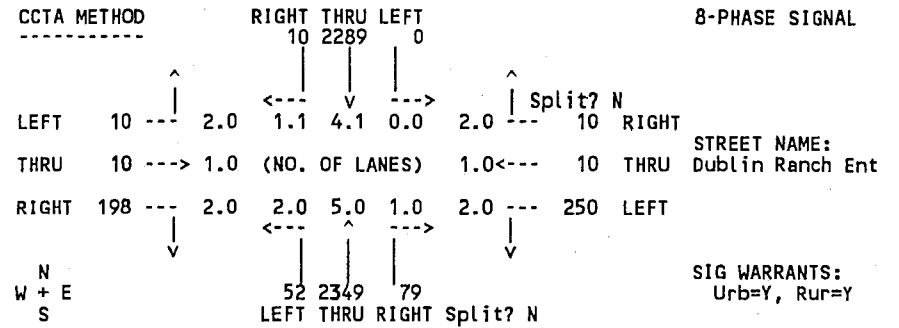
TOTAL VOLUME-TO-CAPACITY RATIO: 0.49
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV. INT, VOL=PERCENT.AMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project_PM Peak 07/02/05

INTERSECTION 21 Fallon Rd./Dublin Ranch Ent City of Dublin
Count Date Time Peak Hour



STREET NAME:
Dublin Ranch Ent

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	79	0 *	1650	0.0000	
NB THRU (T)	2349	2349	8250	0.2847	
NB LEFT (L)	52	52	3000	0.0173	0.0173
SB RIGHT (R)	10	10	1650	0.0061	
SB THRU (T)	2289	2289	6600	0.3468	
SB T + R		2299	6600	0.3483	0.3483
EB RIGHT (R)	198	169 *	3000	0.0563	0.0563
EB THRU (T)	10	10	1650	0.0061	
EB LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	10	10	3000	0.0033	
WB THRU (T)	10	10	1650	0.0061	
WB LEFT (L)	250	250	3000	0.0833	0.0833

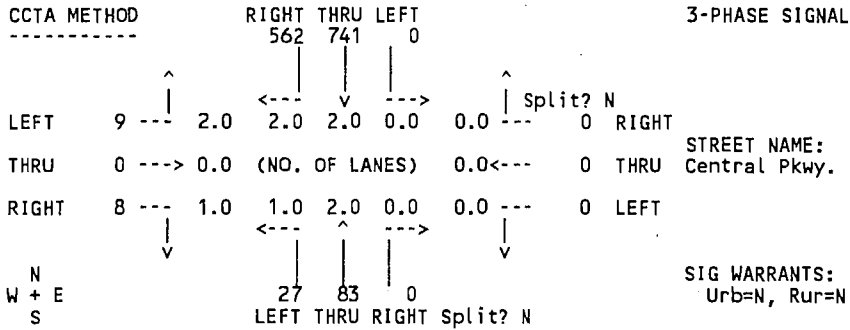
TOTAL VOLUME-TO-CAPACITY RATIO: 0.51
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED

LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-AM Peak 07/15/05

INTERSECTION 22 Croak Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Croak Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	83	83	3440	0.0241	
LEFT (L)	27	27	1720	0.0157	0.0157
SB RIGHT (R)	562	557 *	3127	0.1781	
THRU (T)	741	741	3440	0.2154	0.2154
EB RIGHT (R)	8	0 *	1720	0.0000	
LEFT (L)	9	9	3127	0.0029	0.0029

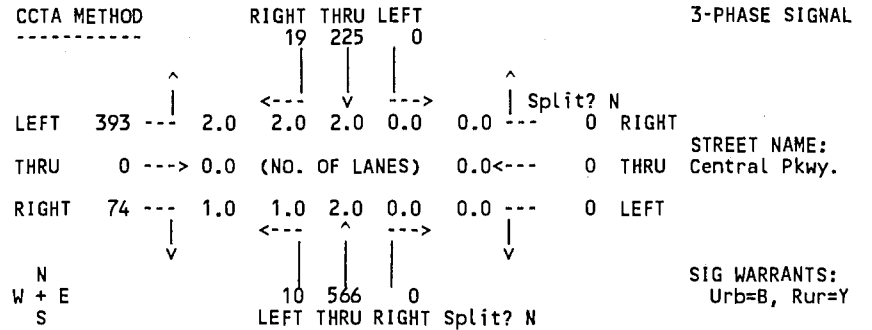
TOTAL VOLUME-TO-CAPACITY RATIO: 0.23
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+75% Project-PM Peak 07/15/05

INTERSECTION 22 Croak Rd./Central Pkwy. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Croak Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	566	566	3440	0.1645	0.1645
LEFT (L)	10	10	1720	0.0058	
SB RIGHT (R)	19	0 *	3127	0.0000	
THRU (T)	225	225	3440	0.0654	
EB RIGHT (R)	74	64 *	1720	0.0372	
LEFT (L)	393	393	3127	0.1257	0.1257

TOTAL VOLUME-TO-CAPACITY RATIO: 0.29
 INTERSECTION LEVEL OF SERVICE: A

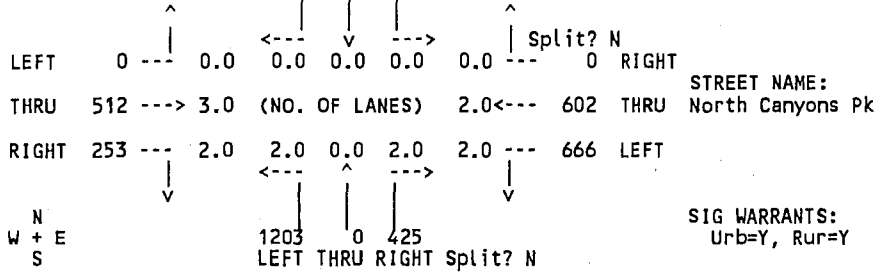
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	425	59 *	3127	0.0189	
NB LEFT (L)	1203	1203	3127	0.3847	0.3847
EB RIGHT (R)	253	0 *	3127	0.0000	
EB THRU (T)	512	512	5160	0.0992	0.0992
WB THRU (T)	602	602	3440	0.1750	
WB LEFT (L)	666	666	3127	0.2130	0.2130
TOTAL VOLUME-TO-CAPACITY RATIO:				0.70	
INTERSECTION LEVEL OF SERVICE:				B	

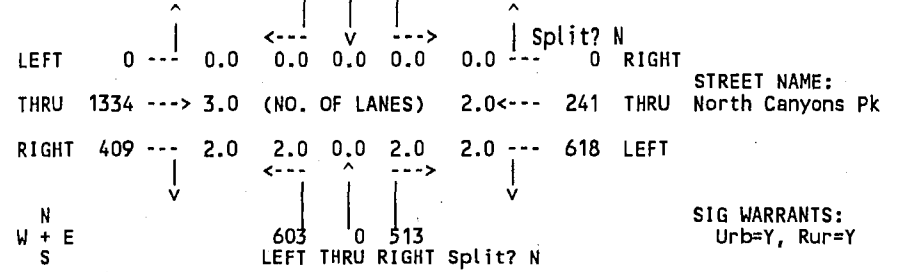
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Airway Blvd.

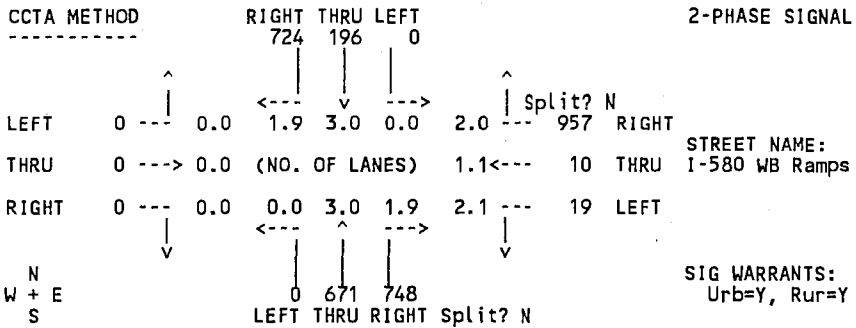
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	513	173 *	3127	0.0553	
NB LEFT (L)	603	603	3127	0.1928	0.1928
EB RIGHT (R)	409	77 *	3127	0.0246	
EB THRU (T)	1334	1334	5160	0.2585	0.2585
WB THRU (T)	241	241	3440	0.0701	
WB LEFT (L)	618	618	3127	0.1976	0.1976
TOTAL VOLUME-TO-CAPACITY RATIO:				0.65	
INTERSECTION LEVEL OF SERVICE:				B	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 24 Airway Blvd./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	748	748	1800	0.4156	
THRU (T)	671	671	5400	0.1243	0.1243
SB RIGHT (R)	724	724	1800	0.4022	
THRU (T)	196	196	5400	0.0363	
WB RIGHT (R)	957	957	3273	0.2924	0.2924
THRU (T)	10	10	1800	0.0056	
LEFT (L)	19	19	3273	0.0058	
T + L		29	3273	0.0089	

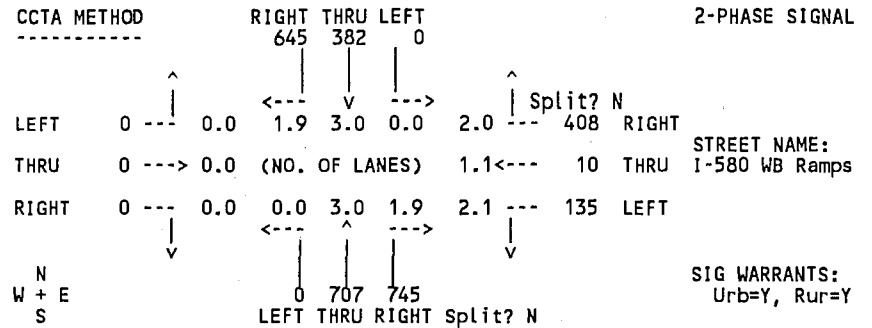
TOTAL VOLUME-TO-CAPACITY RATIO: 0.42
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 24 Airway Blvd./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	745	745	1800	0.4139	
THRU (T)	707	707	5400	0.1309	0.1309
SB RIGHT (R)	645	645	1800	0.3583	
THRU (T)	382	382	5400	0.0707	
WB RIGHT (R)	408	408	3273	0.1247	0.1247
THRU (T)	10	10	1800	0.0056	
LEFT (L)	135	135	3273	0.0412	
T + L		145	3273	0.0443	

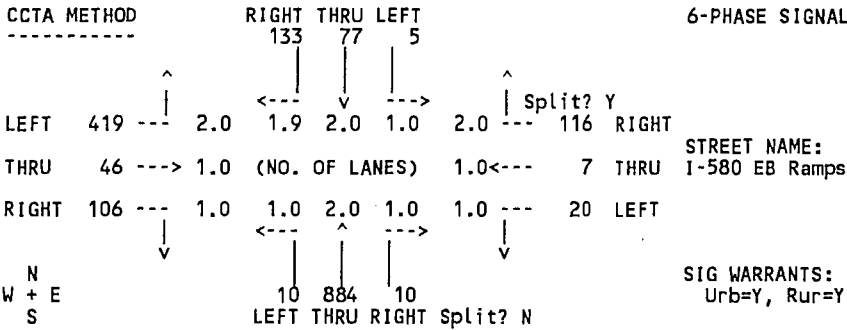
TOTAL VOLUME-TO-CAPACITY RATIO: 0.26
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 25 Airway Blvd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	884	884	3300	0.2679	0.2679
LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	133	133	1650	0.0806	
THRU (T)	77	77	3300	0.0233	
LEFT (L)	5	5	1650	0.0030	0.0030
EB RIGHT (R)	106	96 *	1650	0.0582	
THRU (T)	46	46	1650	0.0279	
LEFT (L)	419	419	3000	0.1397	0.1397
WB RIGHT (R)	116	111 *	3000	0.0370	0.0370
THRU (T)	7	7	1650	0.0042	
LEFT (L)	20	20	1650	0.0121	

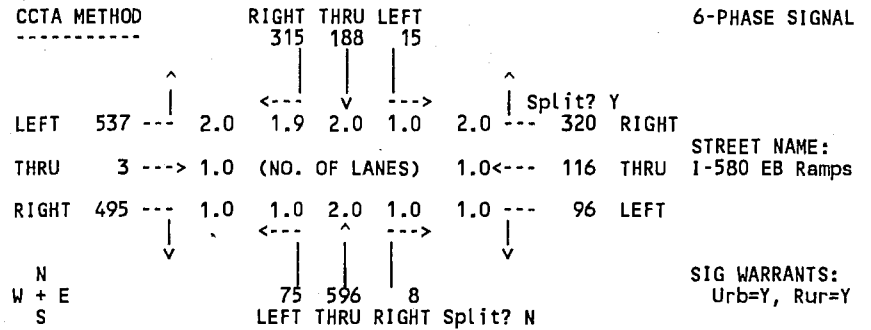
TOTAL VOLUME-TO-CAPACITY RATIO: 0.45
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 25 Airway Blvd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	596	596	3300	0.1806	0.1806
LEFT (L)	75	75	1650	0.0455	
SB RIGHT (R)	315	315	1650	0.1909	
THRU (T)	188	188	3300	0.0570	
LEFT (L)	15	15	1650	0.0091	0.0091
EB RIGHT (R)	495	420 *	1650	0.2545	0.2545
THRU (T)	3	3	1650	0.0018	
LEFT (L)	537	537	3000	0.1790	
WB RIGHT (R)	320	305 *	3000	0.1017	0.1017
THRU (T)	116	116	1650	0.0703	
LEFT (L)	96	96	1650	0.0582	

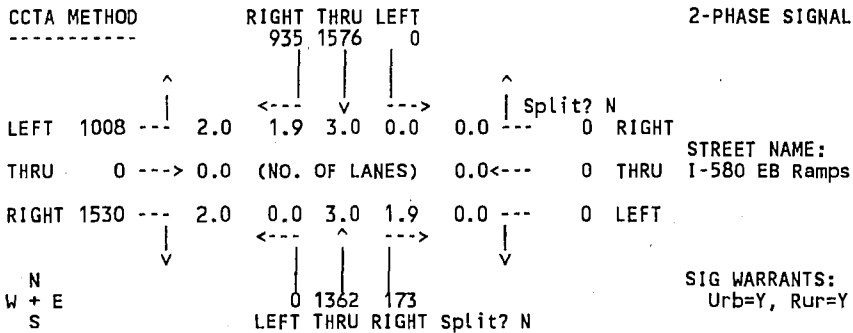
TOTAL VOLUME-TO-CAPACITY RATIO: 0.55
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	173	173	1800	0.0961	
THRU (T)	1362	1362	5400	0.2522	
SB RIGHT (R)	935	935	1800	0.5194	
THRU (T)	1576	1576	5400	0.2919	0.2919
EB RIGHT (R)	1530	1530	3273	0.4675	0.4675
LEFT (L)	1008	1008	3273	0.3080	

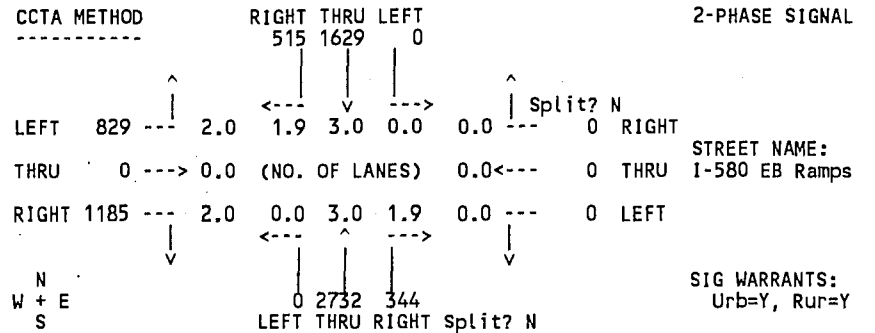
TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



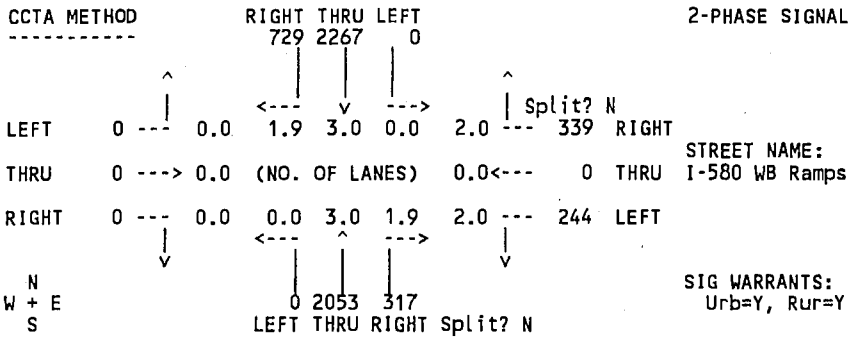
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	344	344	1800	0.1911	
THRU (T)	2732	2732	5400	0.5059	0.5059
SB RIGHT (R)	515	515	1800	0.2861	
THRU (T)	1629	1629	5400	0.3017	
EB RIGHT (R)	1185	1185	3273	0.3621	0.3621
LEFT (L)	829	829	3273	0.2533	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.87
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour

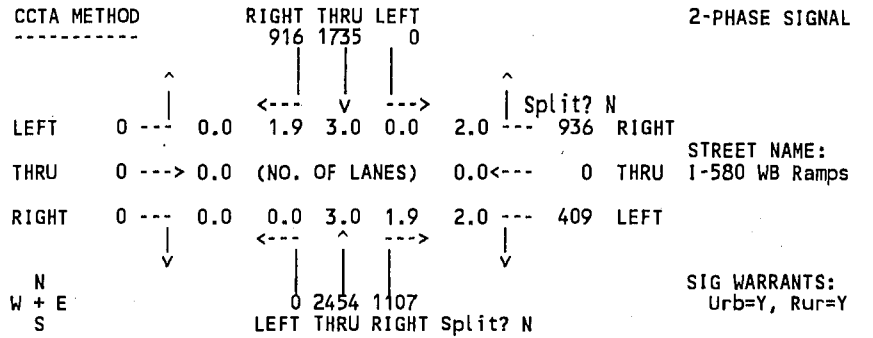


MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	317	317	1800	0.1761	
THRU (T)	2053	2053	5400	0.3802	
SB RIGHT (R)	729	729	1800	0.4050	
THRU (T)	2267	2267	5400	0.4198	0.4198
WB RIGHT (R)	339	339	3273	0.1036	0.1036
LEFT (L)	244	244	3273	0.0745	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.52	
INTERSECTION LEVEL OF SERVICE:				A	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



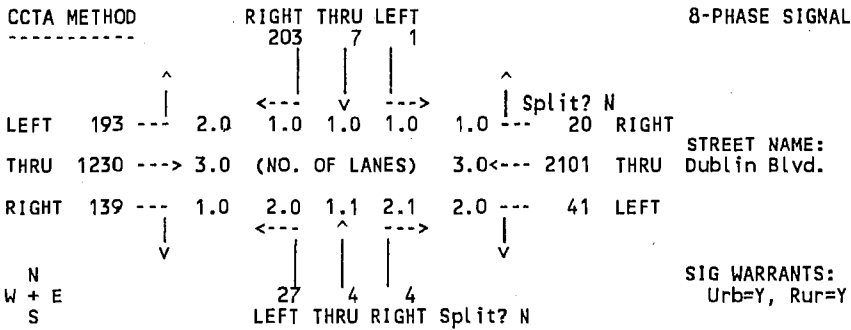
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1107	1107	1800	0.6150	
THRU (T)	2454	2454	5400	0.4544	0.4544
SB RIGHT (R)	916	916	1800	0.5089	
THRU (T)	1735	1735	5400	0.3213	
WB RIGHT (R)	936	936	3273	0.2860	0.2860
LEFT (L)	409	409	3273	0.1250	
TOTAL VOLUME-TO-CAPACITY RATIO:				0.74	
INTERSECTION LEVEL OF SERVICE:				C	

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=PERCENT.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_AM Peak 05/19/05

INTERSECTION 28 Arnold Rd./Dublin Blvd. City of Dublin
Count Date Time Peak Hour



STREET NAME: Arnold Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	4	0 *	3000	0.0000	
THRU (T)	4	4	1650	0.0024	
LEFT (L)	27	27	3000	0.0090	0.0090
T + R		4	3000	0.0013	
SB RIGHT (R)	203	97 *	1650	0.0588	0.0588
THRU (T)	7	7	1650	0.0042	
LEFT (L)	1	1	1650	0.0006	
EB RIGHT (R)	139	124 *	1650	0.0752	
THRU (T)	1230	1230	4950	0.2485	
LEFT (L)	193	193	3000	0.0643	0.0643
WB RIGHT (R)	20	19 *	1650	0.0115	
THRU (T)	2101	2101	4950	0.4244	0.4244
LEFT (L)	41	41	3000	0.0137	

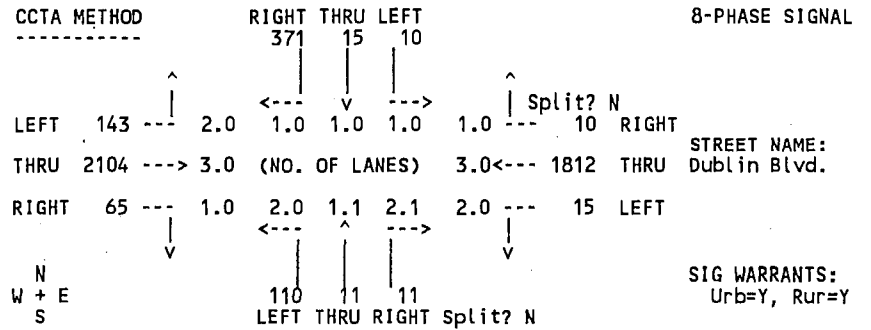
TOTAL VOLUME-TO-CAPACITY RATIO: 0.56
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT, INT, VOL=PERCENT, AMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ 75% Project_PM Peak 05/19/05

INTERSECTION 28 Arnold Rd./Dublin Blvd. City of Dublin
Count Date Time Peak Hour



STREET NAME: Arnold Rd.

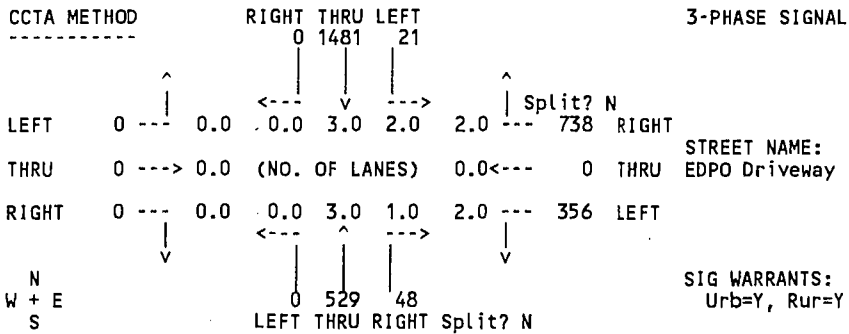
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	11	3 *	3000	0.0010	
THRU (T)	11	11	1650	0.0067	
LEFT (L)	110	110	3000	0.0367	0.0367
T + R		14	3000	0.0047	
SB RIGHT (R)	371	292 *	1650	0.1770	0.1770
THRU (T)	15	15	1650	0.0091	
LEFT (L)	10	10	1650	0.0061	
EB RIGHT (R)	65	5 *	1650	0.0030	
THRU (T)	2104	2104	4950	0.4251	0.4251
LEFT (L)	143	143	3000	0.0477	
WB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	1812	1812	4950	0.3661	
LEFT (L)	15	15	3000	0.0050	0.0050

TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT, INT, VOL=PERCENT, PMV, CAP=...LOSCAP.TAB

Condition: Buildout+75% Project-AM Peak 07/15/05

INTERSECTION 29 Fallon Rd./EDPO Driveway City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

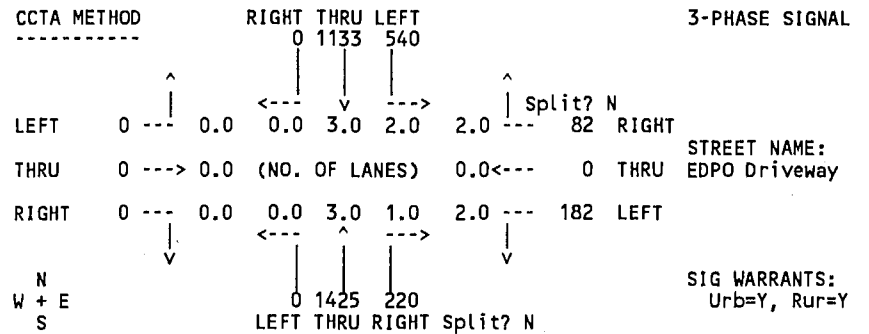
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	48	0 *	1720	0.0000	
THRU (T)	529	529	5160	0.1025	
SB THRU (T)	1481	1481	5160	0.2870	0.2870
LEFT (L)	21	21	3127	0.0067	
WB RIGHT (R)	738	726 *	3127	0.2322	0.2322
LEFT (L)	356	356	3127	0.1138	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.52
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=PERCENT.AMV,CAP=...LOSCAP.TAB

Condition: Buildout+75% Project-PM Peak 07/15/05

INTERSECTION 29 Fallon Rd./EDPO Driveway City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	220	120 *	1720	0.0698	
THRU (T)	1425	1425	5160	0.2762	0.2762
SB THRU (T)	1133	1133	5160	0.2196	
LEFT (L)	540	540	3127	0.1727	0.1727
WB RIGHT (R)	82	0 *	3127	0.0000	
LEFT (L)	182	182	3127	0.0582	0.0582

TOTAL VOLUME-TO-CAPACITY RATIO: 0.51
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV

**APPENDIX G – LEVEL OF SERVICE WORKSHEETS: BUILDOUT PLUS
PROJECT PLUS OFFSET CENTRAL CONDITIONS**

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05

INTERSECTION	1 Dougherty/Dublin		City of Dublin	
Count Date	Time	Peak Hour		
CCTA METHOD	RIGHT THRU LEFT	8-PHASE SIGNAL		
	154 2131 49			
LEFT	144	2.0	1.1 4.1 2.0	1.0 Split? N 29 RIGHT
THRU	1166	3.0	(NO. OF LANES)	3.0<--- 1617 THRU
RIGHT	638	2.0	3.0 3.0 2.0	3.0 --- 296 LEFT
N			200 1274 969	SIG WARRANTS: Urb=Y, Rur=Y
W + E			LEFT THRU RIGHT	
S			Split? N	

STREET NAME: Dougherty

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	969	856 *	3000	0.2853	
THRU (T)	1274	1274	4950	0.2574	
LEFT (L)	200	200	4304	0.0465	0.0465
SB RIGHT (R)	154	154	1650	0.0933	
THRU (T)	2131	2131	6600	0.3229	
LEFT (L)	49	49	3000	0.0163	
T + R		2285	6600	0.3462	0.3462
EB RIGHT (R)	638	561 *	3000	0.1870	
THRU (T)	1166	1166	4950	0.2356	
LEFT (L)	144	144	3000	0.0480	0.0480
WB RIGHT (R)	29	2 *	1650	0.0012	
THRU (T)	1617	1617	4950	0.3267	0.3267
LEFT (L)	296	296	4304	0.0688	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.77
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV. INT, VOL=OFFSET.AMV, CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05

INTERSECTION	1 Dougherty/Dublin		City of Dublin	
Count Date	Time	Peak Hour		
CCTA METHOD	RIGHT THRU LEFT	8-PHASE SIGNAL		
	134 1314 43			
LEFT	261	2.0	1.1 4.1 2.0	1.0 Split? N 16 RIGHT
THRU	1444	3.0	(NO. OF LANES)	3.0<--- 1720 THRU
RIGHT	562	2.0	3.0 3.0 2.0	3.0 --- 791 LEFT
N			1015 1939 525	SIG WARRANTS: Urb=Y, Rur=Y
W + E			LEFT THRU RIGHT	
S			Split? N	

STREET NAME: Dougherty

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	525	222 *	3000	0.0740	
THRU (T)	1939	1939	4950	0.3917	
LEFT (L)	1015	1015	4304	0.2358	0.2358
SB RIGHT (R)	134	134	1650	0.0812	
THRU (T)	1314	1314	6600	0.1991	
LEFT (L)	43	43	3000	0.0143	
T + R		1448	6600	0.2194	0.2194
EB RIGHT (R)	562	173 *	3000	0.0577	
THRU (T)	1444	1444	4950	0.2917	0.2917
LEFT (L)	261	261	3000	0.0870	
WB RIGHT (R)	16	0 *	1650	0.0000	
THRU (T)	1720	1720	4950	0.3475	
LEFT (L)	791	791	4304	0.1838	0.1838

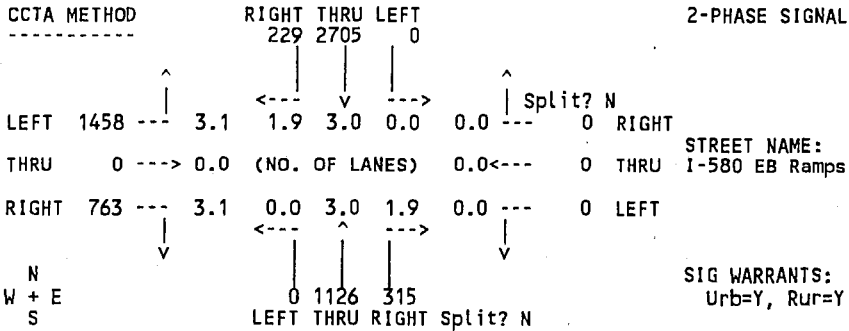
TOTAL VOLUME-TO-CAPACITY RATIO: 0.93
 INTERSECTION LEVEL OF SERVICE: E

* ADJUSTED FOR RIGHT TURN ON RED
 INT=

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	315	315	1800	0.1750	
THRU (T)	1126	1126	5400	0.2085	
SB RIGHT (R)	229	229	1800	0.1272	
THRU (T)	2705	2705	5400	0.5009	0.5009
EB RIGHT (R)	763	763	4695	0.1625	
LEFT (L)	1458	1458	4695	0.3105	0.3105
T + R + L		2221	7590	0.2926	

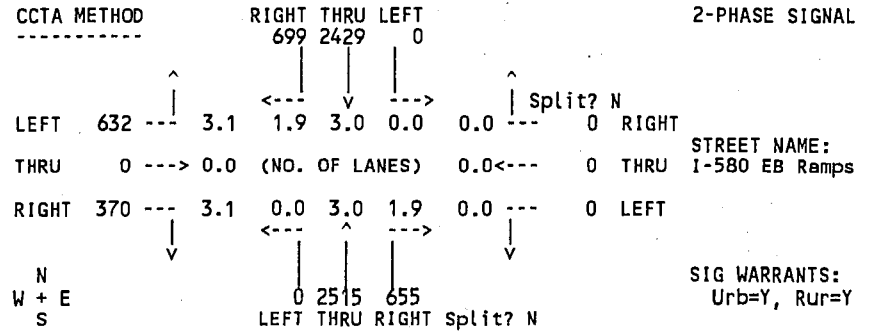
TOTAL VOLUME-TO-CAPACITY RATIO: 0.81
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 2 Hacienda Dr./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	655	655	1800	0.3639	
THRU (T)	2515	2515	5400	0.4657	0.4657
SB RIGHT (R)	699	699	1800	0.3883	
THRU (T)	2429	2429	5400	0.4498	
EB RIGHT (R)	370	370	4695	0.0788	
LEFT (L)	632	632	4695	0.1346	0.1346
T + R + L		1002	7590	0.1320	

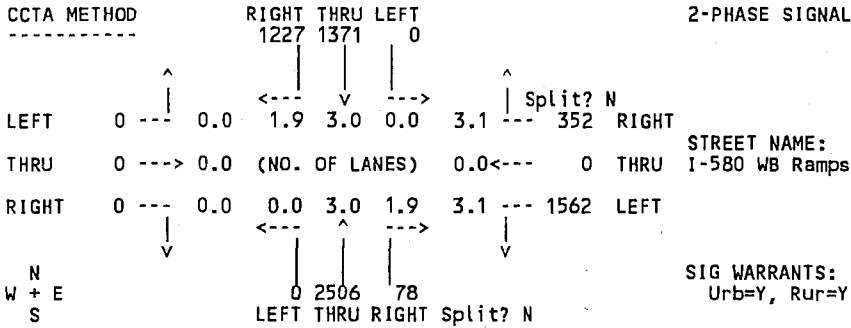
TOTAL VOLUME-TO-CAPACITY RATIO: 0.60
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	78	78	1800	0.0433	
THRU (T)	2506	2506	5400	0.4641	0.4641
SB RIGHT (R)	1227	1227	1800	0.6817	
THRU (T)	1371	1371	5400	0.2539	
WB RIGHT (R)	352	352	4695	0.0750	
LEFT (L)	1562	1562	4695	0.3327	0.3327
T + R + L		1914	7590	0.2522	

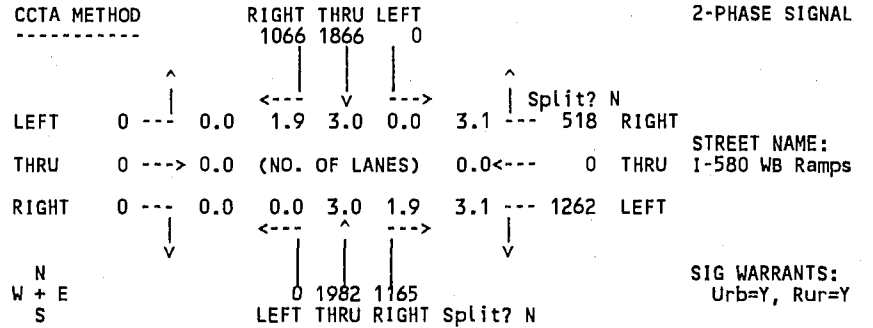
TOTAL VOLUME-TO-CAPACITY RATIO: 0.80
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 3 Hacienda Dr./I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1165	1165	1800	0.6472	
THRU (T)	1982	1982	5400	0.3670	0.3670
SB RIGHT (R)	1066	1066	1800	0.5922	
THRU (T)	1866	1866	5400	0.3456	
WB RIGHT (R)	518	518	4695	0.1103	
LEFT (L)	1262	1262	4695	0.2688	0.2688
T + R + L		1780	7590	0.2345	

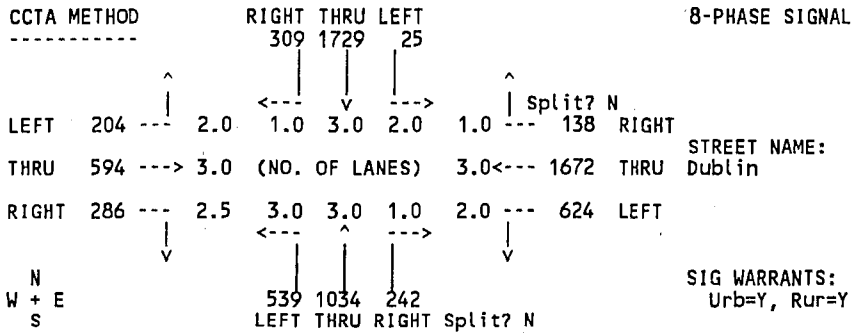
TOTAL VOLUME-TO-CAPACITY RATIO: 0.64
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 4 Hacienda Dr./Dublin City of Dublin
Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	242	0 *	1650	0.0000	
NB THRU (T)	1034	1034	4950	0.2089	
NB LEFT (L)	539	539	4304	0.1252	0.1252
SB RIGHT (R)	309	197 *	1650	0.1194	
SB THRU (T)	1729	1729	4950	0.3493	0.3493
SB LEFT (L)	25	25	3000	0.0083	
EB RIGHT (R)	286	0 *	3000	0.0000	
EB THRU (T)	594	594	4950	0.1200	
EB LEFT (L)	204	204	3000	0.0680	0.0680
WB RIGHT (R)	138	124 *	1650	0.0752	
WB THRU (T)	1672	1672	4950	0.3378	0.3378
WB LEFT (L)	624	624	3000	0.2080	

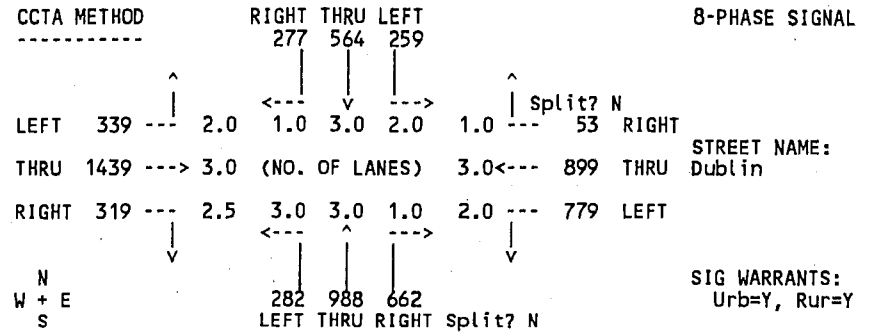
TOTAL VOLUME-TO-CAPACITY RATIO: 0.88
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 4 Hacienda Dr./Dublin City of Dublin
Count Date Time Peak Hour



STREET NAME: Hacienda Dr.

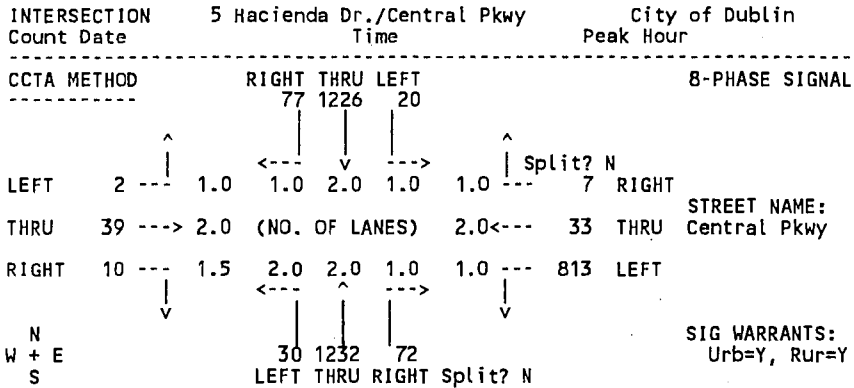
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	662	234 *	1650	0.1418	
NB THRU (T)	988	988	4950	0.1996	0.1996
NB LEFT (L)	282	282	4304	0.0655	
SB RIGHT (R)	277	91 *	1650	0.0552	
SB THRU (T)	564	564	4950	0.1139	
SB LEFT (L)	259	259	3000	0.0863	0.0863
EB RIGHT (R)	319	122 *	3000	0.0407	
EB THRU (T)	1439	1439	4950	0.2907	0.2907
EB LEFT (L)	339	339	3000	0.1130	
WB RIGHT (R)	53	0 *	1650	0.0000	
WB THRU (T)	899	899	4950	0.1816	
WB LEFT (L)	779	779	3000	0.2597	0.2597

TOTAL VOLUME-TO-CAPACITY RATIO: 0.84
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05



STREET NAME: Hacienda Dr.

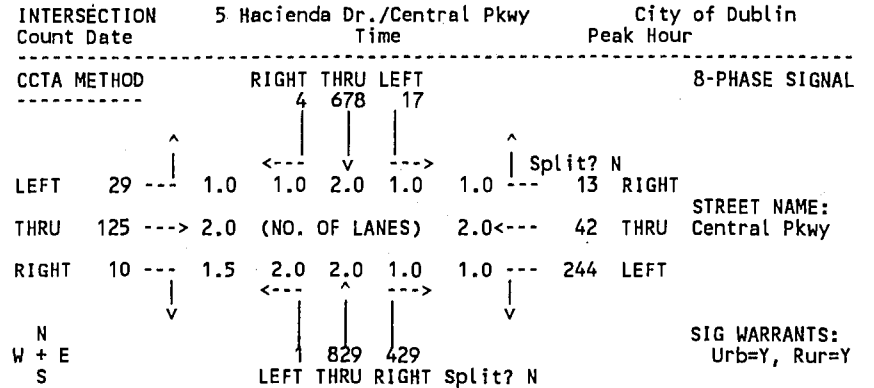
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	72	0 *	1650	0.0000	
THRU (T)	1232	1232	3300	0.3733	0.3733
LEFT (L)	30	30	3000	0.0100	
SB RIGHT (R)	77	75 *	1650	0.0455	
THRU (T)	1226	1226	3300	0.3715	
LEFT (L)	20	20	1650	0.0121	0.0121
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	39	39	3300	0.0118	0.0118
LEFT (L)	2	2	1650	0.0012	
WB RIGHT (R)	7	0 *	1650	0.0000	
THRU (T)	33	33	3300	0.0100	
LEFT (L)	813	813	1650	0.4927	0.4927

TOTAL VOLUME-TO-CAPACITY RATIO: 0.89
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05



STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	429	185 *	1650	0.1121	
THRU (T)	829	829	3300	0.2512	0.2512
LEFT (L)	1	1	3000	0.0003	
SB RIGHT (R)	4	0 *	1650	0.0000	
THRU (T)	678	678	3300	0.2055	
LEFT (L)	17	17	1650	0.0103	0.0103
EB RIGHT (R)	10	9 *	1650	0.0055	
THRU (T)	125	125	3300	0.0379	0.0379
LEFT (L)	29	29	1650	0.0176	
WB RIGHT (R)	13	0 *	1650	0.0000	
THRU (T)	42	42	3300	0.0127	
LEFT (L)	244	244	1650	0.1479	0.1479

TOTAL VOLUME-TO-CAPACITY RATIO: 0.45
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak_Mit 07/02/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 77 1226 20

LEFT 2 --- 1.0 1.0 2.0 1.0 1.0 --- Split? N 7 RIGHT
 THRU 39 ---> 2.0 (NO. OF LANES) 1.0<--- 33 THRU STREET NAME:
 Central Pkwy
 RIGHT 10 --- 1.5 2.0 2.0 1.0 2.0 --- 813 LEFT
 N
 W + E
 S

SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	72	0 *	1650	0.0000	
THRU (T)	1232	1232	3300	0.3733	0.3733
LEFT (L)	30	30	3000	0.0100	
SB RIGHT (R)	77	75 *	1650	0.0455	
THRU (T)	1226	1226	3300	0.3715	
LEFT (L)	20	20	1650	0.0121	0.0121
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	39	39	3300	0.0118	0.0118
LEFT (L)	2	2	1650	0.0012	
WB RIGHT (R)	7	0 *	1650	0.0000	
THRU (T)	33	33	1650	0.0200	
LEFT (L)	813	813	3000	0.2710	0.2710

TOTAL VOLUME-TO-CAPACITY RATIO: 0.67
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak_Mit 07/02/05

INTERSECTION 5 Hacienda Dr./Central Pkwy City of Dublin
 Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
 4 678 17

LEFT 29 --- 1.0 1.0 2.0 1.0 1.0 --- Split? N 13 RIGHT
 THRU 125 ---> 2.0 (NO. OF LANES) 1.0<--- 42 THRU STREET NAME:
 Central Pkwy
 RIGHT 10 --- 1.5 2.0 2.0 1.0 2.0 --- 244 LEFT
 N
 W + E
 S

SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	429	295 *	1650	0.1788	
THRU (T)	829	829	3300	0.2512	0.2512
LEFT (L)	1	1	3000	0.0003	
SB RIGHT (R)	4	0 *	1650	0.0000	
THRU (T)	678	678	3300	0.2055	
LEFT (L)	17	17	1650	0.0103	0.0103
EB RIGHT (R)	10	9 *	1650	0.0055	
THRU (T)	125	125	3300	0.0379	0.0379
LEFT (L)	29	29	1650	0.0176	
WB RIGHT (R)	13	0 *	1650	0.0000	
THRU (T)	42	42	1650	0.0255	
LEFT (L)	244	244	3000	0.0813	0.0813

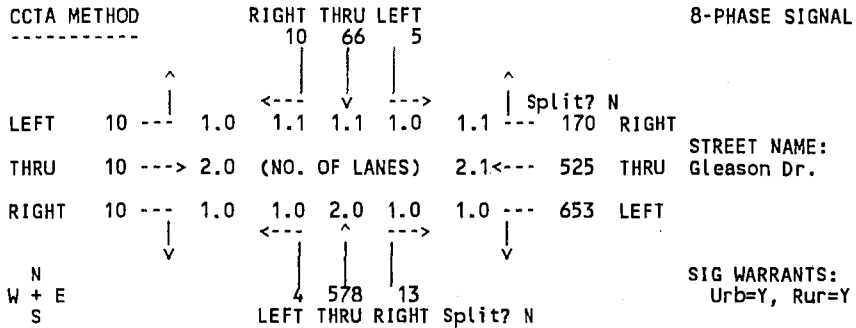
TOTAL VOLUME-TO-CAPACITY RATIO: 0.38
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	13	0 *	1650	0.0000	
THRU (T)	578	578	3300	0.1752	0.1752
LEFT (L)	4	4	1650	0.0024	
SB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	66	66	1650	0.0400	
LEFT (L)	5	5	1650	0.0030	0.0030
T + R		76	1650	0.0461	
EB RIGHT (R)	10	6 *	1650	0.0036	0.0036
THRU (T)	10	10	3300	0.0030	
LEFT (L)	10	10	1650	0.0061	
WB RIGHT (R)	170	170	1650	0.1030	
THRU (T)	525	525	3300	0.1591	
LEFT (L)	653	653	1650	0.3958	0.3958
T + R		695	3300	0.2106	

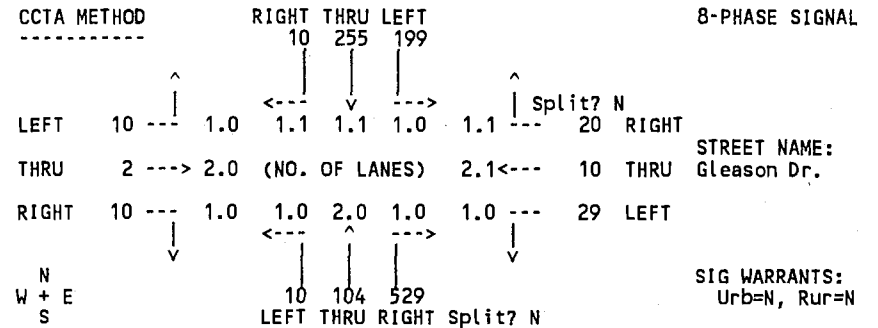
TOTAL VOLUME-TO-CAPACITY RATIO: 0.58
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05

INTERSECTION 6 Hacienda Dr./Gleason Dr. City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=N, Rur=N

STREET NAME: Hacienda Dr.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	529	500 *	1650	0.3030	0.3030
THRU (T)	104	104	3300	0.0315	
LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	255	255	1650	0.1545	
LEFT (L)	199	199	1650	0.1206	0.1206
T + R		265	1650	0.1606	
EB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	2	2	3300	0.0006	
LEFT (L)	10	10	1650	0.0061	0.0061
WB RIGHT (R)	20	20	1650	0.0121	0.0121
THRU (T)	10	10	3300	0.0030	
LEFT (L)	29	29	1650	0.0176	
T + R		30	3300	0.0091	

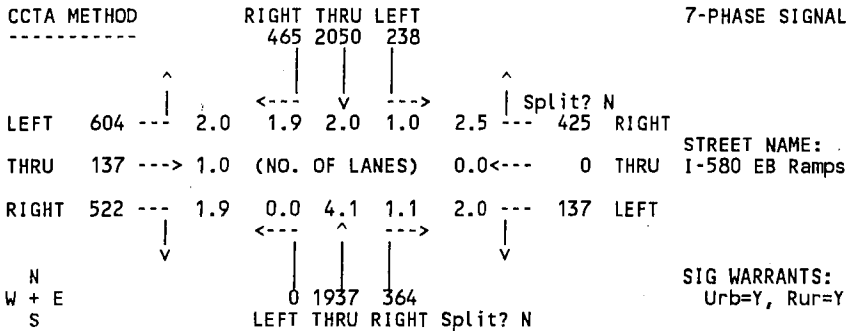
TOTAL VOLUME-TO-CAPACITY RATIO: 0.44
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1937	1937	6600	0.2935	
T + R		2301	6600	0.3486	
SB RIGHT (R)	465	465	1650	0.2818	
THRU (T)	2050	2050	3300	0.6212	0.6212
LEFT (L)	238	238	1650	0.1442	
EB RIGHT (R)	522	522	1650	0.3164	
THRU (T)	137	137	1650	0.0830	
LEFT (L)	604	604	3000	0.2013	0.2013
WB RIGHT (R)	425	0 *	3000	0.0000	0.0000
LEFT (L)	137	137	3000	0.0457	

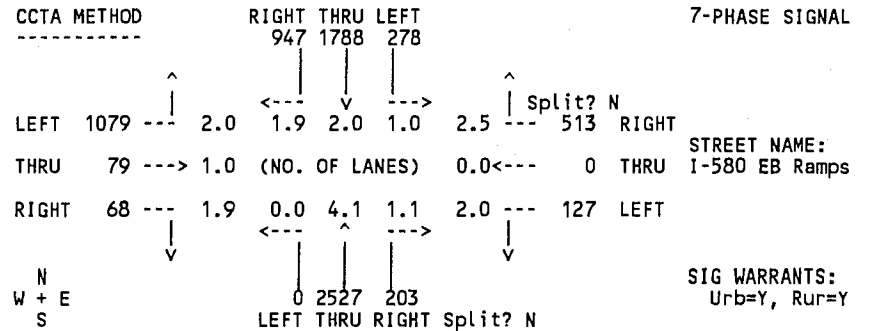
TOTAL VOLUME-TO-CAPACITY RATIO: 0.82
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	203	203	1650	0.1230	
THRU (T)	2527	2527	6600	0.3829	
T + R		2730	6600	0.4136	0.4136
SB RIGHT (R)	947	947	1650	0.5739	
THRU (T)	1788	1788	3300	0.5418	
LEFT (L)	278	278	1650	0.1685	0.1685
EB RIGHT (R)	68	68	1650	0.0412	
THRU (T)	79	79	1650	0.0479	
LEFT (L)	1079	1079	3000	0.3597	0.3597
WB RIGHT (R)	513	8 *	3000	0.0027	0.0027
LEFT (L)	127	127	3000	0.0423	

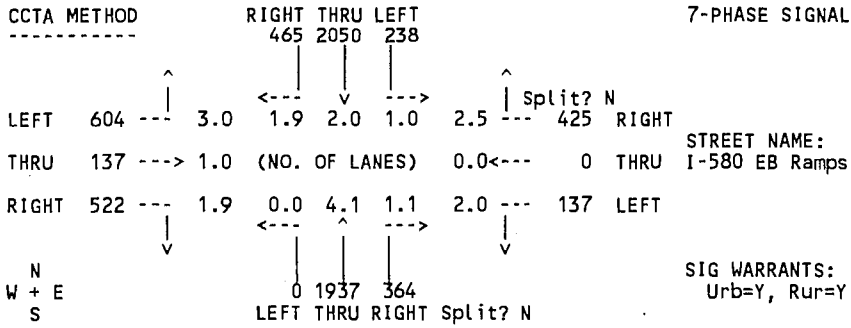
TOTAL VOLUME-TO-CAPACITY RATIO: 0.94
 INTERSECTION LEVEL OF SERVICE: E

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak_Mit 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	364	364	1650	0.2206	
THRU (T)	1937	1937	6600	0.2935	
T + R		2301	6600	0.3486	
SB RIGHT (R)	465	465	1650	0.2818	
THRU (T)	2050	2050	3300	0.6212	0.6212
LEFT (L)	238	238	1650	0.1442	
EB RIGHT (R)	522	522	1650	0.3164	
THRU (T)	137	137	1650	0.0830	
LEFT (L)	604	604	4304	0.1403	0.1403
WB RIGHT (R)	425	0 *	3000	0.0000	0.0000
LEFT (L)	137	137	3000	0.0457	

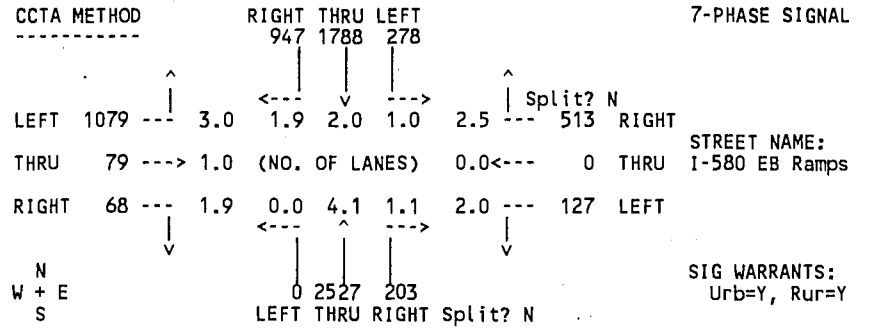
TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak_Mit 07/15/05

INTERSECTION 7 Santa Rita Rd./I-580 EB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Santa Rita Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	203	203	1650	0.1230	
THRU (T)	2527	2527	6600	0.3829	
T + R		2730	6600	0.4136	0.4136
SB RIGHT (R)	947	947	1650	0.5739	
THRU (T)	1788	1788	3300	0.5418	
LEFT (L)	278	278	1650	0.1685	0.1685
EB RIGHT (R)	68	68	1650	0.0412	
THRU (T)	79	79	1650	0.0479	
LEFT (L)	1079	1079	4304	0.2507	0.2507
WB RIGHT (R)	513	8 *	3000	0.0027	0.0027
LEFT (L)	127	127	3000	0.0423	

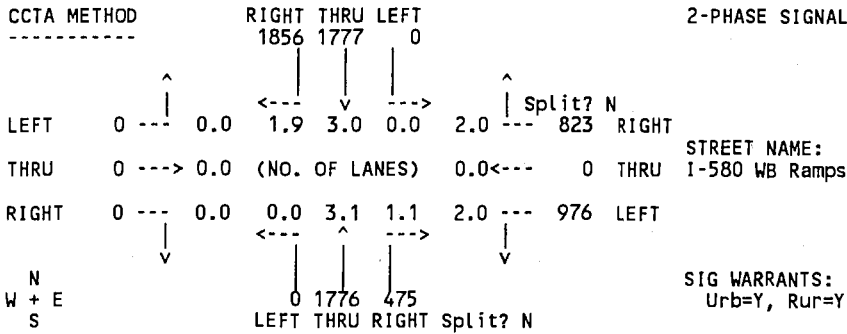
TOTAL VOLUME-TO-CAPACITY RATIO: 0.84
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/15/05

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	475	475	1800	0.2639	
THRU (T)	1776	1776	5400	0.3289	
T + R		2251	5400	0.4169	0.4169
SB RIGHT (R)	1856	1856	1800	1.0311 **	
THRU (T)	1777	1777	5400	0.3291	
WB RIGHT (R)	823	823	3273	0.2515	
LEFT (L)	976	976	3273	0.2982	0.2982

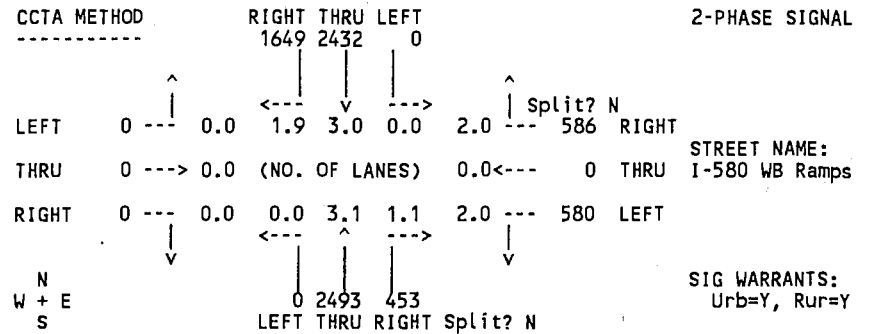
TOTAL VOLUME-TO-CAPACITY RATIO: 0.72
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED ** APPROACHING OR EXCEEDING CAPACITY
 INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/15/05

INTERSECTION 8 Tassajara Rd/I-580 WB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	453	453	1800	0.2517	
THRU (T)	2493	2493	5400	0.4617	
T + R		2946	5400	0.5456	0.5456
SB RIGHT (R)	1649	1649	1800	0.9161 **	
THRU (T)	2432	2432	5400	0.4504	
WB RIGHT (R)	586	586	3273	0.1790	0.1790
LEFT (L)	580	580	3273	0.1772	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.72
 INTERSECTION LEVEL OF SERVICE: C

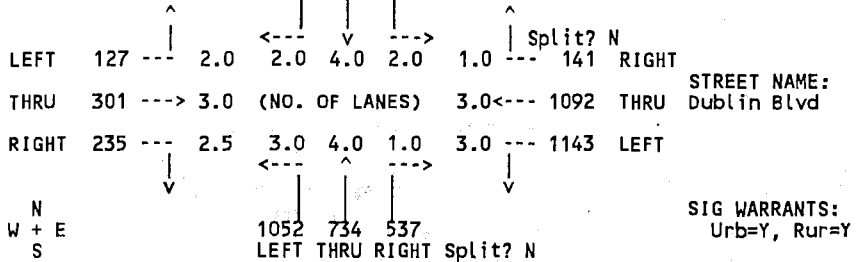
* ADJUSTED FOR RIGHT TURN ON RED ** APPROACHING OR EXCEEDING CAPACITY
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
380 2244 227



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	537	99 *	1650	0.0600	
THRU (T)	734	734	6600	0.1112	
LEFT (L)	1052	1052	4304	0.2444	0.2444
SB RIGHT (R)	380	310 *	3000	0.1033	
THRU (T)	2244	2244	6600	0.3400	0.3400
LEFT (L)	227	227	3000	0.0757	
EB RIGHT (R)	235	0 *	3000	0.0000	
THRU (T)	301	301	4950	0.0608	0.0608
LEFT (L)	127	127	3000	0.0423	
WB RIGHT (R)	141	16 *	1650	0.0097	
THRU (T)	1092	1092	4950	0.2206	
LEFT (L)	1143	1143	4304	0.2656	0.2656

TOTAL VOLUME-TO-CAPACITY RATIO: 0.91
INTERSECTION LEVEL OF SERVICE: E

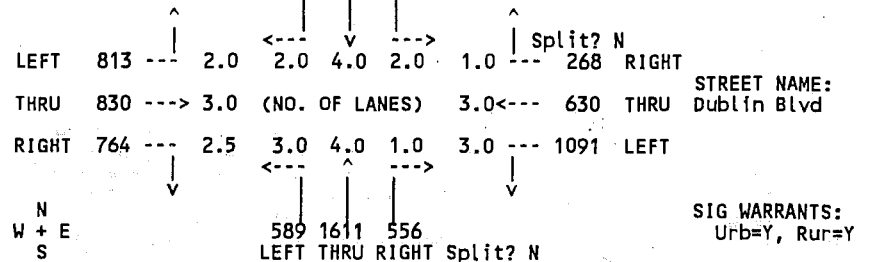
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05

INTERSECTION 9 Tassajara Rd/Dublin Blvd City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 8-PHASE SIGNAL
439 1484 280



STREET NAME: Tassajara Rd

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	556	138 *	1650	0.0836	
THRU (T)	1611	1611	6600	0.2441	
LEFT (L)	589	589	4304	0.1368	0.1368
SB RIGHT (R)	439	0 *	3000	0.0000	
THRU (T)	1484	1484	6600	0.2248	0.2248
LEFT (L)	280	280	3000	0.0933	
EB RIGHT (R)	764	353 *	3000	0.1177	
THRU (T)	830	830	4950	0.1677	0.1677
LEFT (L)	813	813	3000	0.2710	
WB RIGHT (R)	268	114 *	1650	0.0691	
THRU (T)	630	630	4950	0.1273	
LEFT (L)	1091	1091	4304	0.2535	0.2535

TOTAL VOLUME-TO-CAPACITY RATIO: 0.78
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05

INTERSECTION	10 Tassajara Rd./Central Pkwy.			City of Dublin	
Count Date	Time			Peak Hour	
CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL	
	362	2398	59		
LEFT	24	1.0	1.0	3.0	2.0
THRU	3	2.1	(NO. OF LANES)		2.0
RIGHT	10	1.1	2.0	3.0	1.0
			2.0	2.0	338
			6	703	62
			LEFT THRU RIGHT Split? N		

STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	62	0 *	1650	0.0000	
THRU (T)	703	703	4950	0.1420	
LEFT (L)	6	6	3000	0.0020	0.0020
SB RIGHT (R)	362	338 *	1650	0.2048	
THRU (T)	2398	2398	4950	0.4844	0.4844
LEFT (L)	59	59	3000	0.0197	
EB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	3	3	3300	0.0009	
LEFT (L)	24	24	1650	0.0145	0.0145
T + R		13	3300	0.0039	
WB RIGHT (R)	32	0 *	1650	0.0000	
THRU (T)	349	349	3300	0.1058	0.1058
LEFT (L)	338	338	3000	0.1127	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.61
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05

INTERSECTION	10 Tassajara Rd./Central Pkwy.			City of Dublin	
Count Date	Time			Peak Hour	
CCTA METHOD	RIGHT	THRU	LEFT	8-PHASE SIGNAL	
	80	1819	78		
LEFT	330	1.0	1.0	3.0	2.0
THRU	52	2.1	(NO. OF LANES)		2.0
RIGHT	10	1.1	2.0	3.0	1.0
			2.0	2.0	221
			0	2364	231
			LEFT THRU RIGHT Split? N		

STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	231	109 *	1650	0.0661	
THRU (T)	2364	2364	4950	0.4776	0.4776
LEFT (L)	0	0	3000	0.0000	
SB RIGHT (R)	80	0 *	1650	0.0000	
THRU (T)	1819	1819	4950	0.3675	
LEFT (L)	78	78	3000	0.0260	0.0260
EB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	52	52	3300	0.0158	
LEFT (L)	330	330	1650	0.2000	0.2000
T + R		62	3300	0.0188	
WB RIGHT (R)	124	81 *	1650	0.0491	0.0491
THRU (T)	11	11	3300	0.0033	
LEFT (L)	221	221	3000	0.0737	

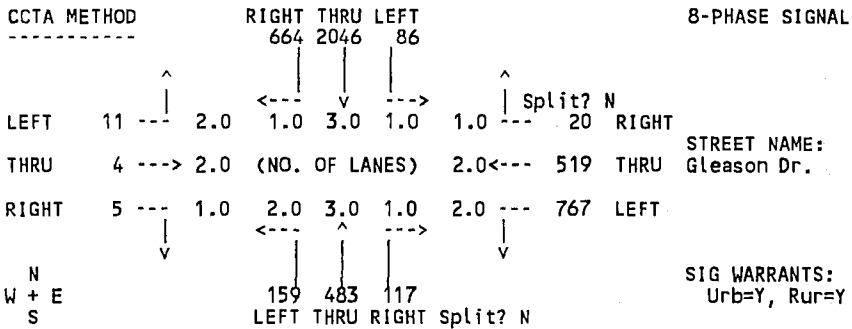
TOTAL VOLUME-TO-CAPACITY RATIO: 0.75
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 11 Tassajara Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	117	0 *	1650	0.0000	
THRU (T)	483	483	4950	0.0976	
LEFT (L)	159	159	3000	0.0530	0.0530
SB RIGHT (R)	664	658 *	1650	0.3988	
THRU (T)	2046	2046	4950	0.4133	0.4133
LEFT (L)	86	86	1650	0.0521	
EB RIGHT (R)	5	0 *	1650	0.0000	
THRU (T)	4	4	3300	0.0012	0.0012
LEFT (L)	11	11	3000	0.0037	
WB RIGHT (R)	20	0 *	1650	0.0000	
THRU (T)	519	519	3300	0.1573	
LEFT (L)	767	767	3000	0.2557	0.2557

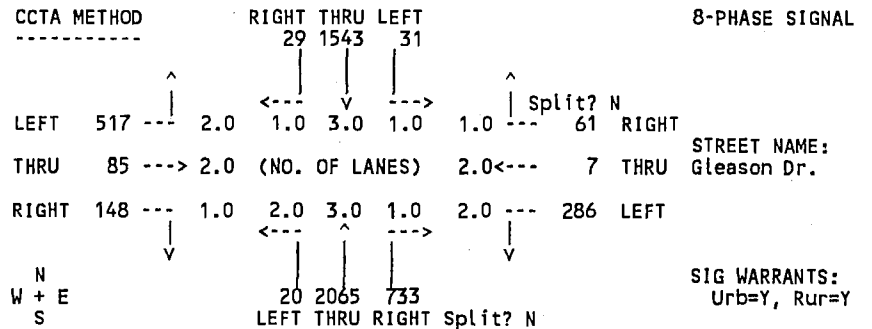
TOTAL VOLUME-TO-CAPACITY RATIO: 0.72
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 11 Tassajara Rd./Gleason Dr. City of Dublin
 Count Date Time Peak Hour



STREET NAME: Tassajara Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	733	576 *	1650	0.3491	
THRU (T)	2065	2065	4950	0.4172	0.4172
LEFT (L)	20	20	3000	0.0067	
SB RIGHT (R)	29	0 *	1650	0.0000	
THRU (T)	1543	1543	4950	0.3117	
LEFT (L)	31	31	1650	0.0188	0.0188
EB RIGHT (R)	148	137 *	1650	0.0830	
THRU (T)	85	85	3300	0.0258	
LEFT (L)	517	517	3000	0.1723	0.1723
WB RIGHT (R)	61	30 *	1650	0.0182	0.0182
THRU (T)	7	7	3300	0.0021	
LEFT (L)	286	286	3000	0.0953	

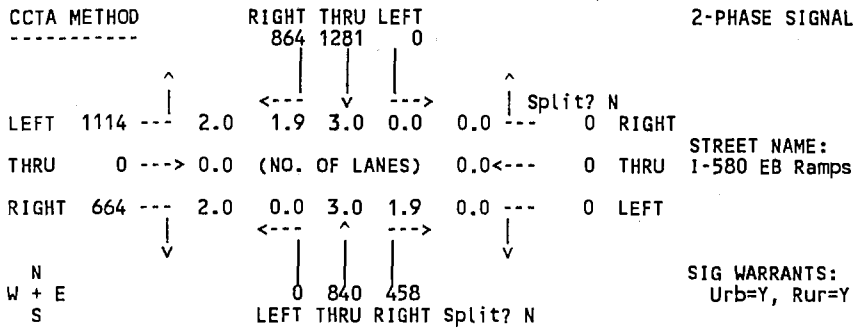
TOTAL VOLUME-TO-CAPACITY RATIO: 0.63
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	458	458	1800	0.2544	
THRU (T)	840	840	5400	0.1556	
SB RIGHT (R)	864	864	1800	0.4800	
THRU (T)	1281	1281	5400	0.2372	0.2372
EB RIGHT (R)	664	664	3273	0.2029	
LEFT (L)	1114	1114	3273	0.3404	0.3404

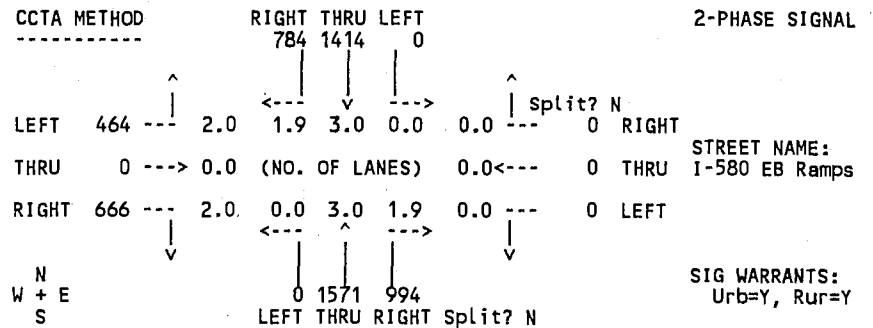
TOTAL VOLUME-TO-CAPACITY RATIO: 0.58
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05

INTERSECTION 13 El Charro Rd/I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	994	994	1800	0.5522	
THRU (T)	1571	1571	5400	0.2909	0.2909
SB RIGHT (R)	784	784	1800	0.4356	
THRU (T)	1414	1414	5400	0.2619	
EB RIGHT (R)	666	666	3273	0.2035	0.2035
LEFT (L)	464	464	3273	0.1418	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.49
 INTERSECTION LEVEL OF SERVICE: A

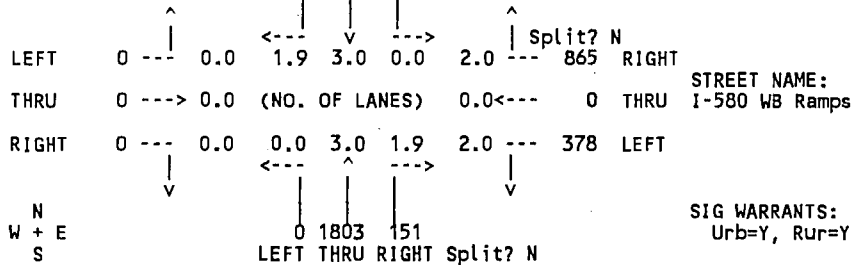
* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
----- 784 1768 0



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	151	151	1800	0.0839	
THRU (T)	1803	1803	5400	0.3339	0.3339
SB RIGHT (R)	784	784	1800	0.4356	
THRU (T)	1768	1768	5400	0.3274	
WB RIGHT (R)	865	865	3273	0.2643	0.2643
LEFT (L)	378	378	3273	0.1155	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.60
INTERSECTION LEVEL OF SERVICE: A

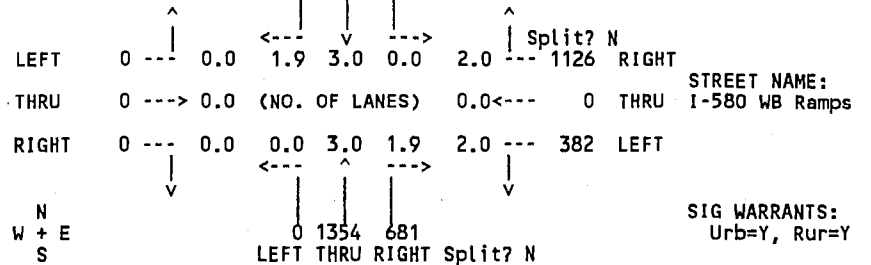
* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05

INTERSECTION 14 Fallon Rd./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 2-PHASE SIGNAL
----- 1082 1816 0



SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	681	681	1800	0.3783	
THRU (T)	1354	1354	5400	0.2507	
SB RIGHT (R)	1082	1082	1800	0.6011	
THRU (T)	1816	1816	5400	0.3363	0.3363
WB RIGHT (R)	1126	1126	3273	0.3440	0.3440
LEFT (L)	382	382	3273	0.1167	

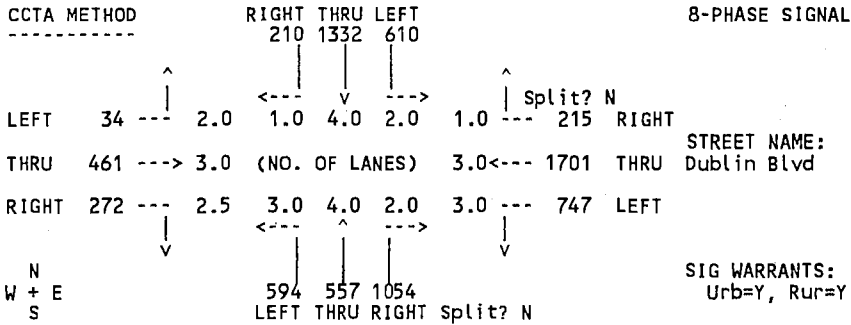
TOTAL VOLUME-TO-CAPACITY RATIO: 0.68
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 15 Fallon Rd./Dublin Blvd City of Dublin
Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1054	768 *	3000	0.2560	0.2560
THRU (T)	557	557	6600	0.0844	
LEFT (L)	594	594	4304	0.1380	
SB RIGHT (R)	210	191 *	1650	0.1158	
THRU (T)	1332	1332	6600	0.2018	
LEFT (L)	610	610	3000	0.2033	0.2033
EB RIGHT (R)	272	0 *	3000	0.0000	
THRU (T)	461	461	4950	0.0931	
LEFT (L)	34	34	3000	0.0113	0.0113
WB RIGHT (R)	215	0 *	1650	0.0000	
THRU (T)	1701	1701	4950	0.3436	0.3436
LEFT (L)	747	747	4304	0.1736	

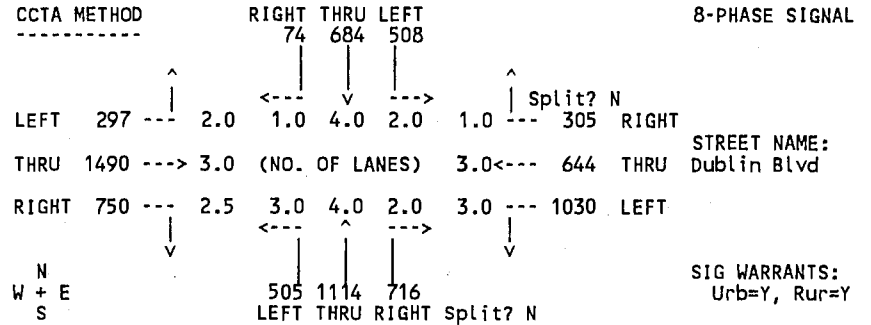
TOTAL VOLUME-TO-CAPACITY RATIO: 0.81
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 15 Fallon Rd./Dublin Blvd City of Dublin
Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	716	321 *	3000	0.1070	
THRU (T)	1114	1114	6600	0.1688	0.1688
LEFT (L)	505	505	4304	0.1173	
SB RIGHT (R)	74	0 *	1650	0.0000	
THRU (T)	684	684	6600	0.1036	
LEFT (L)	508	508	3000	0.1693	0.1693
EB RIGHT (R)	750	398 *	3000	0.1327	
THRU (T)	1490	1490	4950	0.3010	0.3010
LEFT (L)	297	297	3000	0.0990	
WB RIGHT (R)	305	26 *	1650	0.0158	
THRU (T)	644	644	4950	0.1301	
LEFT (L)	1030	1030	4304	0.2393	0.2393

TOTAL VOLUME-TO-CAPACITY RATIO: 0.88
INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05

INTERSECTION	17 Fallon Rd./Antone Way	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	3-PHASE SIGNAL
	4 1450 0	
LEFT	4	0 RIGHT
THRU	0	0 THRU
RIGHT	73	0 LEFT
	19 570 0	
	LEFT THRU RIGHT Split? N	

STREET NAME:
Antone Way

SIG WARRANTS:
Urb=N, Rur=N

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	570	570	3440	0.1657	
LEFT (L)	19	19	1720	0.0110	0.0110
SB RIGHT (R)	4	0 *	1720	0.0000	
THRU (T)	1450	1450	3440	0.4215	0.4215
EB RIGHT (R)	73	54 *	1720	0.0314	0.0314
LEFT (L)	4	4	1720	0.0023	

TOTAL VOLUME-TO-CAPACITY RATIO: 0.46
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05

INTERSECTION	17 Fallon Rd./Antone Way	City of Dublin
Count Date	Time	Peak Hour
CCTA METHOD	RIGHT THRU LEFT	3-PHASE SIGNAL
	5 991 0	
LEFT	7	0 RIGHT
THRU	0	0 THRU
RIGHT	168	0 LEFT
	60 1383 0	
	LEFT THRU RIGHT Split? N	

STREET NAME:
Antone Way

SIG WARRANTS:
Urb=Y, Rur=Y

STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1383	1383	3440	0.4020	0.4020
LEFT (L)	60	60	1720	0.0349	
SB RIGHT (R)	5	0 *	1720	0.0000	
THRU (T)	991	991	3440	0.2881	
EB RIGHT (R)	168	108 *	1720	0.0628	0.0628
LEFT (L)	7	7	1720	0.0041	

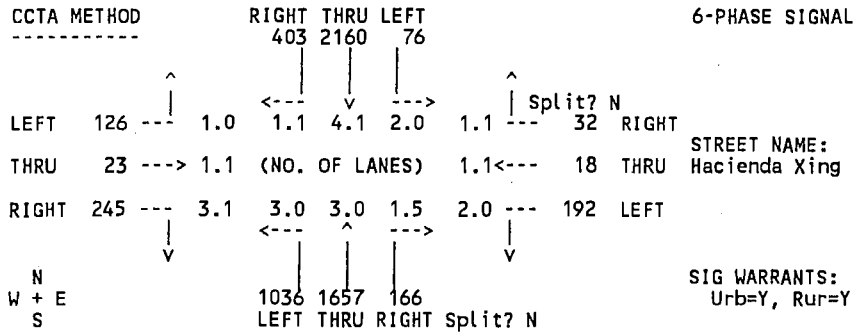
TOTAL VOLUME-TO-CAPACITY RATIO: 0.46
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
Count Date Time Peak Hour



STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	166	60 *	1650	0.0364	
THRU (T)	1657	1657	4950	0.3347	
LEFT (L)	1036	1036	4304	0.2407	0.2407
SB RIGHT (R)	403	403	1650	0.2442	
THRU (T)	2160	2160	6600	0.3273	
LEFT (L)	76	76	3000	0.0253	
T + R		2563	6600	0.3883	0.3883
EB RIGHT (R)	245	0 *	4304	0.0000	
THRU (T)	23	23	1650	0.0139	
LEFT (L)	126	126	1650	0.0764	0.0764
T + R		23	4304	0.0053	
WB RIGHT (R)	32	32	1650	0.0194	
THRU (T)	18	18	1650	0.0109	
LEFT (L)	192	192	3000	0.0640	
T + R		50	1650	0.0303	0.0303

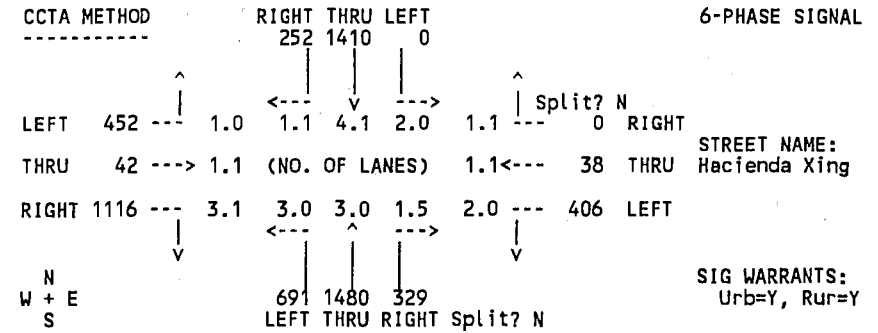
TOTAL VOLUME-TO-CAPACITY RATIO: 0.74
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 18 Hacienda Dr/Hacienda Xing City of Dublin
Count Date Time Peak Hour



STREET NAME: Hacienda Dr

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	329	106 *	1650	0.0642	
THRU (T)	1480	1480	4950	0.2990	
LEFT (L)	691	691	4304	0.1605	0.1605
SB RIGHT (R)	252	252	1650	0.1527	
THRU (T)	1410	1410	6600	0.2136	
LEFT (L)	0	0	3000	0.0000	
T + R		1662	6600	0.2518	0.2518
EB RIGHT (R)	1116	851 *	4304	0.1977	
THRU (T)	42	42	1650	0.0255	
LEFT (L)	452	452	1650	0.2739	
T + R		893	4304	0.2075	0.2075
WB RIGHT (R)	0	0	1650	0.0000	
THRU (T)	38	38	1650	0.0230	
LEFT (L)	406	406	3000	0.1353	0.1353
T + R		38	1650	0.0230	

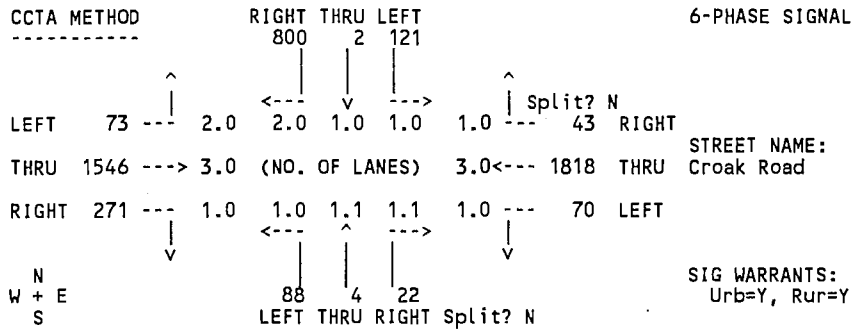
TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/18/05

INTERSECTION 19 Dublin Blvd./Croak Road City of Dublin
Count Date Time Peak Hour



STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	22	22	1650	0.0133	
THRU (T)	4	4	1650	0.0024	
LEFT (L)	88	88	1650	0.0533	0.0533
T + R		26	1650	0.0158	
SB RIGHT (R)	800	760 *	3000	0.2533	0.2533
THRU (T)	2	2	1650	0.0012	
LEFT (L)	121	121	1650	0.0733	
EB RIGHT (R)	271	183 *	1650	0.1109	
THRU (T)	1546	1546	4950	0.3123	
LEFT (L)	73	73	3000	0.0243	0.0243
WB RIGHT (R)	43	0 *	1650	0.0000	
THRU (T)	1818	1818	4950	0.3673	0.3673
LEFT (L)	70	70	1650	0.0424	

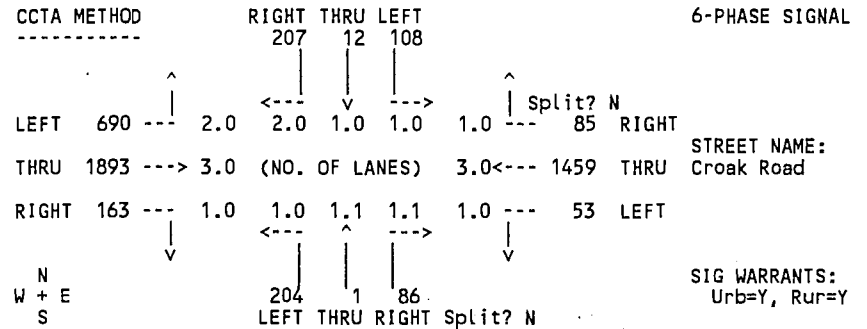
TOTAL VOLUME-TO-CAPACITY RATIO: 0.70
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/18/05

INTERSECTION 19 Dublin Blvd./Croak Road City of Dublin
Count Date Time Peak Hour



STREET NAME: Dublin Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	86	86	1650	0.0521	
THRU (T)	1	1	1650	0.0006	
LEFT (L)	204	204	1650	0.1236	0.1236
T + R		87	1650	0.0527	
SB RIGHT (R)	207	0 *	3000	0.0000	
THRU (T)	12	12	1650	0.0073	0.0073
LEFT (L)	108	108	1650	0.0655	
EB RIGHT (R)	163	0 *	1650	0.0000	
THRU (T)	1893	1893	4950	0.3824	
LEFT (L)	690	690	3000	0.2300	0.2300
WB RIGHT (R)	85	0 *	1650	0.0000	
THRU (T)	1459	1459	4950	0.2947	0.2947
LEFT (L)	53	53	1650	0.0321	

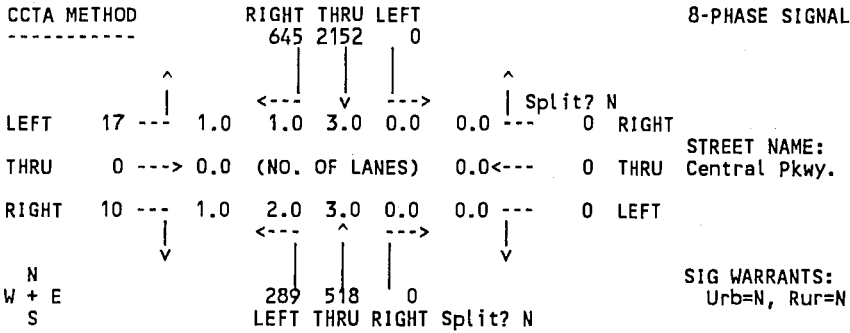
TOTAL VOLUME-TO-CAPACITY RATIO: 0.66
INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 20 Fallon Rd./Central Pkwy. City of Dublin
Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	518	518	4950	0.1046	
LEFT (L)	289	289	3000	0.0963	0.0963
SB RIGHT (R)	645	628 *	1650	0.3806	
THRU (T)	2152	2152	4950	0.4347	0.4347
EB RIGHT (R)	10	0 *	1650	0.0000	
LEFT (L)	17	17	1650	0.0103	0.0103

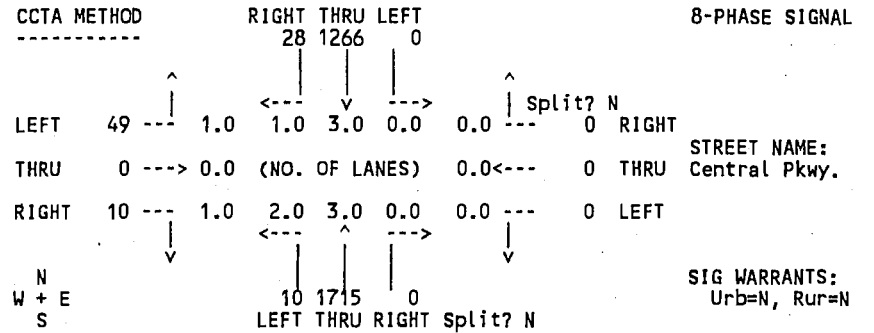
TOTAL VOLUME-TO-CAPACITY RATIO: 0.54
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 20 Fallon Rd./Central Pkwy. City of Dublin
Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB THRU (T)	1715	1715	4950	0.3465	0.3465
LEFT (L)	10	10	3000	0.0033	
SB RIGHT (R)	28	0 *	1650	0.0000	
THRU (T)	1266	1266	4950	0.2558	
EB RIGHT (R)	10	5 *	1650	0.0030	
LEFT (L)	49	49	1650	0.0297	0.0297

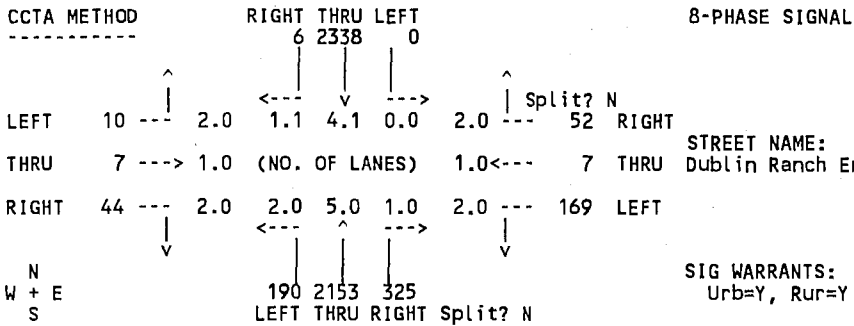
TOTAL VOLUME-TO-CAPACITY RATIO: 0.38
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/02/05

INTERSECTION 21 Fallon Rd./Dublin Ranch Ent City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	325	232 *	1650	0.1406	
THRU (T)	2153	2153	8250	0.2610	
LEFT (L)	190	190	3000	0.0633	0.0633
SB RIGHT (R)	6	6	1650	0.0036	
THRU (T)	2338	2338	6600	0.3542	
T + R		2344	6600	0.3552	0.3552
EB RIGHT (R)	44	0 *	3000	0.0000	
THRU (T)	7	7	1650	0.0042	0.0042
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	52	52	3000	0.0173	
THRU (T)	7	7	1650	0.0042	
LEFT (L)	169	169	3000	0.0563	0.0563

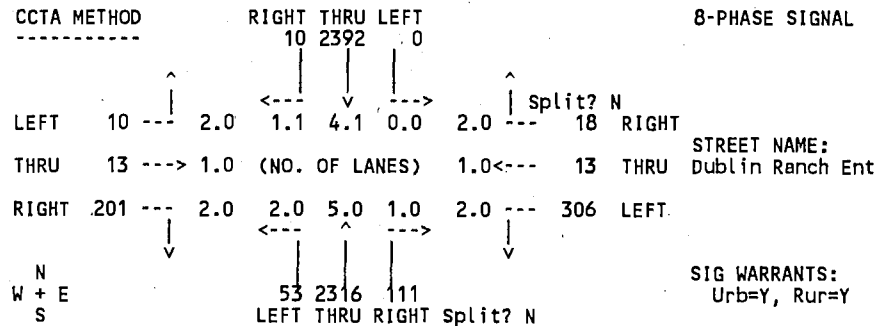
TOTAL VOLUME-TO-CAPACITY RATIO: 0.48
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/02/05

INTERSECTION 21 Fallon Rd./Dublin Ranch Ent City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	111	0 *	1650	0.0000	
THRU (T)	2316	2316	8250	0.2807	
LEFT (L)	53	53	3000	0.0177	0.0177
SB RIGHT (R)	10	10	1650	0.0061	
THRU (T)	2392	2392	6600	0.3624	
T + R		2402	6600	0.3639	0.3639
EB RIGHT (R)	201	172 *	3000	0.0573	0.0573
THRU (T)	13	13	1650	0.0079	
LEFT (L)	10	10	3000	0.0033	
WB RIGHT (R)	18	18	3000	0.0060	
THRU (T)	13	13	1650	0.0079	
LEFT (L)	306	306	3000	0.1020	0.1020

TOTAL VOLUME-TO-CAPACITY RATIO: 0.54
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL
----- 0 0 0
LEFT 0 --- 0.0 0.0 0.0 0.0 0.0 --- 0 RIGHT Split? N
THRU 497 ---> 3.0 (NO. OF LANES) 2.0<--- 551 THRU STREET NAME:
RIGHT 314 --- 2.0 2.0 0.0 2.0 2.0 --- 728 LEFT North Canyons Pk
N
W + E 1320 0 443 SIG WARRANTS:
S LEFT THRU RIGHT Split? N Urb=Y, Rur=Y

STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	443	43 *	3127	0.0138	
LEFT (L)	1320	1320	3127	0.4221	0.4221
EB RIGHT (R)	314	0 *	3127	0.0000	
THRU (T)	497	497	5160	0.0963	0.0963
WB THRU (T)	551	551	3440	0.1602	
LEFT (L)	728	728	3127	0.2328	0.2328
TOTAL VOLUME-TO-CAPACITY RATIO:				0.75	
INTERSECTION LEVEL OF SERVICE:				C	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 23 Airway Blvd./North Canyons Pk City of Dublin
Count Date Time Peak Hour

CCTA METHOD RIGHT THRU LEFT 3-PHASE SIGNAL
----- 0 0 0
LEFT 0 --- 0.0 0.0 0.0 0.0 0.0 --- 0 RIGHT Split? N
THRU 1356 ---> 3.0 (NO. OF LANES) 2.0<--- 241 THRU STREET NAME:
RIGHT 383 --- 2.0 2.0 0.0 2.0 2.0 --- 631 LEFT North Canyons Pk
N
W + E 651 0 378 SIG WARRANTS:
S LEFT THRU RIGHT Split? N Urb=Y, Rur=Y

STREET NAME: Airway Blvd.

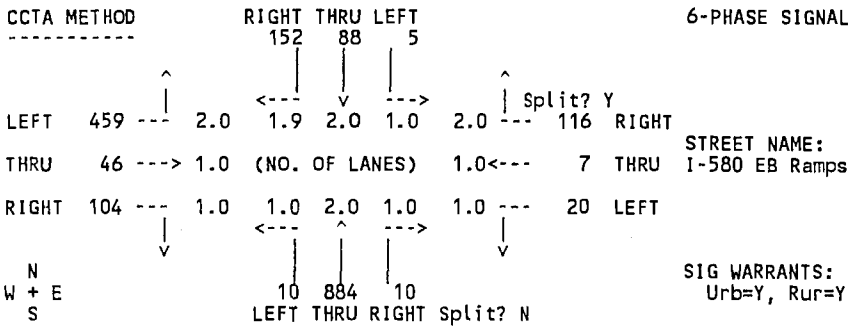
MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	378	31 *	3127	0.0099	
LEFT (L)	651	651	3127	0.2082	0.2082
EB RIGHT (R)	383	25 *	3127	0.0080	
THRU (T)	1356	1356	5160	0.2628	0.2628
WB THRU (T)	241	241	3440	0.0701	
LEFT (L)	631	631	3127	0.2018	0.2018
TOTAL VOLUME-TO-CAPACITY RATIO:				0.67	
INTERSECTION LEVEL OF SERVICE:				B	

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 25 Airway Blvd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	10	0 *	1650	0.0000	
THRU (T)	884	884	3300	0.2679	0.2679
LEFT (L)	10	10	1650	0.0061	
SB RIGHT (R)	152	152	1650	0.0921	
THRU (T)	88	88	3300	0.0267	
LEFT (L)	5	5	1650	0.0030	0.0030
EB RIGHT (R)	104	94 *	1650	0.0570	
THRU (T)	46	46	1650	0.0279	
LEFT (L)	459	459	3000	0.1530	0.1530
WB RIGHT (R)	116	111 *	3000	0.0370	0.0370
THRU (T)	7	7	1650	0.0042	
LEFT (L)	20	20	1650	0.0121	

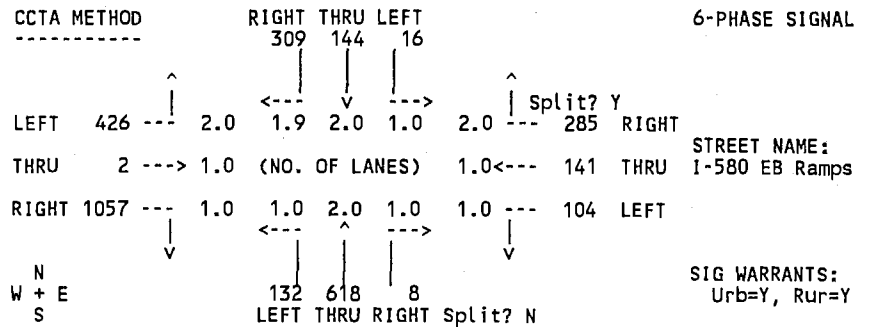
TOTAL VOLUME-TO-CAPACITY RATIO: 0.46
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 25 Airway Blvd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



SIG WARRANTS:
 Urb=Y, Rur=Y

STREET NAME: Airway Blvd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	8	0 *	1650	0.0000	
THRU (T)	618	618	3300	0.1873	0.1873
LEFT (L)	132	132	1650	0.0800	
SB RIGHT (R)	309	309	1650	0.1873	
THRU (T)	144	144	3300	0.0436	
LEFT (L)	16	16	1650	0.0097	0.0097
EB RIGHT (R)	1057	925 *	1650	0.5606	0.5606
THRU (T)	2	2	1650	0.0012	
LEFT (L)	426	426	3000	0.1420	
WB RIGHT (R)	285	269 *	3000	0.0897	0.0897
THRU (T)	141	141	1650	0.0855	
LEFT (L)	104	104	1650	0.0630	

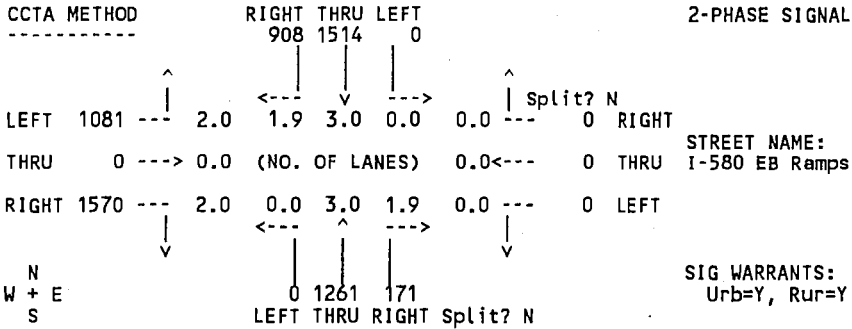
TOTAL VOLUME-TO-CAPACITY RATIO: 0.85
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hopyard Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	171	171	1800	0.0950	
THRU (T)	1261	1261	5400	0.2335	
SB RIGHT (R)	908	908	1800	0.5044	0.2804
THRU (T)	1514	1514	5400	0.2804	
EB RIGHT (R)	1570	1570	3273	0.4797	0.4797
LEFT (L)	1081	1081	3273	0.3303	

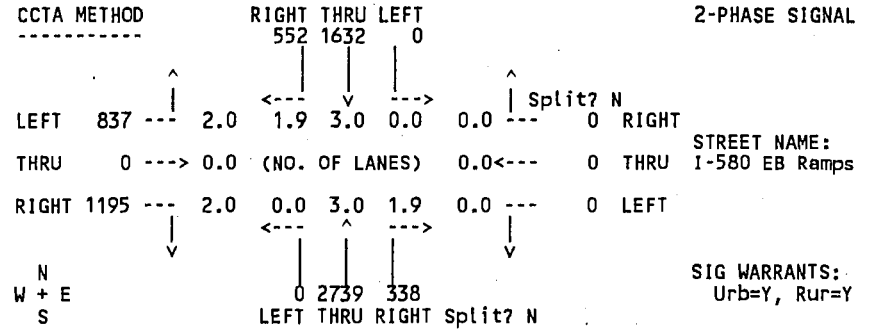
TOTAL VOLUME-TO-CAPACITY RATIO: 0.76
 INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDOUT.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 26 Hopyard Rd./I-580 EB Ramps City of Dublin
 Count Date Time Peak Hour



STREET NAME: Hopyard Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	338	338	1800	0.1878	
THRU (T)	2739	2739	5400	0.5072	0.5072
SB RIGHT (R)	552	552	1800	0.3067	
THRU (T)	1632	1632	5400	0.3022	
EB RIGHT (R)	1195	1195	3273	0.3651	0.3651
LEFT (L)	837	837	3273	0.2557	

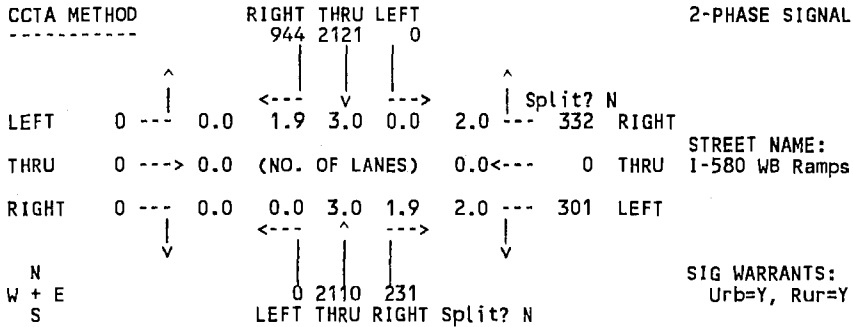
TOTAL VOLUME-TO-CAPACITY RATIO: 0.87
 INTERSECTION LEVEL OF SERVICE: D

* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_AM Peak 05/19/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	231	231	1800	0.1283	
THRU (T)	2110	2110	5400	0.3907	
SB RIGHT (R)	944	944	1800	0.5244	
THRU (T)	2121	2121	5400	0.3928	0.3928
WB RIGHT (R)	332	332	3273	0.1014	0.1014
LEFT (L)	301	301	3273	0.0920	

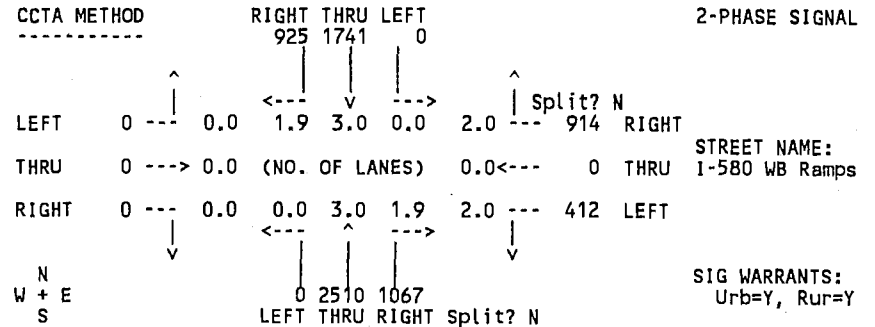
TOTAL VOLUME-TO-CAPACITY RATIO: 0.49
INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
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LOS Software by TJKM Transportation Consultants

Condition: Buildout+ Offset_Central_PM Peak 05/19/05

INTERSECTION 27 Dougherty Rd./I-580 WB Ramps City of Dublin
Count Date Time Peak Hour



STREET NAME: Dougherty Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	1067	1067	1800	0.5928	
THRU (T)	2510	2510	5400	0.4648	0.4648
SB RIGHT (R)	925	925	1800	0.5139	
THRU (T)	1741	1741	5400	0.3224	
WB RIGHT (R)	914	914	3273	0.2793	0.2793
LEFT (L)	412	412	3273	0.1259	

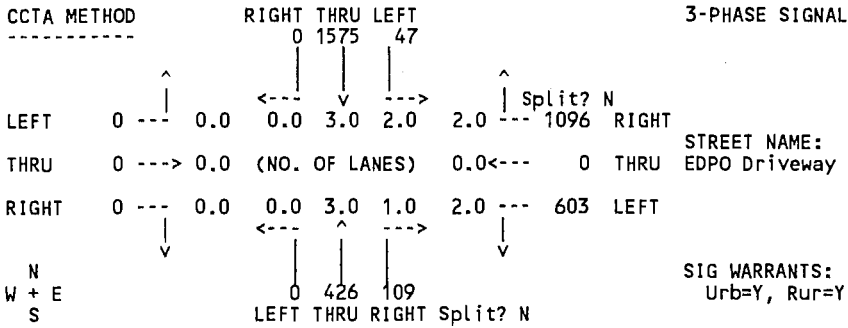
TOTAL VOLUME-TO-CAPACITY RATIO: 0.74
INTERSECTION LEVEL OF SERVICE: C

* ADJUSTED FOR RIGHT TURN ON RED
INT=BDOUT.INT,VOL=OFFSET.PMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-AM Peak 07/15/05

INTERSECTION 29 Fallon Rd./EDPO Driveway City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	109	0 *	1720	0.0000	
THRU (T)	426	426	5160	0.0826	
SB THRU (T)	1575	1575	5160	0.3052	0.3052
LEFT (L)	47	47	3127	0.0150	
WB RIGHT (R)	1096	1070 *	3127	0.3422	0.3422
LEFT (L)	603	603	3127	0.1928	

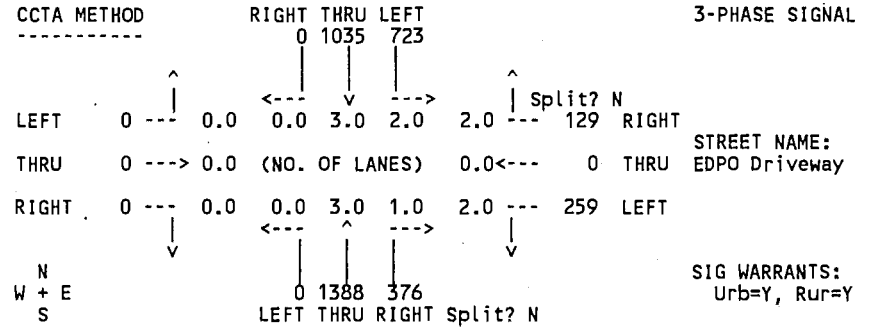
TOTAL VOLUME-TO-CAPACITY RATIO: 0.65
 INTERSECTION LEVEL OF SERVICE: B

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.INT,VOL=OFFSET.AMV,CAP=...LOSCAP.TAB

LOS Software by TJKM Transportation Consultants

Condition: Buildout+Offset_Central-PM Peak 07/15/05

INTERSECTION 29 Fallon Rd./EDPO Driveway City of Dublin
 Count Date Time Peak Hour



STREET NAME: Fallon Rd.

MOVEMENT	ORIGINAL VOLUME	ADJUSTED VOLUME*	CAPACITY	V/C RATIO	CRITICAL V/C
NB RIGHT (R)	376	234 *	1720	0.1360	
THRU (T)	1388	1388	5160	0.2690	0.2690
SB THRU (T)	1035	1035	5160	0.2006	
LEFT (L)	723	723	3127	0.2312	0.2312
WB RIGHT (R)	129	0 *	3127	0.0000	
LEFT (L)	259	259	3127	0.0828	0.0828

TOTAL VOLUME-TO-CAPACITY RATIO: 0.58
 INTERSECTION LEVEL OF SERVICE: A

* ADJUSTED FOR RIGHT TURN ON RED
 INT=BDREV.I