CITY OF HAYWARD

SOUTH OF ROUTE 92 SPECIFIC PLAN AMENDMENT (LEGACY EDEN SHORES) PROJECT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

PREPARED FOR

CITY OF HAYWARD
DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT
777 B STREET
HAYWARD, CA 94541

PREPARED BY

1440 BROADWAY, SUITE 1008
OAKLAND, CA 94612

MAY 2007

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INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Project Title:	**South of Route 92 Specific Plan Amendment (Legacy Eden Shores)**
Lead Agency Name and Address:	City of Hayward Department of Community & Economic Development 777 B Street Hayward, CA 94541-4214
Contact Person and Phone:	David Rizk, AICP Planning Manager City of Hayward (510) 583-4004
Project Location:	West of Hesperian Blvd and south of Industrial Boulevard City of Hayward, California
Project Sponsor's Name and Address:	Steve Dunn Legacy Partners 4000 East Third Avenue, Suite 600 Foster City, CA 94404
General Plan Designation(s): Existing and Proposed	Industrial Corridor (36.3 acres) to Medium Density Residential (14.6 acres) and Retail and Office Commercial (21.8 acres)
Zoning: Existing and Proposed	BP-Business Park (33.4 acres) and CR-Commercial Retail (3.0 acres) to RM-Residential Medium Density (14.6 acres), CN-Neighborhood Commercial (6.25 acres), and a new zoning district of CR-Regional Commercial (15.5 acres)
Other Related Changes:	South of Route 92 Specific Plan, Development Guidelines, and Development Agreement
Assessor's Parcel No.	456-0097-003, -004-2, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -021, -022, -023. -024
Date Prepared:	May 2007

EXECUTIVE SUMMARY

INTRODUCTION

This Initial Study considers environmental impacts from the potential development associated with proposed amendments to the South of Route 92 Specific Plan, located in the City of Hayward (**Figure 1**). Under California Public Resources Code Section 21000 et seq. (CEQA), approval of the proposed project must comply with the California Environmental Quality Act (CEQA) in order to assess the potential environmental impacts of the proposed project. Based on the assessment presented in this Initial Study, it is recommended that as lead agency, the City of Hayward Community and Economic Development Department prepare an Initial Study/Mitigated Negative Declaration for the proposed project.

As required by City guidelines, the CEQA Initial Study Checklist was used as the format for describing potential impacts. The level of research and analysis provided is intended to satisfy the requirements to determine the need for and scope of environmental review pursuant to CEQA.

This document is organized as follows:

- This Executive Summary is provided to introduce the project and present the project description in brief as well as describe the approach to the analysis contained in the body of the document.
- The Impacts section documents all required CEQA checklist items and a discussion of those impacts and their significance.

PROJECT BACKGROUND

In 1998, the City of Hayward certified the Final Program Environmental Impact Report (EIR) for the South of Route 92 General Plan Amendment and Specific Plan for the Oliver Estate/Weber Properties. The City also adopted the South of Route 92, Oliver and Weber Properties, Specific Plan and took other related actions to amend the City's General Plan, adopt Development Guidelines and to pre-zone and rezone properties covered under the Specific Plan, including the properties commonly referred to as "Oliver West" and "Oliver East." The Oliver East property was pre-zoned, with portions of the property to be zoned Light Manufacturing, Commercial Retail, Business Park and Open Space (to allow for development of the Sports Park). In 1999, the City approved and executed the Mount Eden Business and Sports Park Community Development Agreement in connection with the Oliver properties, and approved a Vesting Tentative Map (VTM) for Tract 7065 (including both the Oliver West and Oliver East properties). The Development Agreement, among other things, authorized the residential development on Oliver West and the development of Oliver East for light manufacturing, business park, and commercial retail uses.

Since the City's original approvals, the Oliver East property has been annexed to the City from the County of Alameda. The Eden Shores Sports Park has been constructed. Infrastructure for the development of the Oliver properties has been undertaken. Residential construction of Oliver West (west side of Eden Shores) has been completed. A final subdivision map for Tract 7065 (Eden Shores – Oliver East) was approved by the City in September 2005, recorded and construction of that project is currently underway. The property within the final map for this tract on Oliver East (east side of Eden Shores), exclusive of the Sports Park parcel (developed with the new Sports Park), is now zoned Planned Development.

Public Process

To obtain input for the proposed project, City Staff and the current property owner of the project site, Legacy Partners, have engaged the residents of the surrounding community and other interested parties in several community workshops over the last seven months. This Initial Study analyzes the potential environmental effects of the owner's concept, known as Alternative 2 during the public process. Three possible land use alternatives were originally proposed to the community, City Council and Planning Commission for review and comment. In addition, to the Legacy proposal, an alternative was proposed for the current General Plan and zoning designations (Alternative 1) and one alternative described a hybrid of Alternatives 1 and 2 that would increase the commercial use, but not include residential development. Input from community members suggested support for the Legacy concept and recommendations were made to improve the project through traffic access and other amenities.

In addition to community workshops and joint Council/Commission work sessions, several studies were prepared for all three alternatives. The results of these studies were shared in the community workshop forums prior to preparation of this IS/MND. These included the following:

- Market Review
- Fiscal Impact Analysis
- Traffic Impact Analysis

The Market Review prepared by KMA determined that the projected amount of space to be developed with a mix of commercial, business park and residential uses as contemplated in Alternative 2 (Legacy) could be reasonably absorbed within a shorter time horizon than the other two alternatives (10-15 years). The Fiscal Impact Analysis concluded that both Alternative 2 and Alternative 3 would generate about the same total net revenue for the City's General Fund. Alternative 2 would have the highest service cost to the City; however, this alternative would also provide the most revenue. Finally, the Traffic Impact Analysis concluded that Alternative 2, by including residential uses with commercial and office uses would generate the least traffic impacts in terms of both average daily traffic and peak hour volumes.

PROJECT DESCRIPTION

The project site addressed in this Initial Study is located in the southwestern portion of the City of Hayward, between Industrial Boulevard and Eden Park Place immediately west of Hesperian Boulevard (**Figure 2**). The site is immediately east of the Union Pacific (UPRR) train line at the northern end and is adjacent to Marina Drive and the new housing developments of Bridgeport and The Crossings (**Figure 3)**. The existing 56.41 acre vacant site is relatively flat. The areas north and south of Eden Shores Boulevard and east of Marina Drive are currently designated as Industrial Corridor in the General Plan and Business Park in the Specific Plan. Implementation of the project includes the following actions:

- General Plan Amendment (GPA) PL-2007-0231. Change the General Plan land use designation for portions of the area from Industrial Corridor (36.3 acres) to Medium Density Residential (14.6 acres) and Retail and Office Commercial (21.8 acres) (**Figure 4).**

- Zone Change (ZC) 2007-0232 and Text Amendment (TA) 2007-0233. Change the zoning for portions of the area from BP-Business Park (33.4 acres) and CR-Commercial Retail (3.0 acres) to RM-Residential Medium Density (14.6 acres), CN-Neighborhood Commercial (6.25 acres), and a new zoning district of CR-Regional Commercial (15.5 acres) (**Figure 5**);

- Related revisions to the South of Route 92 Specific Plan, Development Guidelines, and Development Agreement to address the above described changes from business park uses to residential uses and commercial uses.

Access to the project would be provided by existing public streets. All other streets would be private and provide for internal access and circulation in the business park, commercial, single-family home and townhome developments.

The applicant has prepared an illustrative site plan to indicate potential development with amendment of the Specific Plan (**Figure 6**). The conceptual plan would increase the amount of residential use within the Specific Plan area and create opportunities for expanded neighborhood retail and regional retail uses. The area shown as Parcel 1 would be split between the Business Park zoning and Medium Density Residential (RM) zoning and would incorporate within the RM zoning a parcel currently owned by the City of Hayward (0.67 acres). The area shown as Parcel 2 would retain the BP zoning on the northern portion and be amended to Regional Commercial (CR) zoning for the southern portion. The area shown as Parcel 3 would change the BP zoning into a split between Medium Density Residential (RM) and Neighborhood Commercial (CN) zoning.

Parcel 1

Parcel 1 consists of 14.02 acres, and includes 100 single-family attached townhomes on 6.40 acres (15.6 dwelling units per acre) and approximately 106,500 square feet of office space on 7.62 acres. Approximately 0.67 acres are currently owned by the City of Hayward. Legacy Partners would incorporate the city's property into the design of the residential community.

Parcel 2

Parcel 2 includes two proposed uses. Parcel 2A would include three buildings with office space totaling approximately 396,000 square feet on 12.45 acres. Parcel 2B would include a regional retail use with approximately 160,000 square feet on 15.50 acres.

Parcel 3

Parcel 3 also includes two proposed uses: residential and retail. The commercial portion would include 66,500 square feet of neighborhood serving retail on 6.25 acres. The residential portion would be comprised of 28 town house units and 46 single-family detached units on 8.19 acres (9.0 dwelling units per acre).

Environmental Setting and Surrounding Land Uses

The project site, part of the Oliver East portion of the Specific Plan area, is located in an area surrounded by light industrial/business park uses and a residential community currently under construction. The site is bordered on the north by light industrial uses. The site is bounded on the east by Hesperian Boulevard. The site is bordered on the south by Eden Park Place and a sports complex consisting of baseball diamonds and soccer fields. To the west of the project site (Parcel 1) is the Union Pacific Railroad right-of-way (railroad lines/tracks) and other easements identified on plans, and a flood control channel, beyond which lies the new Eden Shores residential development, as well as wetlands on the Weber portion of the Specific Plan area. A previous wetland determination determined that 0.22 acres of the City of Hayward's parcel were found to be Section 404 jurisdictional (Corps of Engineers 2000). However, this Corps

delineation has expired and a new delineation would be required prior to project development as part of a new Section 404 permit request.

Earlier Analysis for Specific Plan Area

An earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). A program level Environmental Impact Report was prepared for the *South of 92 General Plan Amendment and Specific Plan Oliver Estate/ Weber Properties* in October 1997 ("1997 Plan EIR") and certified by the City of Hayward in 1998 and a Mitigation Monitoring Program adopted by the City for the Specific Plan project.

The EIR prepared in 1997 addressed impacts for a light manufacturing zoning and land use in the Oliver East parcel. This Initial Study addresses the potential effects of a change from light manufacturing and business park uses to medium density residential and the development of the Eden Shores Residential Community on a portion of Oliver East property. The 1997 Plan EIR found the effects to loss of open space and farmland a significant and unavoidable impact for which the City prepared a Statement of Overriding Considerations. This IS/MND will not re-address that loss for the project-level environmental review.

An IS/MND prepared in 2005 addressed impacts for the new Bridgeport and Crossings residential community, formerly known as Eden Shores East (City of Hayward 2005). This development, currently under construction, consists of 139 single-family homes and 122 townhomes (261 total).

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

- U.S. Army Corps of Engineers
- San Francisco Regional Water Quality Control Board
- Alameda County Flood Control and Water Conservation District
- California Department of Fish & Game
- California Department of Toxic Substances Control

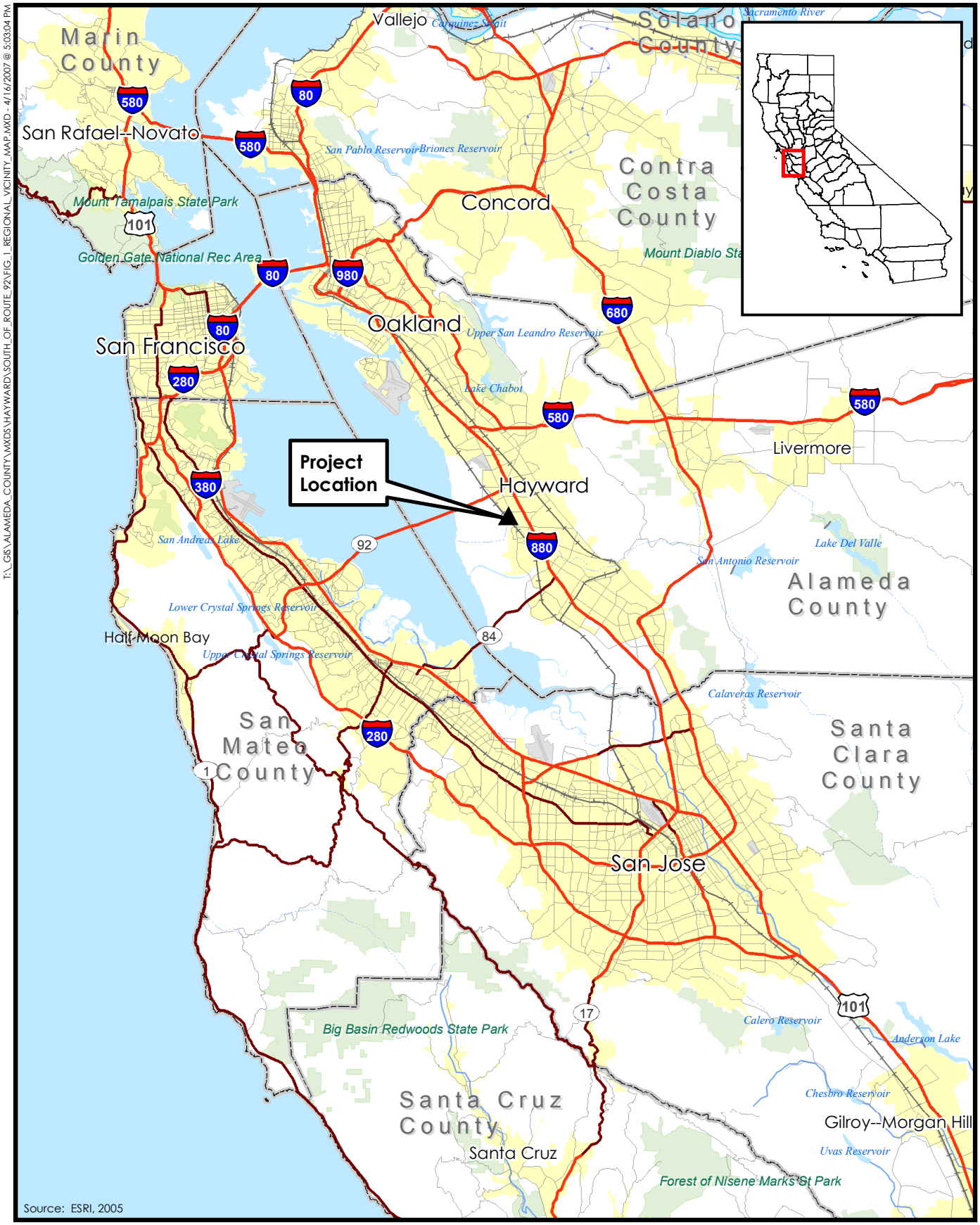

Figure 1
Regional Vicinity Map

PMC

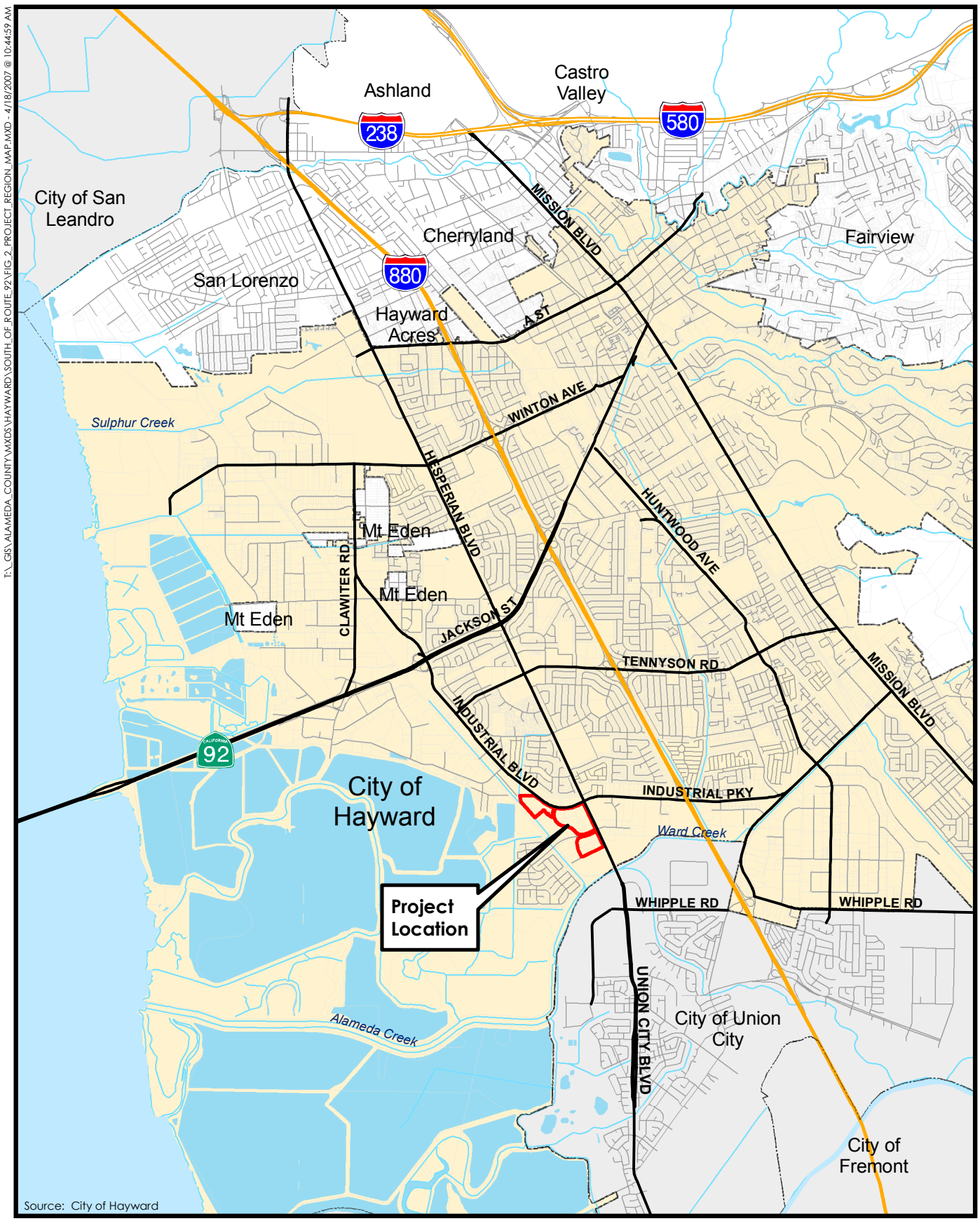

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Figure 2
Project Region Map

PMC

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Figure 3
Project Location Map

PMC

T:_CS\Work\Hayward, City of\Route 92 Initial Study - 26-0187\Figures\Figure 4 - Existing and Proposed General Plan Designations.ai, April 2007

Existing General Plan Designations
South of Route 92 Specific Plan Amendment Study Area

Proposed General Plan Designations
South of Route 92 Specific Plan Amendment Study Area

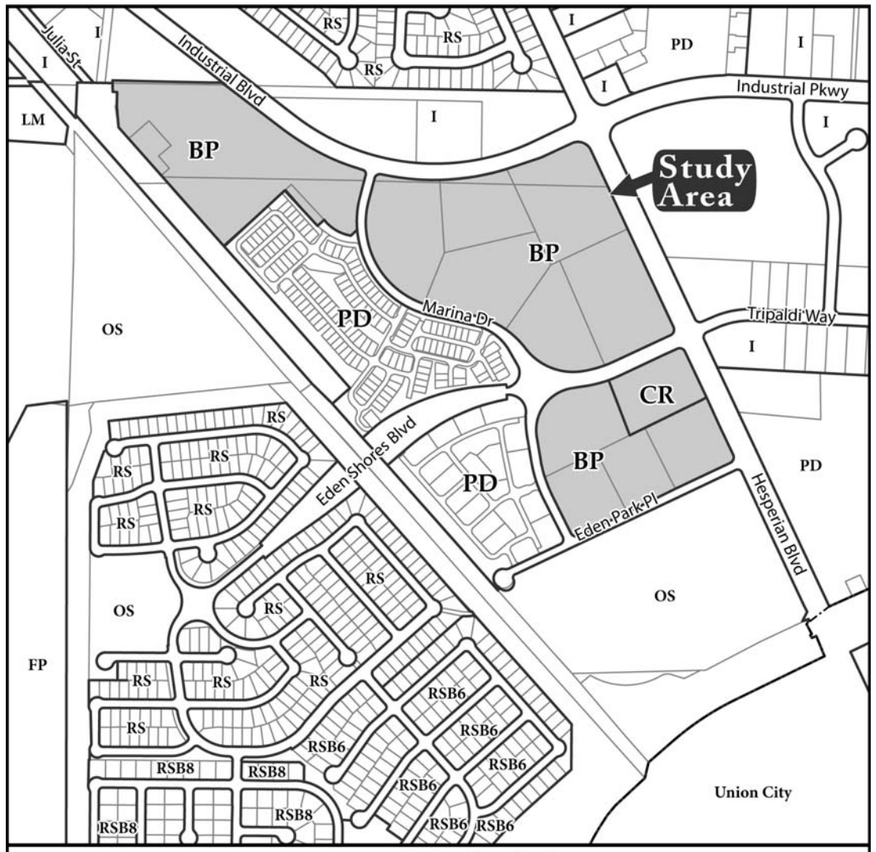
Not to Scale

N

Figure 4
Existing and Proposed General Plan Designations

PMC

T:_CS\Work\Hayward_City of\Route 92 Initial Study - 26-0187\Figures\Figure 5 - Existing and Proposed Zoning Designations.ai, April 2007



Existing Zoning Designations
South of Route 92
Specific Plan Amendment
Study Area

Zoning Classifications

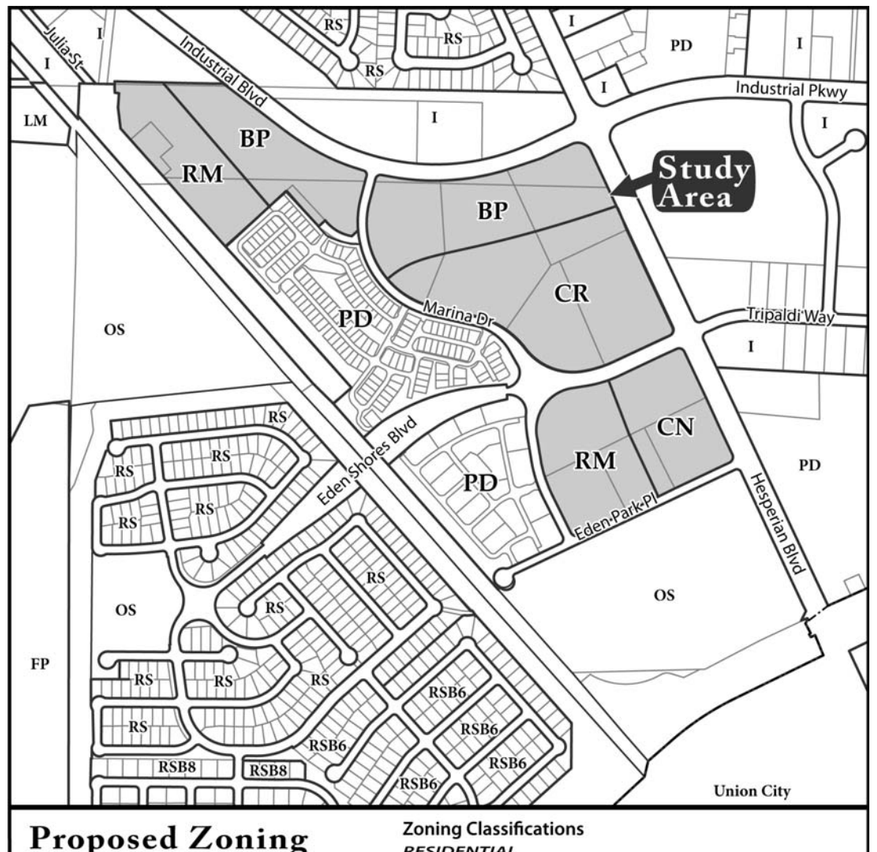
RESIDENTIAL
- **RM** Medium Density Residential, min lot size 2500 sqft
- **RS** Single Family Residential, min lot size 5000 sqft
- **RSB6** Single Family Residential, min lot size 6000 sqft
- **RSB8** Single Family Residential, min lot size 8000 sqft

COMMERCIAL
- **CR** Commercial Retail

INDUSTRIAL
- **I** Industrial
- **LM** Light Manufacturing
- **BP** Business Park

OPEN SPACE
- **FP** Flood Plain
- **OS** Open Space

OTHER
- **PD** Planned Development



Proposed Zoning Designations
South of Route 92
Specific Plan Amendment
Study Area

Zoning Classifications

RESIDENTIAL
- **RM** Medium Density Residential, min lot size 2500 sqft
- **RS** Single Family Residential, min lot size 5000 sqft
- **RSB6** Single Family Residential, min lot size 6000 sqft
- **RSB8** Single Family Residential, min lot size 8000 sqft

COMMERCIAL
- **CR** Regional Commercial
- **CN** Neighborhood Commercial

INDUSTRIAL
- **I** Industrial
- **LM** Light Manufacturing
- **BP** Business Park

OPEN SPACE
- **FP** Flood Plain
- **OS** Open Space

OTHER
- **PD** Planned Development

NOT TO SCALE

N

Figure 5
Existing and Proposed Zoning Designations

PMC

T:_CS\Work\Hayward_City of\Route 92 Initial Study - 26-0187\Figures\Figure 6 - Legacy Eden Shores East.ai, April 2007

PARCEL 1 — 14.02 ACRES

OFFICE:

ACREAGE:	7.62 ACRES
F.A.R:	
MAX. F.A.R. AREA ALLOWED	0.6 = 199,156 S.F.
F.A.R. PROVIDED	0.32= 106,500 S.F.
PARKING:	
PARKING REQUIRED (4:1000)	426 SP.
PARKING PROVIDED	436 SP.
SURPLUS	10 SP.

RESIDENTIAL:

ACREAGE:	6.40 ACRES
UNITS:	100
DENSITY:	15.6 UNITS/ACRE

PARCEL 2A — 12.45 ACRES

OFFICE:

F.A.R:	
MAX. F.A.R. AREA ALLOWED	0.6 = 325,405 S.F.
F.A.R. PROVIDED	0.73= 396,000 S.F.
PARKING:	
PARKING REQUIRED (4:1000)	1584 SP.
PARKING PROVIDED	1589 SP.
SURPLUS	5 SP.

PARCEL 2B — 15.50 ACRES

RETAIL:

F.A.R:	
MAX. F.A.R. AREA ALLOWED	0.3 = 202,554 S.F.
F.A.R. PROVIDED	0.24= 160,000 S.F.
PARKING:	
PARKING REQUIRED (4:1000)	800 SP.
PARKING PROVIDED	940 SP.
SURPLUS	140 SP.

PARCEL 3 — 14.44 ACRES

RETAIL:

ACREAGE:	6.25 ACRES
F.A.R:	
MAX. F.A.R. AREA ALLOWED	0.3 = 81,675 S.F.
F.A.R. PROVIDED	0.24= 66,500 S.F.
PARKING:	
PARKING REQUIRED (5:1000)	333 SP.
PARKING PROVIDED	341 SP.
SURPLUS	8 SP.

RESIDENTIAL:

ACREAGE:	8.19 ACRES
UNITS:	
TOWNHOUSE UNITS	28
SINGLE FAMILY	46
TOTAL UNITS	74
DENSITY:	9.0 UNITS/ACRE

ALTERNATE-2 OVERALL STATISTICS — 56.41 ACRES

RETAIL

	SITE AREA	BUILDING AREA
PARCEL 2B	15.50 ACRES	160,000 S.F.
PARCEL 3	6.25 ACRES	66,500 S.F.
TOTAL	21.75 ACRES	226,500 S.F.

OFFICE

	SITE AREA	BUILDING AREA
PARCEL 1	7.62 ACRES	106,500 S.F.
PARCEL 2A	12.45 ACRES	396,000 S.F.
TOTAL	20.07 ACRES	502,500 S.F.

RESIDENTIAL

	SITE AREA	BUILDING AREA
PARCEL 1	6.40 ACRES	100 UNITS
PARCEL 3	8.19 ACRES	74 UNITS
TOTAL	14.59 ACRES	174 UNITS

PARKING

	PARKING SPACES PROVIDED
PARCEL 1 - OFFICE	436 SP.
PARCEL 2A - OFFICE	1,589 SP.
PARCEL 2B - RETAIL	940 SP.
PARCEL 3 - RETAIL	341 SP.
TOTAL	3,306 SP.

Source: MBH Architects, 2007

NOT TO SCALE

N

Figure 6
Legacy Eden Shores

PMC

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and corresponding discussion on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Geology/Soils
☒ Hazards & Hazardous Materials	☒ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☒ Noise	☐ Population/Housing
☐ Public Services	☒ Recreation	☒ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	

DETERMINATION: (To be completed by the Lead Agency)

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 revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact 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 attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an **EARLIER EIR or NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Planner's Signature

David Rizk

Planner's Printed Name

David Rizk, AICP

Date

May 11, 2007

City of Hayward

Community & Economic Development – Planning Division

PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the Legacy Eden Shores project, as proposed, may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study may be used in support of the preparation of a Mitigated Negative Declaration.

EVALUATION OF ENVIRONMENTAL IMPACTS

The determination of whether a project may have a significant effect on the environment is a critical step in the CEQA process. Consistent with *CEQA Statutes Section 21083* (Significance Guidelines) and CEQA *Guidelines Section 15065* (Mandatory Findings of Significance), significance levels as provided in the checklist are generally defined as follows:

- *Potentially Significant Impact* applies where there is substantial evidence that an effect may be significant. The CEQA Guidelines define "significant effect" as "…a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant" (CEQA Guidelines, 15382).
- *Less than Significant with Mitigation Incorporated* applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The EIR must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level.
- *Less than Significant Impact* applies where the project creates no significant impacts, only less than significant impacts.
- *No Impact* applies where a project does not create an impact in that category. "No Impact" answers need to be adequately supported by information, which shows that the impact simply does not apply to project.

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses 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). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).

2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, and then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be

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" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" 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. Mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where it is available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS** Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

DISCUSSION

a-b) ***No Impact.*** The proposed project is located in an industrial corridor area. The site and surrounding area are generally flat and do not contain any scenic vistas. The site consists of 56.41-acres of land that have been previously graded for development. The northern portion of the site consists of about 14.02 acres of land, the middle portion consists of about 27.95 acres of land and the southern portion of the site consists of about 14.44 acres of land. All three portions of the site consist of vacant, graded lots. The site does not contain any thick stands of trees, rock outcroppings or historic buildings. Therefore, no impacts to scenic resources would occur. Further, construction of the project would not obstruct or disrupt views of a scenic vista.

c) ***Less than Significant Impact.*** The proposed project would include additional residential development in an area that is predominantly industrial with new residential housing currently under construction on the west side of Marina Drive. The area does not contain any unique features which would be lost or compromised as a result of the project. Because the area is flat and surrounding developed areas are at about the same elevation, intermediate views of the project site are considerably restricted from surrounding developed areas.

Visual quality and the aesthetic value of the South of Route 92 Specific Plan area in its current semi-developed state, is a subjective judgment by the observer of the Plan area. The 1997 Plan EIR and 2005 Amended Specific Plan Mitigated Negative Declaration acknowledged that landscape improvements to be provided with new development would partially screen and reduce the amount of development to be perceived on the Oliver East parcel when viewed from Hesperian Boulevard. Due to the proximity of the Parcel 1 of the project site to the railroad tracks, installation of an 18 to 20 foot sound wall is proposed along the northwestern project boundary to buffer noise to several of the single-family homes. This wall would eliminate views from the homes closest to the railroad tracks on this side of the Parcel 1 development; however, in addition to the wall, windows would be constructed perpendicular to the railroad to further reduce noise so that no views are planned from these homes to the west.

Mitigation Measure 3.1.4-1 of the 1997 Plan EIR proposed that planning and design of projects for buildout of the Specific Plan area should conform to the provisions of the Development Guidelines chapter of the Specific Plan. The proposed project requests a revision to the Development Guidelines to allow the medium density residential development on the 14.59 acres, regional retail on 15.50 acres, and neighborhood commercial on 6.25 acres currently zoned for light manufacturing/business park. Approval of this revision and conformance with the Development Guidelines as previously proposed would result in a less than significant impact.

The existing visual character can be seen in the following photographs:

View looking northeast towards Industrial

View looking southwest from Hesperian

View looking east to hills from Marina

View looking west from Hesperian

d) ***Less than Significant.*** The project would be an expansion of existing and new residential use in the vicinity as established by the Eden Shores and Bridgeport and Crossings developments. The view from the Legacy Eden Shores properties would be of the Bridgeport and Crossings residential developments under construction to the west. The view to the east would be of the industrial park across Hesperian Boulevard and to the south an open space buffer zone, the Sports Park, would remain. The project site and adjacent property are all undeveloped and do not currently generate light and glare. As a result, additional light and glare would be created by the project in association with light fixtures and building materials (e.g. windows). However, the project would comply with the City design standards in relation to lighting as well as the City zoning code (Sec. 10-3030). In addition, the adjoining properties would not be adversely affected by light and glare from the proposed project as there is an 18 to 20 foot sound wall proposed on the northwestern boundary. Therefore, impacts to visual character, including light and glare, are considered less than significant. With respect to light and glare caused by the Sports Park and its potential effect on the future residents of Legacy Eden Shores in

Parcel 3, Mitigation Measure 3.1.4-5 of the 1997 Plan EIR makes clear that various controls are required to be in place for the Sports Park lighting, including downward focused fixtures and recessed lighting elements.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**AGRICULTURAL 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. Would the project:				
a)	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?	☐	☐	☒	☐
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☒	☐

DISCUSSION

a) ***Less than Significant Impact.*** The State of California's Department of Conservation classifies most of the Oliver East Parcel as Prime Farmland (P). Prime Farmland is defined as land which has the best combination of physical and chemical characteristics for the production of crops. A small portion located in the central part of the Oliver East Parcel was formerly identified as Unique Farmland (U). Unique Farmland is defined as land of lesser quality soils used for the production of specific high economic value crops (City of Hayward 1997). Thus an approximate total of 108.3 acres of the original Oliver East Parcel is classified as Important Farmlands. The Oliver East property was used as a hay farm and in 1997 was used for the production of ornamental gladioli. The Alameda County Important Farmland Map now shows the Oliver East parcel as no longer within the Prime Farmland and Unique Farmland categories as of 2006 (**Figure II.1**).

The significant unavoidable impact of conversion of prime farmland was addressed in the 1997 Plan EIR. At that time it was acknowledged that implementation of the Specific Plan would result in loss of prime farmland by the development of business and commercial uses at the Oliver East property. The proposed project seeks to amend the business park zoning designation to medium density residential, regional retail and neighborhood commercial and therefore results in no new significant impacts to agricultural land conversion.

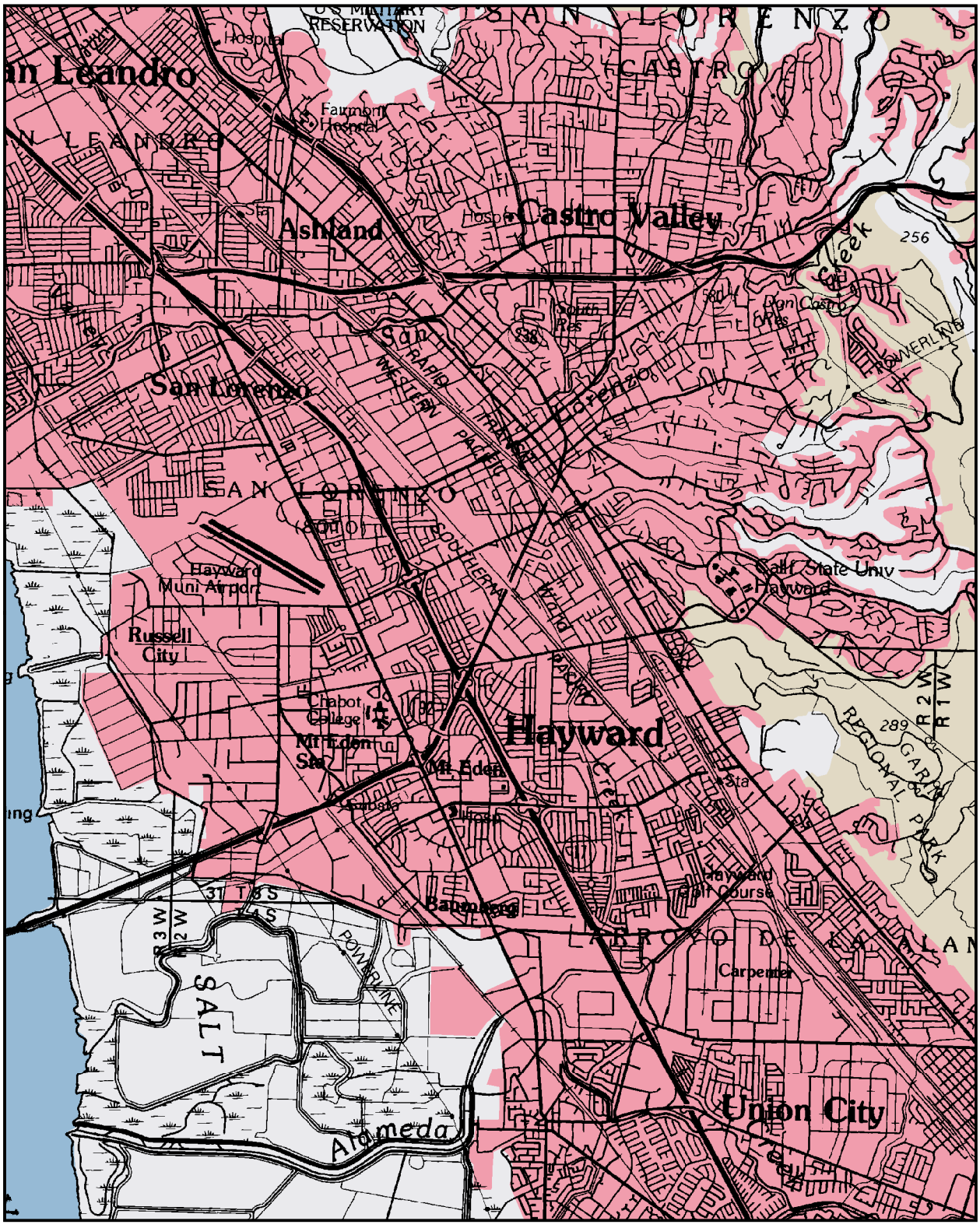
STATE OF CALIFORNIA
Arnold Schwarzenegger, Governor

THE RESOURCES AGENCY
Mike Chrisman, Secretary

DEPARTMENT OF CONSERVATION
Bridgett Luther, Director

DEPARTMENT OF CONSERVATION
DIVISION OF LAND RESOURCE PROTECTION
FARMLAND MAPPING AND MONITORING PROGRAM

Alameda County Important Farmland 2006



Prime Farmland
Farmland of Statewide Importance
Unique Farmland
Farmland of Local Importance
Grazing Land
Urban and Built-Up Land
Other Land
Water

This map is an enlargement of a 1:100,000-scale published map. The Department of Conservation makes no warranties as to the suitability of this product for any particular purpose.

Map data, categories and statistics are available on the World Wide Web at: www.consrv.ca.gov/dlrp/fmmp or contact the Farmland Mapping and Monitoring Program, 801 K Street, MS 18-01, Sacramento, CA 95814. Phone (916) 324-0859; e-mail: fmmp@consrv.ca.gov

b) ***No Impact.*** No Williamson Act Contracts are located on the Oliver East parcel comprising the project site. Furthermore, no Williamson Act Contracts are located in the immediate vicinity of the project site as shown in the 2006 Department of Conservation map for Alameda County. Therefore, no impacts to Williamson Act Contracts would occur.

c) ***Less than Significant Impact.*** The proposed project site is located in a predominantly industrial area. The parcel adjacent to the site on the north is designated industrial and the parcel to the south is designated as open space. A strip of property on the south side of Eden Park Place is designated Open Space and has been developed with the Sports Park. To the west of the project site is a combination of residential and reserved habitat. Implementation of the proposed project would therefore not result in conversion of farmland to non-agricultural uses. The impact to conversion of agricultural land is considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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)?	☐	☐	☒	☐
d) Result in significant construction-related air quality impacts?	☐	☒	☐	☐
e) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
f) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

Ambient Air Quality and Noise Consulting prepared an air quality analysis for the proposed Legacy Eden Shores project, the results of which are incorporated into this section.

EXISTING SETTING

The project site is located in the flatlands along the bayside east of the San Francisco Bay Area. Air temperatures within the Specific Plan area are moderated by the site's proximity to San Francisco Bay and its exposure to sea breezes entering through the Golden Gate. Thus on-site temperatures are slightly warmer in the winter and slightly cooler in the summer than the interior portions of the East Bay. Winds are predominantly out of the northwest in the summer months; afternoon sea breezes are strongest. In the winter, east and northeast winds are also frequent, as a consequence of air flow from the colder interior areas via the Hayward/Dublin Canyon. Annual average wind speeds along the Bay-front are moderate; averaging about seven mph. Strongest winds are in late spring and early summer, while the lightest winds occur in fall and winter.

Sensitive Receptors

Some groups of people are more affected by air pollution than others. Children, elderly and people with respiratory disease or chronic health problems are typically more sensitive to air pollution. The land uses associated with possible sensitive receptors include schools, hospitals, playgrounds, retirement homes, child-care centers, convalescent homes, medical clinics and residences. The sports park is located to the south of the proposed townhomes on Parcel 3.

Air Quality Standards for Criteria Pollutants

The federal and California Clean Air Acts (CAA) have established ambient air quality standards for different pollutants. National ambient air quality standards (NAAQS) were established by the federal CAA of 1970 (amended in 1977 and 1990) for six criteria pollutants (those pollutants with criteria for exposure based on health risks and environmental effects). The Federal and California State Ambient Air Quality Standards for important pollutants are summarized in **Table III-1** and described in detail below. The table reflects the latest revisions to the State standards promulgated by CARB on February 20, 2007.

TABLE III-1
FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone (O_3)	1-Hour 8-HOUR	- 0.08 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide (CO)	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide (NO_x)*	ANNUAL 1-HOUR	0.053 ppm --	0.030 ppm 0.18 ppm
Sulfur Dioxide (SO_2)	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm --	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-HOUR	- 150 µg/m^3	20 µg/m^3 50 µg/m^3
$PM_{2.5}$	ANNUAL 24-HOUR	15 µg/m^3 35 µg/m^3	12 µg/m^3 --
Lead	30-Day Avg. Month Avg.	-- 1.5 µg/m^3	1.5 µg/m^3 --

** The Nitrogen Dioxide ambient air quality standard was amended on February 22, 2007, to lower the 1-hr standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. These changes become effective after regulatory changes are submitted and approved by the Office of Administrative Low, expected later this year.*

Source: California Air Resources Board, "Ambient Air Quality Standards," (02/20/07).
Notes: ppm = parts per million, µg/m3 = Micrograms per Cubic Meter

The primary regional sources of pollutants are emissions from industry, agriculture, automobiles, aircraft and various commercial operations. Pollutants generated in automobile exhaust include carbon monoxide, nitrogen oxides, sulfur oxides, hydrocarbons (organics), and particulates. Toxic air contaminants (TACs), found in ambient air, are typically found in low concentrations near their source (e.g., vinyl chloride near a fiberglass plant). However, chronic exposure can result in adverse health effects. Diesel exhaust is the predominant TAC in urban air, representing about two-thirds of the population cancer burden attributed to this class of compounds (ARB 2002). The BAAQMD Air Toxics Hot Spots Program shows that there are no known industrial facilities within the nine-county air district that present a risk greater than 10 in one million (BAAQMD 2001).

DISCUSSION

a-d) ***Less than Significant with Mitigation Incorporated.*** Air emissions in the San Francisco Bay Area Basin (SFAB) are regulated by the Bay Area Air Quality Management District (BAAQMD) and Association of Bay Area Governments (ABAG). Pursuant to the federal Clean Air Act (CAA), the BAAQMD is required to reduce emissions of criteria pollutants for which the SFAB is in non-attainment. Strategies to achieve these emissions reductions are developed in the Clean Air Plan (CAP) and amendments prepared by BAAQMD (2000) for the region. A comprehensive update to the plan was scheduled for 2003, but has not been released as of this writing. The CAP last produced states that air quality trends are difficult to discern because ambient pollution concentrations are highly dependent on weather conditions. The goal of the CAP is to reduce emissions of certain air pollutants – Reactive Organic Gases (ROG) and Nitrogen Oxides (NO_x) – that lead to the formation of ozone or "smog", in the lower atmosphere (BAAQMD 2000). Future emissions forecasts are based on demographic and economic growth projections provided by ABAG. Individual projects and long-term programs within the region are required to be consistent with population, employments and housing projections.

The BAAQMD has established criteria and plans for reducing air emissions. The BAAQMD's significance thresholds recognize that sources of stationary air pollutant emissions complying with all applicable District regulations generally will not be considered to have significant air quality impacts. The significance thresholds also recognize that construction-related emissions are short-term in duration, and therefore, the determination of significance should be based on a consideration of the control measures to be implemented. Thresholds are provided by the BAAQMD to assess direct and indirect emissions and other impacts such as odors.

The California Air Resources Board (ARB) and Environmental Protection Agency (CalEPA) have jurisdiction over mobile sources. The 2000 Bay Area CAP contains specific measures intended to improve air quality through tighter industry controls, cleaner cars and trucks, and cleaner fuels. Any project that attracts automobile traffic may be found to have a significant air quality impact, according to BAAQMD, if the project's traffic generation has not been properly anticipated in the regional air quality plan. The Specific Plan estimated a higher trip generation for use of Oliver East for light manufacturing than has been estimated for the proposed residential project. Operational emission estimates generated through the URBEMIS 2002 model show slightly higher ROG and higher carbon monoxide, but still well under the BAAQMD thresholds. Therefore development of the proposed project would not conflict with or obstruct implementation of applicable air quality plans and would represent a less than significant impact.

For non-attainment pollutants (ozone precursors or PM_{10}), any net increase in regional emissions is considered significant. For localized pollutants, such as carbon monoxide, an increase in concentrations that would result in a predicted violation of the most stringent State or Federal standard (20.0 ppm for 1-hour or 9.0 ppm for 8-hours) is considered to represent a significant impact.

Short-term Construction Emissions

Construction activities are a minor source of organic gas emissions. Solvents in adhesives, non-waterbased paints, thinners, some insulating materials and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction

that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

The BAAQMD does not require estimation of construction-generated emissions. The major air quality impacts resulting from project construction would be increased ROG, NO_x and CO emissions primarily from off-road diesel construction equipment and architectural coatings. Construction activities are temporary in duration and emissions can vary considerably, depending on the size of the project, type of activities, and site conditions. For these reasons it is difficult to quantify construction air pollutant emissions. Rather than quantify the emissions, sensitive receptors that may be affected by these activities were identified in the Specific Plan EIR and effective control measures were identified to reduce the impacts to a less than significant level.

During preparation of the proposed project site, dust would be generated. Most of the dust will be generated from site grading and vehicle movement over disturbed areas. Dust generated at the construction sites could be transported by winds blowing off the bay that are common to the area. The amount of dust generated would be highly variable. Dust emissions have the tendency to be highest during late spring through early fall, when soil conditions are driest and winds tend to be strongest.

Dust emissions could result in both nuisance and health effects to nearby residents. Residences, park users and some businesses along Industrial Boulevard, Hesperian Boulevard, Eden Park Place and Marina Drive would be located near construction areas for the proposed residential development. These residents would be exposed to potential air quality nuisance and health impacts from construction activities. Nuisance affects would include dust fall on nearby properties. Fine particulate matter (PM_{10}) is the air pollutant of greatest concern associated with construction dust. If uncontrolled, PM_{10} concentrations attributable to construction activities can exceed air quality standards that are designed to protect human health. This is a potentially adverse affect.

Mitigation Measure

MM III-1 Dust emissions from construction-related activities can be greatly reduced by implementing control measures. The BAAQMD has developed feasible control measures for construction emissions of PM_{10}. With these measures implemented the impacts are expected to be reduced to a less than significant level.

The following measures, pertinent to Mitigation Measure 3.2.4-1 of the 1997 Plan EIR, shall be incorporated into all construction contract documents:

Basic, Enhanced and Optional (near residences) Measures.

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e. the minimum required space between the top of the load and the top of the trailer).
- Pave, apply water three times daily, or apply (non-stick) soil stabilizers on all unpaved access roads, parking areas and staging areas.

- Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. Coordinate streets to be swept with the City Engineer.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.
- Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas if conditions warrant.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.
- Limit the area subject to excavation, grading and other construction activity at any one time.
- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints at the construction sites. This person shall respond and take corrective action within 24 hours. The telephone number of the AQMD shall also be visible to ensure compliance with BAAQMD Rule 2: Hazardous Materials; Asbestos Demolition, Renovation and Manufacturing.

Timing/Implementation: *During all grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Public Works Department.*

Implementation of mitigation measure Mitigation Measure III-1 will reduce the project's air quality construction impacts for nuisance conditions to less than significant levels.

Long-term Operational Emissions

In terms of air quality impacts, mixed-use development typically results in reduced vehicle trips and miles traveled due to increased proximity of neighborhood services to residential land uses. The proposed project site is currently approved for development of business park uses, which would generate a total of approximately 18,651 trips per day.[1] Implementation of the proposed project; however, would include a mix of land uses, including residential, office and retail. Based on the traffic modeling conducted for this project, implementation of the proposed project would result in an approximately 19 percent reduction in vehicle use during the PM peak hour, in comparison to existing

[1] Alternative 1 = Approved Use: 2,241 AM peak trips, 2,368 PM peak trips

approved land use designations, resulting in an estimated 22,499 trips per day, but lower trips during the AM and PM peak hours. In comparison to existing approved land use designations, implementation of the proposed project would be anticipated to have a beneficial impact on air quality. In addition, because implementation of the proposed project would not result in an increase in VMT within the region, the proposed project would not be anticipated to conflict with the emissions inventories of any air quality attainment plans.

The emissions inventories contained in the BAAQMD's Clean Air Plan (CAP) and Ozone Attainment Plan (OAP) are based on projected population growth and vehicle miles traveled for the region based, in part, on the predicted growth identified in regional and community plans. The emissions inventories used in the plans also attribute some cumulative impact from all development projects. As a result, projects that would result in an increase in population or employment growth beyond that identified in regional or community plans could result in increases in vehicle miles traveled (VMT) and, as a result, increases in mobile source emissions could conflict with the BAAQMD's air quality planning efforts. Increases in VMT beyond that predicted in area plans would be generally considered to have a significant adverse incremental effect on the region's ability to attain and/or maintain State and federal ambient air quality standards.

In terms of operational impacts, the proposed project would result in fewer automobile trips under the medium density residential, regional commercial, neighborhood commercial, business park combination than under the business park zone alone, and therefore generate fewer emissions than the land use identified for the site in the Specific Plan. Currently, the residents living in the Eden Shores community do not have neighborhood serving retail. Many residents have noted to the City during the community workshops that they travel to Union City and as far as Fremont for groceries. As a result, implementation of the proposed project would not be anticipated to result in an increase in vehicle miles traveled that would conflict with BAAQMD regional air quality planning efforts. For these reasons, this impact is considered less than significant.

e-f) ***No Impact***. The project site is not located in a high-density area, near a school, hospital, assisted living facility, or other facility that would house people with lowered immune systems. However, residential development is located north and west of the project site. The project, once built, would not expose project residents or neighboring residents to substantial pollutant concentrations or create objectionable odors affecting a substantial number of people. The impact is considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES Would the project:				
a) 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?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) 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?	☐	☒	☐	☐
d) 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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

A biological assessment was conducted by LSA Associates, Inc. on June 18, 2004 and by TOVA Applied Sciences and Technology on May 5, 2005 for the Eden Shores East project. A recent biological assessment was conducted by Angela Calderaro of PMC on December 10, 2006 for the Legacy Eden Shores site and is incorporated in this analysis (**Appendix A**). The following impact analysis is based on the site visit conducted for the biological assessment, review of the CNDDB and review of previous studies performed for the Oliver East parcel.

a) ***Less than Significant with Mitigation Incorporated.*** The project site has been rough graded and disturbed by site preparation activities. The soils are compacted with

scattered rocks and stones on the surface. The existing sparsely distributed vegetation cover consists of plants that invade and colonize bare disturbed soils. These include the following dominant, ruderal or weedy, plant species:

TABLE IV.1
DOMINANT PLANT SPECIES ON THE PROJECT SITE

Common Name	Scientific Name	Wetland Indicator Status
Annual beard grass	*Polypogon monospeliensis*	FACW+
Biennial sagewort	*Artemisia biennis*	FAC
Broadleaved cattail	*Typha latifolia*	OBL
Bull thistle	*Cirsium vulgare*	FAC-
Canadian horseweed	*Conyza Canadensis*	FAC
Curly dock	*Rumex crispus*	FACW-
Fennel	*Foeniculum vulgare*	FACU
Field bindweed	*Convolvulus arvensis*	NI
Giant European reed	*Arundo donax*	FACW
Hyssop loosestrife	*Lythrum hyssopifolium*	FACW
Italian wildrye	*Lolium multiflorum*	FAC+
Mediterraneam hoary mustard	*Hirschfeldia incana*	UPL
Pampas grass	*Cortaderia selloana*	NI
Prickly sow thistle	*Sonchus asper*	FAC
Silver-sheath knotweed	*Polygonum argyrocoleon*	FAC+
Tall nutsedge	*Cyperus eragrostis*	FACW
Tree mallow	*Lavatera arborea*	NI
Wild oats	*Avena fatua*	NI
Yellow-star thistle	*Centaurea solstitalis*	NI

Source: PMC 2006. Observed during December 10, 2006 survey.

Grading and resultant removal of vegetation, have altered the natural biological resources that existed subsequent to the designation of the area as Business Park under the South of Route 92 Specific Plan (Legacy Eden Shores Area). The land clearing activities under the prior Specific Plan Land Use designation resulted in impacts to native vegetation cover and the creation of the existing site conditions. The 1997 South of Route 92 Specific Plan EIR identified and addressed these impacts. The amendment of the Specific Plan to replace the Business Park land use designations with proposed residential and commercial land uses in the Legacy Eden Shores Area would not result in any additional adverse impacts to vegetation over that which was addressed in the South of Route 92 Specific Plan EIR.

Wildlife use of the project area is restricted to such mammals as the black-tailed hare, and perhaps red fox (determined by scat), and sparse distribution of California ground squirrel. Red wing blackbird, barn swallow, song sparrow, and rock dove use the site. The

small areas of rainwater pools in the low spots scattered over the roughly graded soil offer temporary resting habitat for mallard and black-necked stilt.

Updated records on file at the California Natural Diversity Data Base (CNDDB) for the project area (San Leandro, Redwood Point, Newark, Milpitas, Mountain View, Palo Alto, Dublin, Niles and Hayward USGS 7.5 minute topographic quadrangles) indicate the potential occurrence of seven candidate, sensitive or special status plants and 23 similar status animals (see Appendix D of BRA). Although potentially occurring within the vicinity of the project area, there is no suitable habitat on the project site for these animal species, with exception of the burrowing owl. There is a moderate potential for the following CNPS list 1B plant species to occur within the PSA: alkali milk-vetch (*Astralgus tener var. tener)*, Santa Cruz tarplant (*Holocarphas macradenia), and Contra Costa goldfields (Lasthenia conjugens)*. The most recent CNDDB map (**Figure 2** in the BRA) shows that there is a record for alkali milk-vetch within the PSA. Santa Cruz tarplant and Contra Costa goldfields also have previously recorded occurrences within five miles of the PSA. The other species have a low probability of occurring on the site because of the graded and disturbed conditions of the soil and sparse, non-native vegetation cover. The following mitigation is recommended to avoid impacts to special-status species. Therefore, the project would not result in impacts to these endangered, threatened, or rare species or their habitats.

Mitigation Measures

MM IV.1a A focused pre-construction survey for special-status plant species with moderate to high potential to occur within the PSA shall be conducted within the species blooming period, prior to the start of construction activities. If no species are found then the project will not have any impacts to the species and no additional mitigation measures are necessary.

Timing/Implementation: *Prior to any grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

MM IV.1b If special-status plant species are found within the PSA, then the project applicant shall consult with the appropriate agency on the mitigation to reduce impacts to a less than significant level, including but not limited to, fencing off the area where this species is found and posting of signs to publicize the sensitive nature of the area. The protective fencing would be required to ensure that the plant or plants are not destroyed, crushed of damaged during construction. Other mitigation will likely include avoidance and minimization measures to apply to both the construction and post-construction phases of the project.

Timing/Implementation: *Prior to any grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

Potential Project Impact (Discussed in the 1997 Plan EIR). The 1997 Plan EIR identified an August 6, 1997 observation of a burrowing owl burrow within the Specific Plan area in a culvert at the end of an irrigation channel at the southeast corner of the former Oliver West property, which is now the built out Standard Pacific Homes development (Eden Shores). Evidence of owl activity outside the culvert included fresh owl pellets, feathers, a roosting pole with fecal stains, and a trampled vegetation path leading to the entrance to the culvert. Additional records of observation indicated breeding pairs of burrowing owls during the summer of 1995 at the northeastern corner of Tripaldi Way and Hesperian Boulevard; and West Whipple Road at Union City Boulevard. The 1997 Plan EIR identified no owls or owl burrows on the site during the August 1997 survey but the 1997 Plan EIR determined that there could be potentially significant impacts to owls if they move into the project area from adjacent areas. The 1997 Plan EIR provided the following mitigation measure to reduce the potential impact to a level of less than significance:

> *"Mitigation Measure 3.2.3-5*
>
> *The burrowing owl habitat is located within the 100-foot-wide buffer zone proposed in Mitigation Measure 3.2.3-4. Incorporation of the burrow within that zone and avoidance of owl disturbance during construction of a buffer water channel would reduce the impact. To mitigate for disturbance within 160 feet of the burrow, owl burrows will be enhanced at the required ratio of 2:1 by either creating new burrows or enhancing existing unsuitable burrows following CDFG guidelines. Enhancement will be conducted at the outer edge of the 100-foot buffer strip. While this location will be approximately 90 to 100 feet away, the location is suitable since other adjacent properties will remain undeveloped. In compliance with CDFG's burrowing owl survey protocol, a preconstruction survey will also be conducted within 30 days prior to the beginning of construction activities since owls often change location and could have taken residence on the site prior to construction."*

A letter report prepared by LSA Associates to Duc Housing Partners in June 18, 2004, describes the South of Route 92 Specific Plan Project Site as having been rough graded resulting in a sparse vegetation cover of weedy plants. Wildlife species that are adapted to disturbed areas have colonized the site. These include black-tailed hare, killdeer and California ground squirrel. Burrowing owls frequently occur in areas used by ground squirrels; therefore, there is a possibility that the presence of ground squirrels may be positively associated with the occurrence of burrowing owls.

Records compiled by the California Natural Diversity Data Base show a distribution of California burrowing owls north and south of the project site:

TABLE IV.2
RECORDED OBSERVATIONS OF BURROWING OWLS NEAR THE PROJECT SITE

Location	Habitat/Community	Year of Recorded Observation
Newark: 0.5 miles southeast of the intersection of Cherry Street and Mowry Avenue	Undeveloped field	1998
Newark South side of Cherry Street, 0.2 mile east of Mowry Avenue	Burrow sites in old ground squirrel holes; undeveloped field	1998

Location	Habitat/Community	Year of Recorded Observation
Newark: East side of Coyote Hills, 0.8 mile north of Dumbarton Road, northwest of Newark	Overgrazed horse pasture	1991-1993
Hayward Shoreline: Northwest of Skywest Golf Course	Annual grassland, low quality wetlands	1983
Oakland: Southeast of San Leandro Bay near Edgewater Drive & Pardee Lane	Undeveloped, open grassland	1950
Bay Farm Island: Northwest of Oakland International Airport, near Catalina Avenue and Leeward Avenue	Undeveloped field	1983
Newark: Jarvis Landing, East end of Dumbarton Bridge, northwest of Jarvis Road & Thornton Avenue, west of Newark	Disturbed field	1972-1979

Source: 1997 Specific Plan EIR

Because burrowing owls occur near the project site, and such owls frequently occur in areas used by ground squirrels, TOVA Applied Science & Technology conducted a focused field survey to determine the presence or absence of owls, or their suitable habitat, on the Eden Shores East project site in 2005 (City of Hayward 2005).

TOVA Applied Science & Technology observed no ground squirrels on site. None of the apparent small mammal holes showed signs of modification or enlargement to accommodate burrowing owls. Based on these dimensions, it is most likely that Botta's pocket gopher (*Thomomys bottae)* and California vole (*Microtis californicus)* are responsible for most of these holes. No observed evidence of other fossorial mammals occurs on the site.

The small mammal burrows in the soil embankment lacked the excrement, pellets, debris, grass, and feathers normally associated with burrows used by burrowing owls. In addition, areas of asphalt, brick and concrete blocks piled on some areas of the project site showed no sign of burrowing owl use.

Based on the lack of suitably sized burrows or signs of active burrow use (excrement, pellets, debris, grass, feathers, etc.), burrowing owls are not currently using the project site as habitat. The current conditions do not preclude the development of suitable burrows and use by burrowing owls prior to project construction, a potential outcome identified in the 1997 Plan EIR. Because burrowing owls could migrate to the project area from nearby locations, the mitigation measure identified in the 1997 Plan EIR, including pre-construction surveys and provisions for the protection of owls if nests are encountered, would continue to reduce the potential significance of project construction on burrowing owls to less than significant levels. This mitigation measure is relevant to the proposed Amendment to the Specific Plan.

Construction activities may impact burrowing owls on the project site.

Mitigation Measure

MM IV-2 The following steps clarify the Mitigation Measure 3.2.3-5 identified in the earlier 1997 Plan EIR.

- If burrowing owl burrows are identified through the preconstruction surveys, protective measures will be required as a CEQA mitigation measure. These would include such avoidance actions as the following:

  - If any owls are present in areas scheduled for disturbance or degradation (e.g., grading) or within 50 meters (160 feet) of a permanent project feature, and nesting is not occurring, owls are to be passively relocated by a qualified biologist per CDFG-approved relocation as described in the burrowing owl guidelines (CBOC 1993). A time period of at least one week is recommended to allow the owls to move and acclimate to alternate burrows.

  - If any owls are present within 50 meters (160 feet) of a temporary project disturbance areas (i.e., parking areas) then active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify additional losses from nest abandonment and/or loss of reproductive effort (e.g., killing of young). If additional losses occur then the qualified biologist/monitor has the authority to stop construction and consult with CDFG to determine further mitigation. One-way doors should be left in place 48 hours to insure owls have left the burrow before excavation.

  - If any owls are nesting in areas scheduled for disturbance or degradation, nest(s) should be avoided from February 1 through August 31 by a minimum of a 75 meter (250-foot) buffer or until fledging has occurred. Following fledging, owls may be passively relocated as described in the burrowing owl guidelines (CBOC 1993).

  - Active burrows shall be monitored by a qualified biologist(s)/monitor(s) throughout construction to identify additional losses from nest abandonment.

  - One alternate natural or artificial burrow should be provided for each burrow that will be excavated in the project impact zone. The project area should be monitored daily for one week to confirm owl use of alternate burrows before excavating burrows in the immediate impact zone.

  - Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

    Timing/Implementation: *During all grading and construction phases of the project by construction contractor.*

    Enforcement/Monitoring: *City of Hayward Planning Division.*

In addition to the analysis conducted as part of the 1997 Plan EIR, LSA Associates, in their 2004 report, documented potential impacts of feral and domestic cats on sensitive wildlife habitat in the area (including the A-2 flood control channel). The 18-20 foot sound wall that separates the project from the channel and the railroad tracks will also serve to inhibit the intrusion of cats into these sensitive areas.

Implementation of Mitigation Measure IV-2 will reduce the project's impacts on candidate, sensitive, or special status species to less than significant levels.

The amendment to the South of Route 92 Specific Plan proposed for the Legacy Eden Shores project would not result in new adverse impacts to special status species over that which was discussed and mitigation measures provided in the 1997 Plan EIR and as clarified above.

b) ***No Impact***. There is no riparian habitat on the project site and the site is not a natural community. Therefore, the project would not have an adverse effect on any riparian habitat or other sensitive natural community.

c) ***Less than Significant with Mitigation Incorporated***. The entire project site is rough graded and disturbed with the exception of the 0.67 acres currently owned by the City of Hayward. The sparse vegetation cover consists primarily of upland plant species. Low, topographic spots on the site, areas cleared of covering vegetation, pond after winter rains but these areas lack the defining characteristics of wetlands. The federal government defines wetlands as habitats that have three important characteristics (1) hydrophytic vegetation, (2) hydric soils, and (3) wetlands hydrology. All three defining features are absent from the project site (excluding the City property), as such; the site does not contain any wetland areas. The 1997 *Plan EIR* identified wetland areas west of the project area from the proposed Specific Plan Amendment.

Jurisdictional wetlands have been previously identified within the Project Study Area (PSA); however, these delineations are over five years old and no longer valid. During the field visit conducted on December 10, 2006, features which exhibit wetland characteristics were observed within the PSA (see Figure 3 of the BRA). The PSA may contain jurisdictional wetlands or other waters of the U.S. as defined by Section 404 of the Clean Water Act. Because the wetland areas within the PSA are potentially jurisdictional waters, project activities could possibly be regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the CWA. Therefore, disruption of federally protected wetlands and other waters of the U.S. from implementation of the proposed project is considered a significant impact. Even though wetland delineations have previously been conducted, it is recommended that a new wetlands delineation be conducted before any ground disturbance since the verification of those wetlands determinations have expired.

A less than significant impact to federally protected wetlands as defined by Section 404 would occur with the implementation of the mitigation below. There is no new information, or change in circumstances since the certification of the 1997 Plan EIR that would result in new significant environmental effects to wetlands. The proposed land uses would have no effect on existing wetlands permits received from natural resource agencies (U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Game).

Mitigation Measures

MM IV.3a A wetland delineation shall be conducted and the delineation verified by the USACE to confirm or deny the presence of wetlands or other waters of the U.S. within the PSA before any ground disturbance.

Timing/Implementation: *Prior to any grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Planning Division, US Army Corps of Engineers.*

MM IV.3b If the wetland delineation determines that jurisdictional wetland features are present within the PSA, the Applicant shall apply for a Section 404 permit from the USACE and a Section 401 permit from the Regional Water Quality Control Board. Adherence to the federal and state permitting requirements identified above would ensure that impacts to wetlands and water of the United States would be less than significant.

Timing/Implementation: *Prior to any grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Planning Division, US Army Corps of Engineers and Regional Water Quality Control Board.*

d) ***Less than Significant with Mitigation Incorporated.*** Habitat conditions within and surrounding the PSA provide suitable foraging and nesting habitat for many avian species, including some raptors and migratory birds. Raptors and raptor nests are considered to be a special resource by federal and state agencies and are protected under the Migratory Bird Treaty Act (MBTA) and nesting raptors protected under Section 3503.5 of the California Fish and Game Code. Migratory birds are also protected under the MBTA. Construction activities associated with the proposed project may impact protected avian species if vegetation is removed while nesting raptors and/or migratory birds are present.

Noise and other human activity may also result in nest abandonment if nesting raptors and/or migratory birds are present within 100 feet of the work site for raptors and 50 feet for migratory birds. Suitable raptor nesting habitat occurs in the mature eucalyptus trees adjacent to the PSA along Industrial Boulevard. Construction activities proposed within the PSA could potentially result in significant adverse impacts to raptors and/or migratory birds and therefore is considered a **potentially significant** impact if mortality occurs. The following mitigation is required to reduce impacts to a less than significant level.

Mitigation Measure

MM IV.4 If proposed construction activities are planned to occur during the nesting season for avian species (typically March 1 through August 31), the Applicant shall retain a qualified biologist to conduct a focused survey for nesting raptors and migratory birds within 100 feet of the construction

area no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys, USFWS and/or CDFG shall be notified regarding the status of the nests. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with USFWS and/or CDFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius around the nest of 100 feet for raptors and 50 feet for migratory birds. No action is necessary if construction will occur during the non-breeding season (generally September 1 through February 28). Reference to this requirement, the MBTA, and Section 3503.5 of the California Fish and Game Code shall be included in the construction specifications.

Timing/Implementation: *Prior to any grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

e) ***No Impact***. The project site is undeveloped and disturbed by grading. Colonizing weeds characterize the sparse vegetation cover. The amendment to the South of Route 92 Specific Plan proposed for the Legacy Eden Shores project would not result in new potential conflicts with policies, plans, or ordinances that protect biological resources. The site would not require removal or disturbance of sensitive biological resources or landmark trees.

f) ***No Impact***. The City of Hayward does not have an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the project would have no impact on these types of plans.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

DISCUSSION

a-b) ***Less than Significant with Mitigation Incorporated***. A thorough discussion of the historic aspects of the entire Specific Plan area was included in the EIR prepared in 1997 by EIP Associates. The project study area was the site of the first commercial production of salt in 1854. In the late 1860s the Crystal Salt Works produced a salt that was 99.63 percent pure. Throughout the 19th century most of the salt works were small family-run operations; however, several were large operations employing primarily Chinese labor. By 1927, the E.A. Oliver Salt Company had consolidated all of the saltworks in the project study area and in 1931 Leslie Salt bought the Oliver Salt Works. The City of Hayward General Plan Historic Preservation Policy 8 promotes the establishment of a salt manufacturing historic exhibit, either as part of development proposals for the former Oliver Salt Works or in another prominent location along the Bay Trail.

Excluding the Oliver/State Route 92 parcel, according to research conducted by the Northwest Information Center at Sonoma State University, a review of records and literature on file indicates that the Plan area contains no recorded Native American or historic cultural resources listed with the Historic Resources Information System. However, the Northwest Information Center has no record of an archaeological study of the Plan area. Thus, the prospect of buried cultural resources within the project area cannot definitively be ruled out. Potential damage to or disturbance of important archaeological or historical resources, resulting from the proposed project would be considered a significant impact. The following measure would reduce this impact to a less than significant level.

Mitigation Measure

MM V-1 If prehistoric or historic cultural resources are inadvertently discovered during any ground-disturbing activities, all work in the area shall stop immediately and the City shall be notified of the discovery. No work shall be done in the area of the find and within 100 feet of the find until a

professional archaeologist can determine whether the resource(s) is significant. If necessary, the archaeologist shall develop mitigation measures consistent with the State CEQA Guidelines in consultation with the appropriate state agency and, if applicable, a representative from the Native American Heritage List. A mitigation plan shall be submitted to the City for approval. Mitigation in accordance with this plan shall be implemented before any work is done in the area of the resource find. Therefore, impacts to archaeological resources are considered less than significant.

Timing/Implementation: *During all grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

Implementation of Mitigation Measure **MM V-1** will reduce the project's impacts on historic and archeological resources to less than significant levels.

c) ***Less than Significant with Mitigation Incorporated.*** Erosion and excavation can expose marine and terrestrial fossils, particularly at outcrops. No outcrops are found on the project site as it is relatively flat and has been previously graded and filled. It is unlikely that fossils would be uncovered during the project development; however, the potential does exist for fossils to be uncovered during any excavation activities.

MM V-2 If fossils or other paleontological resources are encountered, there shall be no further disturbance of the area surrounding this find until the materials have been evaluated by a qualified paleontologist, and appropriate treatment measures have been identified.

Timing/Implementation: *During all grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

Implementation of Mitigation Measure **MM V-2** would reduce the project's impacts on paleontological resources to less than significant levels.

d) ***Less than Significant Impact.*** The proposed project would be subject to State law regarding the discovery and disturbance of human remains. It is not anticipated that any human remains will be encountered during construction of the proposed project because the site and surrounding area have been previously disturbed to accommodate development. However, should any previously unidentified or unanticipated human remains be discovered during project construction, compliance with the following State laws regarding impacts to prehistoric Native American burials shall be strictly enforced.

- The Health and Safety Code Section (b) states: that in the event of a discovery of human remains, all work is to stop and the County Coroner is to be called.
- Public Resources Code Section 5097.98 addresses the handling of archaeological remains that have been identified as Native American.

Therefore, impacts to human remains are considered less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS Would the project:				
a) 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?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) 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?	☐	☐	☒	☐
d) 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?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

DISCUSSION

a)

i) ***Less than Significant Impact***. The City of Hayward, as part of the Bay Area, is in one of the most active seismic regions in the United States. Each year, low and moderate magnitude earthquakes occurring within or near the Bay Area are felt by residents of the City. About twenty of these temblors caused moderate to substantial damage: those of 1868 and 1989 being the most destructive. The major fault zones of the San Andreas Fault System were the sources of these earthquakes, and are expected to be the sources of future earthquakes. **Figure**

VI.1 is a regional geologic map of the Bay Area showing the approximate position of the major fault zones, and the location of the City of Hayward in relation to these features. The nearest active fault to the subject site is the Hayward Fault, which is located approximately five miles east. The Working Group on California Earthquake Probabilities (1999) has estimated there is a 32% probability for the occurrence of a large earthquake in the next 30 years on the Hayward-Rogers Creek fault system. Adherence to the provisions of the UBC would reduce potential for structural damage in the event of an earthquake. Therefore, seismic related impacts are considered less than significant.

ii) ***Less than Significant Impact.*** Any major earthquake damage in the City of Hayward is likely to occur from ground shaking and seismically related ground and structural failures. Local soil conditions, such as topography, soil strength, thickness, density, water content, and firmness of underlying bedrock affect seismic response. Ground shaking intensity associated with a characteristic earthquake of 7.3 magnitude, and peak horizontal ground accelerations between 0.5g and 0.7 g. is expected to be at least IX on the Modified Mercalli Intensity (MMI) Scale in the project study area. Seismically induced shaking and some damage should be expected to occur but damage should be no more severe in the project area than elsewhere in the region. For buildings constructed to current CBC seismic-resistance standards, the damage potential is lower, but still not insubstantial, unless the buildings are constructed using site-specific design to address the proximity of the fault. The 1997 Plan EIR addressed the issue of raising the elevation of finished grades for development projects in the Plan area. Berlogar Geotechnical Consultants verified the same general criteria used for the initial fill of about 4 to 6 feet placed several years ago. The proposed project would also follow Mitigation Measure 3.2.1-1 of the 1997 Plan EIR to reduce impacts of potential ground shaking to less than significant. Therefore, this impact is considered less than significant.

iii) ***Less than Significant Impact.*** Liquefaction typically is caused by strong ground shaking during an earthquake. Areas most susceptible to liquefaction in Hayward are underlain by granular sediments within younger alluvium and include low-lying lands adjacent to creeks and estuaries. The project site is in an area with deposits of water-saturated alluvium or similar deposits of artificial fill so that according to the Liquefaction Hazard Map in the Hayward General Plan the potential for liquefaction is high (WLA June 2001).

On the Oliver East property, this alluvium has a naturally high salt content, common to intertidal embayments along the margins of San Francisco Bay. Near the south corner of the Oliver East property, as much as eight feet of Bay Mud underlies the salt-affected fine-grained alluvium, but the deposit thins northward and westward to zero near where the fine alluvium grades into the medium alluvium. However, EIP Associates found that the area does not appear to be susceptible to liquefaction hazards because no substantial layers or lenses of uniformly fine sand were discovered below the water table. The 1987 Shorelands EIR indicates the presence of potentially liquefiable material beneath the

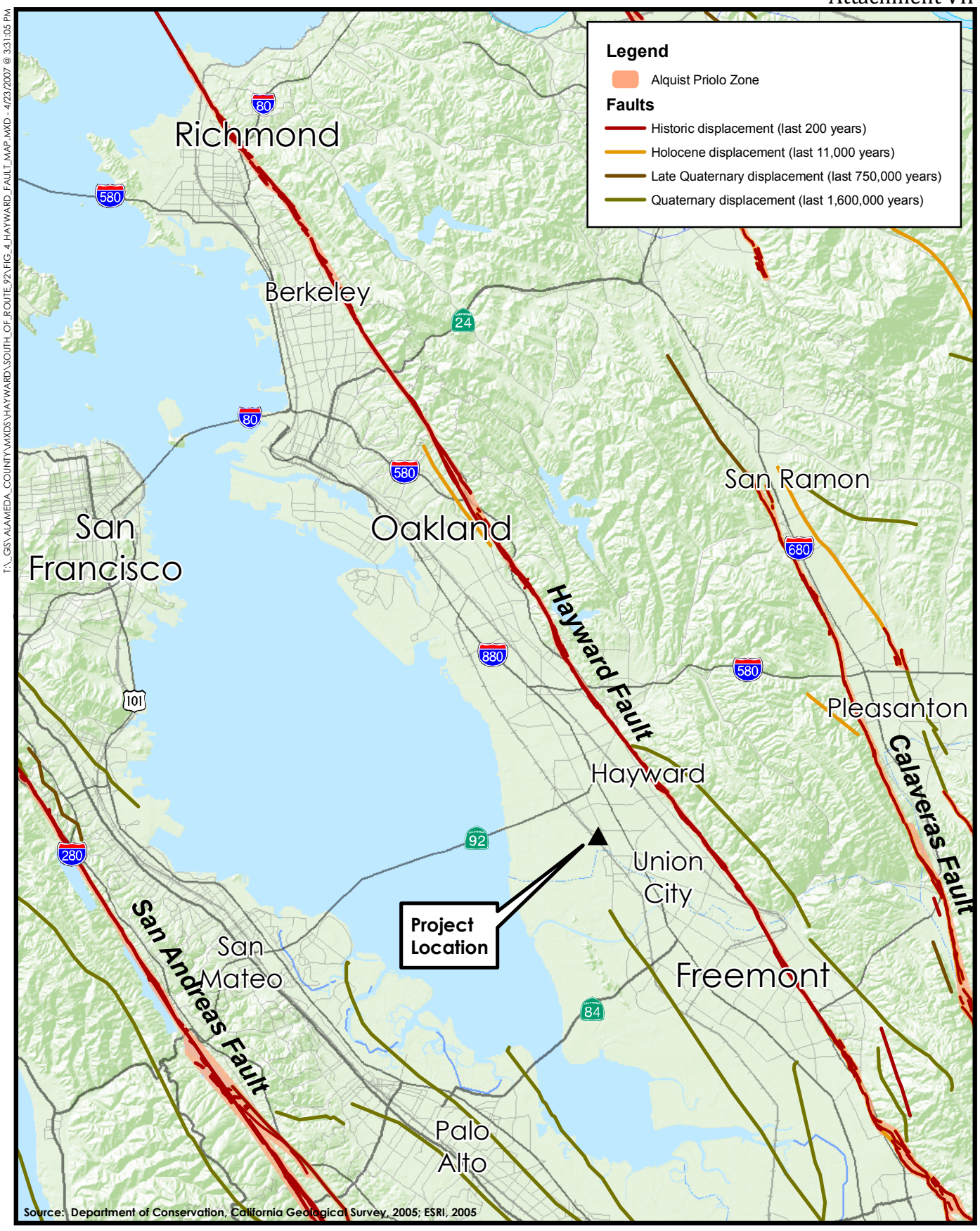


Figure VI.1
Fault Lines Map

PMC

northwest corner of the project area, but its existence was not confirmed by the 1996 geotechnical investigations. The State of California currently is planning to map the distribution of liquefaction hazard within the Hayward area as part of CDMG's ongoing efforts to implement the statewide Seismic Hazards Mapping Act. The Hayward General Plan Policy 7.7 and 7.7.1 states the following:

7.7 Promote greater public awareness of earthquake hazards, along with assistance to help property owners make their homes and businesses more seismically safe.

7.7.1. Expand the scope of educational materials about seismic risks and mitigation measures distributed though the city's emergency preparedness program to include maps that identify potential ground shaking and liquefaction hazards.

If all site-specific geotechnical recommendations are followed along with the City's policy's the impact is considered less than significant.

iv) ***No impact.*** The project site and surrounding vicinity are relatively flat eliminating the potential for landslides. Approval of the proposed project would not expose people or structures to potential landslides. Therefore, no impact would occur.

b) ***Less than Significant Impact.*** Some soil erosion is expected during construction, but loss of topsoil is not a significant issue. General grading activities, including those related to construction, are regulated by Chapter A33 of the City's Building Code. During the filling and construction period, the potentially erosive effects of water leaving the construction sites would be of concern. Runoff during the filling period could carry particles from the grading and construction sites, or could erode soil down-gradient, if the flow were not controlled. The loss of the material by erosion may not be a significant impact by itself; however, the re-deposition of eroded material in San Francisco Bay via the waterways adjacent to the project area could create turbidity (endangering aquatic life), reduce wildlife habitat, and reduce the carrying capacity of the waterways, thereby potentially aggravating flood conditions. Erosive conditions created during the grading period could persist into the operations period. The 1997 Plan EIR identified Mitigation Measure 3.2.1-4 to reduce soil erosion and deposition impacts by requiring an erosion and sediment transport control plan, which if followed for this proposed project would reduce this impact to less than significant.

c) ***Less than Significant Impact.*** From review of local geologic conditions, it is apparent that the project area is subject to static ground failures associated with the subsurface geologic materials at the project location. As previously discussed, the project area is underlain by fine-grained geologic deposits that, in their natural state, could respond poorly to loading from surcharging or building foundations. It is possible to reduce the risks associated with static ground failure hazards by taking into consideration the location and type of subsurface materials, and appropriate remedial actions when designing surcharges and building foundations for a particular building site. Such consideration includes the items in Mitigation Measure 3.2.1-2 from the 1997 Plan EIR which specify the incorporation of seismic-restraint criteria in the design of excavations, foundations and structures for the project. This measure recommends the incorporation of seismic-restraint criteria in the design of excavations, foundations and structures for the project, which would reduce this impact to a less than significant level.

d) ***Less than Significant Impact.*** Expansive soils primarily are composed of clays with a significant capacity to shrink and swell with seasonal moisture fluctuation. The major naturally occurring surface soils are the Omni silty clay loam, generally east of the Union Pacific Railroad right-of-way, and the Reyes clay, generally west of the railroad. The soils are alkaline, low in soil strength, and highly expansive. In the City of Hayward, buildings constructed for human occupancy are required to reduce the exposure to potentially damaging static ground failures site design, in conformance with the City's building code. Because the project study area is in a particularly sensitive part of the City (with regard to potential ground failures), it is desirable to review the static ground failure protection in sufficient detail for the City confirm that construction would conform to applicable City safety standards. An acceptable degree of soil stability can be achieved by adopting soil treatment programs (grouting, compaction, drainage control, etc.) and foundation designs (cast-in-place piers, driven piles, floating pads, etc.) that address site-specific soil conditions. A Soil Report is required prior to issuance of a building permit (in accordance with the Grading Ordinance and the UBC) where potential expansive soils are present. In addition, the 1997 Plan EIR proposed Mitigation Measure 3.2.1-3, which requires site-specific soil suitability analysis and stabilization procedures, and design criteria for foundations, as recommended by a California-registered soil engineer during the project design phase. Implementation of this mitigation measure would reduce static ground failure impacts to a less than significant level.

e) ***No Impact.*** The project would be required to connect to City water and sewer services and would not use septic systems. Therefore, no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) 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?	☐	☒	☐	☐
e) 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?	☐	☐	☐	☒
f) 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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) 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?	☐	☐	☐	☒

DISCUSSION

In May 1998, Henshaw Associates, Inc. (Henshaw) of Dublin, California performed a Phase I Preliminary Site Assessment (PSA) to assess conditions and activities at and within the immediate vicinity of the site that could indicate the potential presence of hazardous constituents in shallow soil and groundwater. The PSA concluded that agricultural activities and the placement of fill material represented potential sources of soil and groundwater contamination and specific testing was recommended. Henshaw performed an investigation of soil and groundwater quality on the Oliver Property in May and June 1998 to evaluate the environmental concerns

outlined in the PSA. In June 2004, Northgate Environmental Management, Inc. was retained by Duc Housing Partners, Inc. to conduct a Phase I PSA and a Phase II soil and groundwater quality investigation on the Eden Shores East parcels to review the historical information (**Appendix B)**.

a,b) ***Less than Significant Impact***. The proposed project involves development of retail, business park and up to 146 new single-family homes and 28 town homes. Construction of the proposed project would involve the use of heavy equipment which uses small amounts of oils and fuels and other potentially flammable substances. During construction, equipment would require refueling and minor maintenance on location which could lead to fuel and oil spills. The Contractor will be required to identify a staging area for storing materials and equipment. The proposed project would not result in a significant risk of explosion or accidental release of hazardous substances. The use and handling of hazardous materials during construction activities would occur in accordance with applicable Federal, State, and local laws including California Occupational Health and Safety Administration (CalOSHA) requirements.

The Phase I PSA and Phase II Assessment for Eden Shores East found measured concentrations of naturally-occurring asbestos associated with serpentine below established regulatory thresholds. It is assumed that similar concentrations would be found on the Legacy Eden Shores parcels. Petroleum hydrocarbons and MTBE were present on a portion of the old Oliver Property located to the east of the southern portion of the subject site. Petroleum hydrocarbons were also reported present in groundwater on a parcel located along Industrial Parkway, approximately 500 feet north of the northern portion of the subject site. However, all measured hydrocarbon concentrations are below the ESLs for residential land use established by the California RWQCB and do not represent a significant environmental concern. Metals were detected in the shallow soil samples at concentrations generally representative of naturally-occurring background levels.

The proposed project would involve the construction of homes in the immediate vicinity of a railroad right-of-way, posing potential safety hazards. Similar to a public highway, this active right-of-way is used by passenger trains and common cargo carriers. Depending on commercial needs, the commodities shipped along the right-of-way sometimes includes hazardous materials. Safety requirements for hazardous materials transport by rail have been established by the U.S. Department of Transportation (set forth in Title 49 of the *Code of Federal Regulations)*.

According to the Federal Railroad Administration, about 3.6 railroad accidents occur for every million miles traveled by train. This rate suggests that the probability of an accident occurring on the less than one mile of railroad track traversing the project site is relatively low. Furthermore, due to the mild grade and curvature of the railroad right-of-way bordering the project site, the California Public Utilities Commission has not designated it as a local safety hazard site. In addition to the foregoing, it should be noted that buildings in the project will be constructed a minimum of 100 feet from the railroad tracks in conformance with *Mitigation Measure 3.18-3* of the *1997 Plan EIR*.

No waterways are located on the site and the project would be required to obtain a National Pollution Discharge Elimination System (NPDES) General Construction Activity Storm Water Permit. The project contractor would be required to file a Notice of Intent (NOI) under the State's NPDES General Construction Permit (CAS00002). This permit requires that a Storm Water Pollutant Prevention Plan (SWPPP) be prepared specifying

Best Management Practices (BMPs) to reduce construction related-impacts on the project site. Therefore, accidental release impacts are considered less than significant.

c) ***Less than Significant Impact.*** The area surrounding the project site has remained relatively vacant with the exception of the light manufacturing and business development located along Industrial Boulevard and Hesperian Boulevard. No schools are located within one-quarter mile of the project site. During operation no hazardous emissions or acutely hazardous substances or waste would be utilized within the residential developments. No impact would occur.

d) ***Less than Significant with Mitigation.*** According to a review by Northgate Environmental, none of the 38 sites listed on the Cortese List near the project study area are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site. Therefore, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, a Request for Oversight of a Brownfields Site Application was required from Standard Pacific prior to the start of construction of the residential homes in the Bridgeport and The Crossings project. An underground storage tank (UST) was located adjacent to a shed located to the south of an unnamed road. The shed was identified by the California Department of Toxic Substances Control (DTSC) as located south of Street "E" on VTM 7065 dated June 1999, which is now Eden Park Place. Soil and groundwater samples collected on the former Eden Shores East site (now Bridgeport and The Crossings) showed no detectable levels of constituents of concern in the soil or groundwater. Since the entire Oliver property was formerly agricultural and subsequently covered with imported fill prior to development, a change in land use to residential would need a similar clearance from DTSC and/or the San Francisco Bay Regional Water Quality Control Board (RWQCB), as was required for the Eden Shores East project. The possibility of soil and groundwater contamination on the Legacy Eden Shores property due to the former agricultural use could be a **potentially significant** impact.

The following mitigation measure would reduce this impact to less than significant:

Mitigation Measure

MM VII-1 Pursuant to the California Health and Safety Code, Division 20, Chapter 6.8, the project developer shall be required to coordinate with the City of Hayward Fire Department, DTSC and/or RWQCB on the methodology to collect soil and groundwater samples in conjunction with a submission of a Request for Oversight of a Brownfields Site Application. For the sites to be developed with residential use, DTSC and/or RWQCB shall be required to identify that no further investigation/action is necessary for unrestricted residential use prior to any grading or construction activities occurring on site. Upon receipt of a clearance letter from DTSC and/or RWQCB, that letter shall be forwarded to the Hayward Fire Department Hazardous Materials Program Coordinator for review.

Timing/Implementation: *Prior to start of grading and construction activities.*

Enforcement/Monitoring: *City of Hayward Fire Department, California Department of Toxic Substances Control, San Francisco Bay Regional Water Quality Control Board.*

e-f) ***No Impact***. The nearest airport/airstrip is the Hayward Executive Airport located on Hesperian Boulevard north of Winton Avenue. The Airport is approximately 3.0 miles north of the project site. Normal operations of this facility would not result in safety related or other adverse impacts to people working at or near the project site. Therefore, no impact would occur.

g) ***Less than Significant Impact.*** The proposed project would be designed to follow all emergency turnaround guidelines of the City of Hayward Fire Department. During development of the project no emergency access would be impeded by construction activities. Because the project would not interfere with emergency response plans or emergency evacuation plans, and will not place an undue burden on emergency response capabilities, the impact of the project on hazardous materials emergency response planning and services would be considered less than significant.

h) ***No Impact***. The project site is surrounded by residential, light manufacturing and business park uses and bordered by the Union Pacific Railroad. Based on the site's location in an urban area on the Bay side, it would not be subject to wildlands fires. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) 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)?	☐	☐	☒	☐
c) 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?	☐	☒	☐	☐
d) 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?	☐	☒	☐	☐
e) 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?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) 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? (Source:	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) 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?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

DISCUSSION

a) ***Less than Significant Impact.*** The proposed project would not violate any water quality standards or waste discharge requirements. Any run-off that occurred during storm events would be managed in accordance with the requirements of the San Francisco Regional Water Quality Control Board.

Measures included in the grading plans would minimize erosion potential and water quality degradation for the project area in accordance with the NPDES requirements. All grading plans would also be submitted to the RWQCB for approval under the NPDES construction activities storm water permit. The purpose of the permit is to protect water quality from development areas that would discharge into a surface water body. During construction of the project, the City would require that the contractor: eliminate non-storm water discharges to storm water systems, develop and implement a Storm Water Pollution Prevention Plan (SWPPP), and perform monitoring of discharges to storm water systems. The state has published a set of Best Management Practices (BMPs) for both pre- and post-construction periods. The contractor will identify the appropriate BMPs in coordination with the City and the RWQCB for the proposed project. Therefore, potential for violation of water quality standards or waste discharge requirements is considered less than significant.

b) ***Less than Significant Impact.*** Excavation within areas of high groundwater could need dewatering to allow construction and to protect foundations. The depth to groundwater within the project study area is generally less than five feet. Seeps, where groundwater discharges to the surface, occur in the wetlands adjacent to the Plan Area. Construction may involve excavation below the water table, and may need dewatering and the installation of subdrains to provide adequate foundation drainage. The 1997 Plan EIR proposed Mitigation Measure 3.2.2-4, which requires that a geotechnical report which designates specific groundwater conditions and subdrain requirements be submitted to the City Public Works Department. The recommendations of the report would be incorporated into the project design. Implementation of this measure would result in a less than significant impact to groundwater supplies.

(c) ***Less than Significant with Mitigation Incorporated.*** Development of the project site would result in higher surface runoff than currently leaves the area, potentially affecting the capacity handling ability of Old Alameda Creek. At present, most of the project site, excluding existing public streets, is undeveloped (formerly agricultural) land. Runoff factors, (the portion of rainfall that does not soak into the ground) for this type of land development are between 0.20 and 0.50, depending on such conditions as the slope and density of the soil surface, the amount, and the extent and degree of compaction of unpaved roads and levee surfaces. The average runoff factor existing at the site is in the lower third of this range. Buildout of the proposed Specific Plan Area would replace about 65 percent of the vacant land with buildings, roads, driveways, landscaping and parking areas. Parks and wetlands occupy the remaining 35 percent of the Plan area. The runoff factor for suburban residential use is 0.25 to 0.40. The average runoff factor (0.55) predicted for the Plan Area prior to rezone of the portion of Oliver East for the Legacy Eden Shores project would be higher than with the proposed project as the runoff factor for business parks is 0.50 to 0.70. Nevertheless, the average runoff factor would represent a substantial increase from 1997 conditions. The 1997 Plan EIR proposed Mitigation Measure 3.2.2-1, which would incorporate runoff control design in the drainage collection system for the project. Implementation of this previously proposed mitigation measure would reduce this impact to a less than significant level.

During the construction period, soils at the project site could be exposed to the erosive forces of wind and storm runoff to a potentially significant degree. Grading activities on the site for foundations, structures and parking lots, could adversely affect downstream water quality through erosion, the transport of sediments and dissolved constituents entering receiving waters (Old Alameda Creek, San Francisco Bay) by increasing turbidity and contaminant load. The *1997 Plan EIR* previously proposed *Mitigation Measure 3.2.2-2*, which would reduce erosion impacts to a less than significant level.

> *"Mitigation Measure 3.4.4-2*
>
> *(a) Construction should be scheduled for the dry season.*
>
> *(b) The project will be subject to an NPDES permit from the RWQCB. This permit requires that the applicant develop a Storm Water Pollution Prevention Plan. The permit requirements of the Regional Board would be satisfied prior to granting of a building permit by the City of Hayward.*
>
> *(c) A soil erosion and sedimentation control plan would be submitted to the City of Hayward by the applicant for individual development sites proposed under the Specific Plan prior to grading. This plan may include, but would not be limited to, the erosion control methods outlined in Mitigation Measure 3.2.1-4 (soil erosion control)."*

No further mitigation is required.

(d) ***Less than Significant with Mitigation Incorporated.*** Creation of impervious surfaces on the site as a result of project construction would alter the existing drainage patterns. The *1997 Plan EIR* stated that the decrease in permeable land surfaces for light manufacturing, business, residential and park land uses would approximately double the amount of surface runoff leaving the Specific Plan Area. The *1997 Plan EIR* proposed the following mitigation measure, which should be incorporated into the proposed Legacy Eden Shores project to reduce the potential impact to a level of less than significant:

> *"Mitigation Measure 3.2.2-1*
>
> *Incorporate runoff control design in the drainage collection system for the project. Implementation of this mitigation measure, as describe below, would reduce this impact to an insignificant level.*
>
> *(a) The project engineer would perform detailed, site-specific hydrologic and hydraulic analysis for the proposed development areas, to validate the drainage calculations for the Specific Plan Area as a whole. The analyses would be in conformance with City of Hayward and ACFCWCD standards for the 100-year storm, would quantify the proposed development area's increased stormwater runoff volumes, and would quantify the effect on the capacity of the existing drainage facilities, including the levees along Old Alameda Creek.*
>
> *(b) The proposed additions to the storm-drainage system would be designed to accommodate the anticipated flows from the*

Specific Plan Area. The project engineer would include facilities in the storm-drain infrastructure that would avoid increasing the risk of offsite flooding or increasing the area of offsite 100-year floodplains. Such facilities could include detention or storage structures.

(c) Facilities to accommodate the additional volume of stormwater runoff would be designed, reviewed, and incorporated into development prior to completion of the permitting process for this project. Specific structural mitigation measures that could be included in the facilities include detention basins, energy reducers, and oversized pipes and catch-basins that could act as temporary storage facilities for stormwater runoff."

No further mitigation is required.

e-f) ***Less than Significant with Mitigation Incorporated.*** The project would involve construction of impervious surfaces (homes, driveways, parking lots) on a site that is currently undeveloped. This would change the drainage of the site decreasing absorption rates and increasing run-off incrementally in the area.

Project Construction

Project construction and grading activities on-site would involve the operation of heavy equipment. Although the project site is relatively flat and the potential for soil erosion is considered to be low, peak storm water runoff could result in short-term sheet erosion in areas of exposed soils. The compaction of soils by heavy equipment would reduce the infiltration capacity of soils and increase runoff and erosion potential. If uncontrolled, soil materials could result in engineering problems including the blockage of storm drainage channels and downstream sedimentation. Projects disturbing more than one acre are required to obtain a National Pollution Distribution Elimination System (NPDES) General Construction Activity Storm Water Permit. The project construction contractor would be required to file a Notice of Intent under the State's NPDES General Construction Permit (CAS00002). This permit requires that a Storm Water Pollutant Prevention Plan (SWPPP) be prepared specifying Best Management Practices (BMPs) to reduce erosion to disturbed soils. The project would also be subject to the City's Land Grading and Clearing Ordinance (Hayward Municipal Code Sec. 10-8.10). This ordinance establishes administrative procedures, minimum standards for review, and implementation and enforcement procedures for controlling erosion, sedimentation, disruption of existing drainage and related environmental damage caused by land clearing activities, grading, filling, and land excavation. The ordinance applies to all projects that would disturb 300 cubic yards or more of soil. Therefore, impacts to drainage and runoff due to construction are considered less than significant.

Project Operations

The project would connect to the City of Hayward and Alameda County Flood Control storm water system and comply with City standards requiring that all new projects do not result in new or increased flooding impacts on adjoining parcels on upstream and downstream areas. The *1997 Specific Plan EIR* proposed Mitigation Measure 3.2.2-5 to address these impacts. In addition, the proposed project is required to comply with the new San Francisco Bay Area Regional Water Quality Control Board numeric standards for

post-construction. The following measure would ensure that non-point source pollution would not enter the stormwater runoff after construction.

Mitigation Measure

MM VIII-1 At least 85 to 90 percent of annual average stormwater runoff from the site would be treated per the standards in the 2003 California Stormwater Best Management Practice New Development and Redevelopment Handbook. Drainage from all paved surfaces, including streets, parking lots, driveways, and roofs shall be routed either through swales, buffer strips, or sand filters or treated with a filtering system prior to discharge to the storm drain system. Landscaping shall be designed to effect some treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. The specifications of the StormFilter © by Stormwater Management, Inc. adequately meets the requirements of the Regional Water Quality Control Board (RWQCB) for a "box-in-ground" filtering system. A filtering system with similar specifications may be used based on the size of the project site, if landscape-based stormwater treatment measures cannot effect the required level of treatment. Roofs shall be designed with down-spouting into landscaped areas, bubbleups, or trenches. Driveways shall be curbed into landscaping so runoff drains first into the landscaping. Permeable pavers and pavement shall be utilized to construct the development, where appropriate. Any one or combination of these suggested RWQCB treatment measures will potentially meet RWQCB requirements for controlling runoff.

Timing/Implementation: *During all final design and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Department of Public Works Dept.*

Implementation of Mitigation Measure VIII-1 will reduce the project's stormwater runoff impacts to less than significant levels.

g-h) ***Less Than Significant Impact.*** The project site is located in FEMA Zone C (areas determined to be located above the 100-year floodplain). The City of Hayward received from FEMA a Letter of Map Revision Determination Document (LOMAR) **(Appendix B)** on April 11, 2005 which describes a change in status for the project from Zone AH (within the 100 year floodplain) to Zone C (outside the floodplain). Therefore, less than significant impacts would occur.

i-j) ***Less than Significant Impact.*** A major hazard associated with earthquakes is water inundation resulting from dam failure or a tsunami. Although no dams or open reservoirs are sited within the city limits, potential inundation may occur downstream as the result of failure of reservoirs or dams upstream of the city. Inundation from South Reservoir in Castro Valley would affect a few small areas at the northeastern edge of the city. Inundation from Del Valle and other dams along Alameda Creek would be limited to the salt evaporation ponds south of Old Alameda Creek in the shoreline area. Tsunamis are a series of waves typically produced by an offshore earthquake, volcanic eruption, or

landslide. A tsunami with a wave height of 20 feet at the Golden Gate Bridge, which is likely to occur approximately every 200 years, would result in a runup of less than 10 feet above sea level if it reached Hayward. Areas most likely to be inundated by tsunami runup within the city are marshlands, tidal flats, and former bay margin lands that are now artificially filled but still at sea level.

The project site averages about +2.4 feet to about +5.3 feet above mean sea level (msl) on the Oliver East parcel. The Plan Area is composed of tidal flats, separated by levees from the Bay (formerly used for the production of sodium salt by the evaporation of sea water), and their adjacent alluvial margins, formerly used for water-fowl habitat. The embankment of the Union Pacific rail line, which forms the western boundary of the Eden Shores East project site, rises from +8.3 feet to +12.5 feet msl. The Grading Master Plan proposed in the *1997 Plan EIR* would raise the ground surface several feet, but would retain it's essentially flat character. A grading plan has not yet been prepared for the Legacy Eden Shores project, but would be required during the final design plan approval phase. Implementation of the Grading Master Plan for the proposed project site would be required to reduce potential inundation by tsunami to a less than significant level.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

a) ***No impact.*** The project site is located in southwest Hayward adjacent to San Francisco Bay. The City of Hayward encompasses approximately 61 square miles of area, exclusive of area within San Francisco Bay. The City of Hayward comprises a portion of a band of urban development situated between San Francisco Bay and ridgelines of the East Bay extending from the City of Richmond in the north to the City of Fremont in the south, a distance of about 50 miles. The City has undertaken formal planning processes for all neighborhoods except the Industrial Corridor. The proposed project would provide for the creation of 174 residential homes, a regional retail center and neighborhood serving commercial within an area of the Industrial Corridor that is currently zoned Light Manufacturing, Commercial and Business Park.

The Industrial Corridor has also been the subject of particular attention during the last General Plan update. The General Plan recognized that the emergence of the new economy is shaping the changes taking place in the industrial areas around the western and southern edges of the city. A significant portion of the land already devoted to industrial uses may see a change to more intensive land uses based on current development trends. An extended discussion of these points is provided in the General Plan update. A Market Analysis was prepared for three alternative land uses for this part of the Plan Area. The results of this study concluded that Alternative 2, the proposed project analyzed in this Initial Study, would be reasonably absorbed sooner than the other alternatives, within a 10 to 15 year horizon, with much of the space within five years (KMA 2007).

The Specific Plan Land Use Designations proposed the Oliver East parcel to be divided into Light Manufacturing, Business Park and Commercial with an open space buffer to the south. The Oliver West parcel to the west was to consist of 578 5,000 square foot single-family lots. That site is currently the Standard Pacific Homes development, which is now built out. As none of the Specific Plan Area is built with the exception of the new Eden Shores (Standard Pacific Homes) community and the Sports Park (**see Figure 3**), the conversion of the Legacy Eden Shores portion of Oliver East would not divide an already

established neighborhood. Therefore, the project would not divide an established community and no impact would occur.

b) ***No Impact.*** Development of the proposed Legacy Eden Shores project, in conjunction with approval of the proposed amendments to the General Plan, would not conflict with current General Plan policies and Specific Plan objectives for the project area that are designed to avoid or mitigate environmental impacts.

The project is proposing a rezone from BP to Medium Density Residential (RM) in the western portion of the northern parcel (Parcel 1) and western portion of the southern parcel (Parcel 3) (approximately 14.6 acres). A rezone is also proposed from BP to Regional Retail (CR) for the southern portion of the middle parcel (15.50 acres) and from BP to Neighborhood Commercial (CN) for the eastern portion of Parcel 3 (6.25 acres). The project is also requesting a Specific Plan Amendment for the same area currently designated Business Park to Medium Density Residential (14.6), and Retail and Office Commercial (21.75 acres). The proposed rezone, General Plan and Specific Plan Amendment would require approval by the Hayward City Council for development of 174 residential units and the expanded commercial areas. The project proposes residential units, regional and neighborhood serving retail and accompanying environmental safeguards so as to be consistent with the environmental policies of the General Plan and Specific Plan. Therefore, no impacts would occur.

c) ***No Impact.*** The project would not conflict with an applicable habitat conservation plan or natural community conservation plan. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES Would the project:				
a) 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?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒

a, b) ***No Impact.*** The state requires local jurisdictions to protect areas with economically significant mineral resources from incompatible development. In an effort to maintain availability of sand, gravel and crushed rock for long-term construction needs, the California Division of Mines and Geology (under the authority of the Surface Mining and Reclamation Act of 1975) has classified aggregate mineral zones through the state. The La Vista Quarry, located in the unincorporated area east of Mission Boulevard and Tennyson Road was recently approved for development and operations have ceased at the site. Therefore, no impacts to mineral resources would occur as a result of the proposed Legacy Eden Shores project.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
I. NOISE Would the project result in:				
a) 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?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) 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?	☐	☐	☒	☐
f) 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?	☐	☐	☒	☐

Noise impacts were the subject of a comprehensive noise analysis for the 1997 Plan EIR. In addition, Charles M. Salter Associates, Inc. conducted an updated noise analysis for the proposed Eden Shores East project in February, April and July 2005, and Ambient Air Quality and Noise Consulting prepared a noise study for the proposed Legacy Eden Shores project. The complete 2005 and 2007 reports are attached as **Appendix C**.

EXISTING NOISE ENVIRONMENT

Noise-Sensitive Land Uses

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other noise-sensitive land uses include hospitals, convalescent facilities, parks, hotels, churches, libraries, and other uses where low interior noise levels are essential.

Noise-sensitive land uses located near the project site consist of residential land uses, the nearest of which are located adjacent to and to the south and west of the project site.

Ambient Noise Levels

The existing noise environment in the vicinity of the proposed project site is influenced primarily by vehicle traffic area roadways, occasional aircraft overflights, as well as trains traveling along the Union Pacific Railroad (UPRR), which extends along the western boundary of the project site.

To document the existing noise environment, ambient noise surveys were conducted by AMBIENT Air Quality & Noise Consulting at various locations in the project area. Noise measurements were conducted using a Larson Davis model 820 sound-level meter placed at a height of approximately 4.5 feet above the ground surface. Based on the measurements conducted, average daytime noise levels (in dBA L_{eq}) in the project area generally range from the upper 50's to the upper 60's, dependent primarily on distance from nearby roadways. Aircraft overflights resulted in intermittent noise levels of approximately 65 to 70 dBA L_{max}. One train pass-by was observed during the noise survey, consisting of a single engine and 25 cars traveling southbound at a speed of approximately 30 mph. The train pass-by resulted in intermittent noise levels of approximately 103.4 dBA L_{max} (107.8 SEL) at approximately 55 feet from the track centerline. Measurement locations, observed noise sources, and corresponding measured noise levels are summarized in **Table XI.1.**

TABLE XI.1
AMBIENT NOISE LEVELS

Monitoring Location		Noise Sources Noted During Measurement	Noise Level		
			Leq	Lmax	Lmin
Eden Park Place, Western Boundary (55 feet from UPRR)	12:00-12:15 pm	Vehicle traffic and construction activities at ~125 yards, occasional aircraft over-flights.	58.5	70.2	47.2
Mt. Eden Sports Park, Western Boundary (55 feet from UPRR)	12:17 pm	Train pass-by along UPRR with horn sounding	NM	103.4	NM
Eden Park Place, Eastern Boundary (25 feet from Hesperian Boulevard)	13:00-13:15 pm	Vehicle traffic on Hesperian Boulevard	68.6	75.2	60.7
Marina Drive, Northern Boundary (25 feet from Industrial Boulevard)	13:45-14:00 pm	Vehicle traffic on Industrial Boulevard	67.1	73.8	58.2

Note: Measurements conducted on April 18, 2007 using a Larson Davis model 820 sound level meter positioned at a height of 4.5 feet.
Source: Ambient Air and Noise Consulting 2007

DISCUSSION

a) ***Less than Significant with Mitigation Incorporated.*** A noise measurement survey was performed on September 26, 1995 to identify existing noise sources on and around the Specific Plan area. Noise from transportation-related sources was the most influential. The project study area includes two major regional transportation facilities, State Route 92 approximately one mile north of the Specific Plan area and a Union Pacific Railroad line, which now forms the western boundary of the Eden Shores East project site. A few major local streets, specifically Arden Road, Industrial Boulevard, and Hesperian Boulevard, approach the site's northern and eastern boundaries. New roads have been

constructed since 1995 within the Specific Plan area. These include Eden Shores Boulevard, which runs east-west and Marina Drive, which runs north-south connecting Industrial Boulevard with Eden Park Place. These roads were constructed to implement the Specific Plan, connecting to the Eden Shores community.

On November 13-14, 2003, Charles Salter Associates conducted a continuous 24-hour noise measurement to document the current noise environment. The monitor was located near the southwest property line of the Eden Shores East site at the end of Eden Park Place, and near the grade-crossing of the UPRC train line. Several days of acoustical measurements were also conducted during the last three years at the other side of the train tracks for the Eden Shores project for Standard Pacific Homes of Northern California. For Eden Shores, additional measurements were conducted to determine the L_{max} and the noise spectrum data from the train engines only. At the northern part of the project site and away from the grade-crossing, the contribution from train horns becomes less significant. The purpose of documenting the noise spectrum data was to determine the low frequency noise contribution of the train engines for the exterior window/wall calculations.

On April 18, 2007, Ambient Consulting conducted an ambient noise survey, the results of which are included in Table XI.1 above.

Short-term Increases in Ambient Noise Levels

Construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., demolition/land clearing, grading and excavation, erection) of construction. Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Although noise ranges were found to be similar for all construction phases, the grading phase tends to involve the most equipment resulting in slightly higher average-hourly noise levels. Typical noise levels for individual pieces of construction equipment are summarized in **Table 5**. As depicted, individual equipment noise levels typically range from approximately 75 to 91 dBA at 50 feet, without noise control. With noise control, individual equipment noise levels typically range from approximately 75 to 80 dBA at 50 feet. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower settings. Depending on the activities performed and equipment usage requirements, combined average-hourly noise levels at construction sites typically range from approximately 65 to 89 dBA L_{eq} at 50 feet (EPA 1971).

TABLE XI.2
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS

Type of Equipment	Noise Level in dBA at 50 feet	
	Without Feasible Noise Control	With Feasible Noise Control [1]
Dozer or Tractor	80	75
Excavator	88	80
Compactor	82	75
Front-end Loader	79	75

Type of Equipment	Noise Level in dBA at 50 feet	
	Without Feasible Noise Control	With Feasible Noise Control [1]
Backhoe	85	75
Grader	85	75
Crane	83	75
Generator	78	75
Truck	91	75

1. Feasible noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds.
Sources: U.S. Environmental Protection Agency 1971; Federal Transit Administration 2006

Assuming a maximum construction noise level of 89 dBA L_{eq} and an average attenuation rate of 6 dBA per doubling of distance from the source, construction activities located within approximately 1,500 feet of noise-sensitive receptors could reach levels of approximately 60 dBA. Activities occurring during the more noise-sensitive evening and nighttime hours may result in increased levels of annoyance and potential sleep disruption to occupants of nearby residential dwellings. Construction-generated noise would, therefore, be considered to result in a ***potentially significant*** short-term noise impact to nearby noise-sensitive land uses.

Construction noise would be temporary, but the following mitigation measure from the *1997 Specific Plan EIR* would reduce this impact to less than significant:

"Mitigation Measure 3.2.5-1

- *To minimize construction noise impacts upon nearby residents, limit construction hours to between 7:00 AM and 7:00 PM on weekdays. Any work outside of these hours including work on weekends, should require a special permit from the City of Hayward based on compelling reasons and compatibility with nearby residences.*

- *Construction equipment should be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise.*

- *The contractor shall located stationary noise sources away from residents in developed areas and require use of acoustic shielding with such equipment when feasible and appropriate."*

The following mitigation measure would serve to clarify Mitigation Measure 3.2.5-1:

MM XI-1 Short-term Increases in Ambient Noise Levels

In addition to 1997 EIR *Mitigation Measure 3.2.5-1* the following shall apply during construction activities:

- Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer's recommendations,

- When not in use, motorized construction equipment shall not be left idling.

Timing/Implementation: *During all grading and construction phases of the project by construction contractor.*

Enforcement/Monitoring: *City of Hayward Department Planning Division.*

Implementation of Mitigation Measure **MM XI-1** will reduce the project's construction noise impacts to less than significant levels.

Implementation of the above mitigation measures would prohibit noise-generating activities from occurring during the more noise-sensitive periods of the day and would reduce short-term noise impacts to nearby residential land uses. With mitigation, this impact would be considered ***less-than-significant***.

Long-term Increases in Ambient Noise Levels – Stationary Sources

The proposed project includes a mix of various land uses, including residential and retail uses. Noise levels typically associated with these land uses and associated noise impacts are discussed separately below.

Residential Land Uses

Noise from proposed residential dwellings would expose other nearby residences (both existing and project related) to minor increases in ambient noise levels. Noise typically associated with such development includes lawn and garden equipment and amplified music. Activities associated with these land uses would result in only minor increases in ambient noise levels, primarily during the day and evening hours and less frequently at night, as perceived at the closest residential receptors. Residential-use air conditioning units would also be a source of noise. Depending on size and type, noise levels generated by central air conditioning units can reach levels of approximately 60 to 70 dBA L_{eq} at 3 feet from the source (EPA 1971, AMBIENT 2007). Depending on operational characteristics and distance between proposed residential dwellings, noise levels associated with air conditioning units located in side-yard areas could potentially exceed the City's interior noise standard of 45 dBA L_{dn} at neighboring residences. As a result, stationary-source noise levels associated with proposed residential land uses would be considered potentially significant.

Commercial Uses

The proposed project includes development of commercial retail land uses; however, the specific types of retail uses to be developed have not yet been determined. Noise sources commonly associated with retail land uses include occasional parking lot activities (e.g., opening and closing of vehicle doors, people talking), loading dock operations (e.g., use of forklifts, hydraulic lifts), trash compactors, and air compressors. Noise commonly associated with commercial land uses, such as idling trucks, vehicle backup alarms, decompression of trailer truck brakes, forklifts, and other material loading and unloading activities, can generate intermittent noise levels of approximately 90 dBA

L_{max} at 10 feet. Average-hourly noise levels associated with commercial sources typically range from approximately 60-70 dBA L_{eq} at 50 feet.

Depending on the specific activities conducted, hours of operation, and distance to the nearest residential land use, predicted noise levels could potentially exceed the City's exterior and interior noise standards of 60 dBA and 45 dBA L_{dn}, respectively. As a result, stationary-source noise generated by the proposed commercial land uses would be considered ***potentially significant***.

MM XI.2 Long-term Increases in Ambient Noise Levels – Stationary Sources

Proposed Residential Land Uses

- Residential dwellings shall be equipped with central heating and air conditioning systems to allow closure of windows during inclement weather conditions.
- Exterior air-conditioning units located within 10 feet of adjacent residential dwellings shall be low-noise rated.
- Exterior air-conditioning units located within 10 feet of adjacent residential dwellings shall be shielded from direct line-of-sight to adjacent residential dwellings. Shielding may include (but is not limited to) the use of wood fencing, provided no visible air gaps are detectable between individual panels. Use of tongue-and-grove or over-lapping panels is recommended.
- Residential dwellings shall be insulated to exceed Title 24 standards.

Proposed Commercial Land Uses

- Material deliveries, landscape maintenance, waste-collection activities, and the operation of noise-generating stationary equipment, such as solid-waste compactors and compressors (excluding HVAC units), shall be limited to between the hours of 7:00 a.m. and 10:00 p.m.

- The City shall require an acoustical assessment to be performed prior to construction of proposed commercial land uses. Where acoustical analysis determines that stationary source noise levels would exceed applicable City noise standards, the City shall require the implementation of noise attenuation measures sufficient to achieve compliance with City noise standards at nearby noise-sensitive land uses. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, or equipment enclosures.

Timing/Implementation: *Implement prior to approval of Tentative Map.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

Implementation of the above mitigation measures would substantially reduce predicted noise levels at nearby sensitive receptors. Major noise-generating activities associated with proposed land uses, including operation of the proposed commercial land uses would be limited to the less noise-sensitive

daytime hours. As a result, increased levels of annoyance and potential sleep disruption to occupant of nearby existing or proposed residential dwellings would be substantially reduced. With mitigation, this impact would be considered ***less than significant***.

Long-term Increases in Ambient Noise Levels – Traffic

Implementation of the proposed land uses would result in increased traffic volumes on some area roadways. The increase in traffic volumes resulting from implementation of the proposed project would, therefore, contribute to predicted increases in traffic noise levels. The FHWA roadway noise prediction model was used to predict traffic noise levels along affected roadways for existing traffic conditions, with and without implementation of the proposed project. Modeling was conducted for roadways anticipated to be primarily affected by the proposed project, based on predicted traffic volumes obtained from the traffic analysis prepared for this project. The project's contribution to traffic noise levels along area roadways was determined by comparing the predicted noise levels with and without project-generated traffic. Predicted traffic noise levels are summarized in **Table XI.3**. For comparison purposes, predicted traffic noise levels associated with the proposed project were also compared to the existing approved land use designations (Alternative 1), based on trip-generation data obtained from the traffic analysis prepared for this project. A comparison of traffic noise levels associated with currently approved (Alternative 1) and proposed land use designations are summarized in **Table XI.4.**

In comparison to existing conditions (**Table XI.3**), implementation of the proposed project would result in predicted increases of approximately 1 dBA, or less, along Industrial and Hesperian Boulevards. Predicted increases in traffic noise levels would primarily occur along Eden Shores Boulevard and Marina Drive, which would range from approximately 7 to 9 dBA, respectively. However, assuming a minimum setback of 60 feet from the centerline of the near travel lane, increases in predicted traffic noise levels would not be predicted to exceed the City's "normally acceptable" noise level of 60 dBA L_{dn} at adjacent residential land uses. Current City zoning requirements and Development Guideline standards call for a minimum 50 foot front yard setback, which together with a parking lane, would approximate 60 feet. If the final design plans submitted by the applicant request a variation from City standards, or proposed group or private open space areas are within the 50-foot setback, then the applicant would be required to provide a new noise analysis to ensure that the City's "normally acceptable" noise level for residential use is still met. The developer would also be required to provide acceptable mitigation, if necessary, to meet the 60 dBA L_{dn} at adjacent residential land uses.

MM XI.3 Long-term Increases in Ambient Noise Levels – Traffic

In the event that the final design plans request a change from the current 50 foot front yard setback requirement, or proposed group or private open space areas are within the 50-foot setback, the developer shall retain a noise consultant to prepare a new noise analysis to ensure that residential uses would still not be affected by traffic noise levels in excess of 60 dBA L_{dn}. If the City's "normally acceptable" noise level would be exceeded with a decreased setback, then appropriate mitigation must be included to ensure no impact would occur.

Timing/Implementation: *Implement prior to approval of Tentative Map.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

In addition, in comparison to existing approved land use designations (**Table XI.4**), implementation of the proposed project would result in a slight reduction in traffic noise level along area roadways, with the exception of Eden Shores Boulevard, which would be projected to increase by approximately 0.13 dBA. Because implementation of the proposed project would not result in a substantial increase in traffic noise levels that would be anticipated to exceed the City's noise standards, this impact would be considered ***less than significant***.

TABLE XI.3
PREDICTED TRAFFIC NOISE LEVELS
EXISTING CONDITIONS

Roadway Segment	CNEL (dBA) at 60 feet from Near-Travel-Lane Centerline		
	Existing	Existing Plus Project	Predicted Increase
Industrial Boulevard, West of Hesperian Boulevard	66.07	67.43	1.36
Hesperian Boulevard, North of Tripaldi Way	68.03	69.09	1.06
Hesperian Boulevard, South of Tripaldi Way	68.35	69.02	0.67
Eden Shores Boulevard, West of Hesperian Boulevard	52.48	59.20	6.72
Marina Drive, South of Industrial Boulevard	49.68	58.76	9.08

Note: Traffic noise levels were predicted using the FHWA Traffic Noise Model based on data obtained from the traffic analysis prepared for this project. Predicted noise levels do not take into account shielding provided by intervening structures or existing noise barriers.
Source: Ambient 2007

TABLE XI.4
PREDICTED TRAFFIC NOISE LEVELS
CURRENTLY APPROVED VS. PROPOSED LAND USE DESIGNATIONS

Roadway Segment	CNEL (dBA) at 60 feet from Near-Travel-Lane Centerline		
	Currently Approved	Proposed	Difference
Industrial Boulevard, West of Hesperian Boulevard	68.12	67.43	-0.69
Hesperian Boulevard, North of Tripaldi Way	69.26	69.09	-0.17
Hesperian Boulevard, South of Tripaldi Way	69.22	69.02	-0.20
Eden Shores, West of Hesperian Boulevard	59.07	59.20	0.13

Marina Drive, South of Industrial Boulevard	59.49	58.76	-0.73

Note: Traffic noise levels were predicted using the FHWA Traffic Noise Model based on data obtained from the traffic analysis prepared for this project. Predicted noise levels do not take into account shielding provided by intervening structures or existing noise barriers.
Source: Ambient 2007

Compatibility of Proposed Land Uses with Predicted Noise Environmental

As noted earlier in this report, the City's "normally acceptable" noise compatibility criteria is 60 dBA L_{dn}/CNEL for residential land uses and 70 dBA L_{dn}/CNEL for commercial land uses. Noise levels are considered "conditionally acceptable" at levels up to 70 dBA L_{dn}/CNEL for residential land uses and 77.5 dBA L_{dn}/CNEL for commercial land uses, provided exterior noise reduction measures have been incorporated and interior noise levels have been reduced to within acceptable levels (see Table 2 in Appendix I).

Commercial Land Uses

Based on the conceptual site plan for the proposed project, commercial land uses would be generally located within the eastern and northern-most portions of the project site, along Industrial and Hesperian boulevards. Ambient noise levels at these locations are primarily influenced by vehicle traffic on Industrial and Hesperian boulevards. Based on the traffic noise modeling conducted, traffic noise levels at proposed commercial land uses would not exceed the City's "normally acceptable" exterior noise compatibility criteria of 70 dBA L_{dn}/CNEL. Assuming an average exterior-to-interior noise reduction of 25 dBA, which is typical for newer commercial development, predicted interior noise levels would be approximately 45 dBA, or less. Predicted traffic noise levels at proposed commercial development would not be anticipated to exceed the City's noise criteria for land use compatibility.

Residential Land Uses

As currently proposed, residential land uses would be located within the western-most portion of the project site. Ambient noise levels at the proposed residential land uses would be primarily affected by vehicles traveling along area roadways, as well as trains traveling along the existing UPRR.

Based on the traffic noise modeling conducted, predicted noise levels along Marina Drive and Eden Shores Boulevard would be approximately 59 dBA Ldn/CNEL, or less, at 60 feet from the nearest travel lane. Predicted traffic noise levels at proposed residential land uses would not be anticipated to exceed the City's "normally acceptable" noise standard of 60 dBA L_{dn}/CNEL.

The existing UPRR is currently used for freight transport. The number of trains traveling along the UPRR varies from day to day, but typically averages fewer than 5 trains per day. An analysis of train noise levels was recently completed for the adjacent *Eden Shores East* development project in February 2005. Based on the analysis conducted, the predicted train noise levels measured approximately 74 dBA L_{dn} at 50 feet from the track. Based on this noise level, the predicted traffic noise levels would decrease to approximately 65 dBA L_{dn} at 240 feet from the track and to approximately 60 dBA L_{dn} at approximately 650 feet. Maximum intermittent noise levels associated with the sounding of train horns ranged from 86 to 89 dB at a distance of 160 feet (City of Hayward 2005).

Based on these noise levels, predicted train noise levels at proposed residential dwellings located within approximately 650 feet of the UPRR track could exceed the City's "normally acceptable" exterior noise standard of 60 dBA L_{dn}/CNEL, as well as the City's interior noise standard of 50 dBA L_{max}. As a result, exposure to exterior noise levels would be considered ***potentially significant***, subject to mitigation.

MM XI.4 Compatibility of Proposed Land Uses with Predicted Noise Environment

Mitigation measures to be implemented will be dependent on site design and structural features/characteristics incorporated in the building design and construction. The City shall require an acoustical assessment to be performed prior to construction of proposed residential land uses to evaluate exposure to train noise. Where acoustical analysis determines that train noise levels would exceed applicable City noise standards, the City shall require the implementation of noise attenuation measures sufficient to achieve compliance with City noise standards at affected residential land uses. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, or equipment enclosures. As an alternative to the preparation of an acoustical assessment to analyze train noise impacts, the following mitigation measures, derived from the recently prepared acoustical assessment prepared for the adjacent *Eden Shores East* development project (City of Hayward 2005), shall be implemented:

- All residential dwellings shall be constructed of a 3-coat stucco system.
- All potential homebuyer shall be provided a written disclosure statement describing the current train activity and expected noise levels.
- A sound barrier shall be constructed along the northwest boundary of the project site to a minimum height of 18 feet above the elevation of the train track.
- Residential dwellings located within approximately 160 feet of the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Both the staggered-stud and resilient channel exterior wall assembly should consist of two layers of gypsum board on the interior side. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-42 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-42 rating or use STC-31 storm doors over standard gasketed entry doors. Exterior doors on non-exposed facades shall achieve a minimum STC-37 rating.
- Residential dwellings located between 160 to 240 feet from the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-40 rating on non-exposed facades. Exterior

doors on exposed facades shall achieve a minimum STC-42 rating or use STC-31 storm doors over standard gasketed entry doors. Exterior doors on non-exposed facades shall achieve a minimum STC-34 rating.

- Residential dwellings located between 240 to 480 feet from the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-37 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-40 rating. Exterior doors on non-exposed facades shall achieve a minimum STC-32 rating.

- Residential dwellings located in excess of 480 feet from the UPRR track shall be constructed with windows that achieve a minimum STC-38 rating along facades located within line-of-sight of the UPRR and a minimum STC-29 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-29 rating.

Timing/Implementation: *Implement prior to approval of Tentative Map.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

b) ***Less than Significant.*** Ground vibration spreads through the ground and diminishes in strength with distance. The effects of ground vibration can vary from no perceptible effects at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely result in structural damage. For most structures, a peak particle velocity (ppv) threshold of 0.5 inches per second (in/sec) is sufficient to avoid structure damage, with the exception of fragile historic structures or ruins. At the request of the U.S. Environmental Protection Agency the Committee of Hearing, Bio-Acoustics, and Bio-Mechanics (CHABA) have developed guidelines for safe vibration limits for ruins and ancient and/or historic buildings. For fragile structures, the CHABA recommends a maximum limit of 0.25 inches per second ppv. For the protection of fragile, historic, and residential structures, the California Department of Transportation recommends a more conservative threshold of 0.2 inches per second ppv. This same threshold would represent the level at which vibrations would be potentially annoying to people in buildings (FTA 2006, Caltrans 2002).

Increases in groundborne vibration levels attributable to the proposed project would be primarily associated with short-term construction-related activities. Groundborne vibration levels associated with construction equipment are summarized in **Table XI.5**. Construction activities associated with the proposed improvements would likely require the use of various tractors, trucks, and jackhammers. The use of pile drivers is not anticipated to be required for this project. Based on the vibration levels presented in **Table XI.5**, ground vibration generated by construction equipment would be less than 0.09 inches per second ppv at 25 feet. Predicted vibration levels at the nearest onsite and offsite structures would, therefore, not be anticipated to exceed even the most

conservative threshold of 0.2 inches per second ppv. Short-term groundborne vibration impacts would be considered ***less than significant***. No mitigation is required.

TABLE XI.5
REPRESENTATIVE VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Peak Particle Velocity at 25 Feet (in/sec ppv)
Large Tractors	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Tractors	0.003

Source: Caltrans 1996, FTA 2006

Long-term operational activities associated with the proposed project would not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration. However, as previously discussed, the proposed project site is located adjacent to the UPRR. Trains can generate relatively high levels of ground vibration levels, depending on various factors, including train speed and weight, condition of track, and amount of ballast used to support the track. Based on measurements conducted by the California Department of Transportation (Caltrans) the highest ground vibration measurement obtained for a freight train measured 9.1 mm/s (0.36 in/sec) at 3 m (10 ft). This measurement, screening criteria have been developed to estimate maximum anticipated ground vibration levels at varying distances from a railroad track. Based on the Caltrans screening criteria, architectural damage due to train-generated ground vibration may occur for structures located within approximately 25 feet of the track centerline. Ground vibration levels may be perceptible and may begin to annoy occupants of buildings located within approximately 66 feet of the tract centerline (Caltrans 2002). The proposed project site is not located within 66 feet of the existing UPRR track. As a result, this impact is considered **less than significant**.

b) ***Less than Significant with Mitigation Incorporated.*** Implementation of the proposed project may result in potentially significant increases in ambient noise levels at nearby existing and/or proposed noise-sensitive land uses associated with long-term operational activities. Refer to "Impact A" in this section for additional discussion of long-term noise levels attributable to the proposed project and recommended mitigation measures. As discussed in "Impact A" this impact would be considered ***potentially significant***, subject to mitigation. With implementation of the proposed mitigation measures, as noted in "Impact A", this impact would be considered ***less than significant.***

d) ***Less than Significant with Mitigation Incorporated.*** Implementation of the proposed project may result in potentially significant increases in ambient noise levels at nearby existing and/or proposed noise-sensitive land uses associated with short-term construction activities. Refer to "Impact A" of this section for additional discussion and recommended mitigation measures. As discussed in "Impact A" this impact would be considered ***potentially significant***, subject to mitigation. With implementation of proposed mitigation measures, as noted in "Impact A", this impact would be considered ***less than significant.***

e-f) ***No Impact.*** The nearest airport/airstrip is the Hayward Executive Airport located on Hesperian Boulevard north of Winton Avenue. The Airport is approximately 3.0 miles north of the project site. Flyovers by commercial and private aircraft are very frequent (i.e., one every few minutes) at mid-day, but their noise impact is moderated by their relatively high altitude. Average noise levels are in the low to mid-40s dBA on portions of the site distant from the north and east boundaries. Away from the rail line, aircraft are responsible; however, for most of the site's short-duration peak noise events, some as high as the mid-70s dBA during a plane's closest approach. The mitigations described above for train noise impact would reduce any impact from the airplane noise (**MM XI-4**). Therefore, the proposed project would not be adversely affected by excessive noise from airplanes and no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING Would the project:				
a) 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)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

a-c) ***Less Than Significant Impact.*** The proposed project would add up to 174 new housing units to the City's housing stock in addition to expanded commercial uses. The project site is in an area that is surrounded by industrial uses with some commercial uses interspersed and would represent an extension of existing residential development. The Hayward General Plan provides a table of population forecasts projected by the Association of Bay Area Governments (ABAG). Population for the City of Hayward in 2006 was estimated to be 148,000 with 3.17 persons per household.[2] The Eden Shores East project under construction was assumed to have an increase of 827 persons from 279 new homes or 0.6% of the current estimated population. For the proposed Legacy Eden Shores project, there would be an increase of 552 persons or 0.4% of the population. While the Legacy Eden Shores project would generate a new resident population in the area, the extent of the new population would not be considered substantial and is consistent with growth assumed in the General Plan. No existing residents or housing would be displaced to accommodate the proposed project. Therefore, impacts to population and housing are considered less than significant.

[2] Based on ABAG Projections 2005, extrapolated to 2006 from KMA 2007 Market Review.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES 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. Would the project result in:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

DISCUSSION

Contact was made with local service providers during the preparation of this Mitigated Negative Declaration. Responses were received from the Hayward Fire Department, the Hayward Police Department, and the Hayward Area Recreation and Park District.

a) ***Less Than Significant Impact.*** The Hayward Fire Department provides service to the entire city and to the Fairview Fire Protection District on a contract basis. There are seven fire stations strategically located throughout the city, while two more stations are located in the Fairview area. The nearest fire station to the project site is Loyola Station #4 at the intersection of Loyola at Panama.

In the City of Hayward four units are dispatched to all single-family dwelling fires with five units responding to apartment houses and commercial and industrial fires. The Hayward Fire Department requires special protection measures in buildings that are difficult to access such as high-rise or larger industrial complexes. Measures include fire sprinklers and smoke detectors, above and beyond what may be required elsewhere. The City has upgraded its Emergency Response System by installing traffic signal priority for Fire Department vehicles. The system has improved response times.

The average response time is five minutes and in 2006 the Department received 13,800 calls for service. The Department representative contacted regarding the proposed Legacy Eden Shores project noted that no new funding is required for this project (Bueno 2007). However, a concern was mentioned regarding access to units from private streets within the development. Mitigation Measure 3.1.7-2 in the 1997 Plan EIR addressed secondary and emergency vehicle access as follows:

- Secondary and emergency vehicles access will meet all Department requirements including being 20 feet in width and unobstructed, having an all weather driving surface, contain Department approved automatic electronic

opening devices if gates are used, and roundabout accessible. In addition, all public roadways, emergency vehicle access points and cul-de-sacs must meet Departmental turning radius standards with vertical clearances a minimum of 13 feet 6 inches.

- Fire hydrants will be spaced a maximum of 400 feet apart. Hydrants will provide 1500 gallons per minute at 20 pounds per square inch. The buried water supply pipe must meet NFPA 24 Chapter 8 "Private Fire Service Mains and their Appurtenances" and all other applicable codes, standards and ordinances of the City of Hayward.

The proposed project would have a less than significant impact to fire services as the final design plan would be required to meet all HFD standards for access requirements. Public streets would allow unrestricted access to units. The responsibility for enforcing restrictions on private streets where there is no parking allowed on either side of the street would be with the Homeowner's Association.

b) ***Less than Significant Impact.*** The City of Hayward currently has one police station located at 300 West Winton Avenue that serves the entire City. The police department is located approximately five miles from the project site. Staffing levels in 2006 were 191 sworn personnel and 153 civilian personnel. This staffing level translates into a ratio of 1.3 sworn personnel to 1,000 population based on an estimated service population of 148,100 persons. The City's service standard is 1.5 police officers per 1,000 resident population. Calls for service in residential areas have decreased to 2.22 per household (from 2.65 in 2004) and include parking violations, domestic disputes and burglaries (Weldon 2007). The department estimates that it responded to 103,917 calls in 2006. The Hayward Police Department provides a Patrol Division including K-9s, and Investigation Division including a Youth and Family Services Bureau, a Community Policing Division including Crime Prevention, a Traffic Bureau and an Operations Support Division.

The proposed project site is located within police beat "E," the beat with the largest geographic area (13.6 miles) in the City, covering the area south of Depot Road and west of I-880. The proposed project site is in the extreme southwest portion of Beat "E," which is currently vacant, underdeveloped land and, therefore, generates a lower ratio of calls for service in relation to land area than other areas in the City.

The Hayward Police Department's assessment of project impacts for the 1997 Plan EIR to beat "E" are based on increases in residential population and day-time work force, the size of the beat, and the outlying nature of the project. Based on the Department's assessment in 1997 and its service standard of 1.5 officers per 1,000 population, serving the proposed project would require adding one more officers to Beat "E", based on an estimated 551 new residents. The increase in staffing would also require safety equipment for the additional officers and additional patrol vehicles.

The impact described above would increase through 2010 as the Specific Plan project develops. The fiscal analysis indicates that adequate General Fund revenues would be generated by the Specific Plan to fund the needed police services. Mitigation Measure 3.1.7-1 in the 1997 Plan EIR noted that project plans should be submitted to the Police Department for comment on feasible design measures that would increase safety and reduce the demand for police services and iterated that the City would fund the Department's staffing needs as demands for police services increased with buildout of

the Specific Plan area. Implementation of this measure for the Legacy Eden Shores project would result in a less than significant impact on police services.

In a discussion with Lt. Weldon of the Hayward Police Dept. on April 18, 2007, it was noted that the 18 to 20 foot sound wall in Parcel 1 would also act as a protective measure for residents of the project, discouraging intruders and vagrants. To decrease the incidence of graffiti vandalism, it is recommended that vines are planted on the sound wall along with an irrigation system.

c) ***Less than Significant Impact.*** The project site is located within the Hayward Unified School District. The addition of up to 128 new multi-family and 46 new single-family dwellings would increase demand for classrooms by generating additional students. Based on the updated generation factors provided by HUSD, the proposed project would add 17 elementary school (K-6) students, 5 middle school (7-8 grade) students, and 6 high school (9-12) students (HUSD 2005). Mechanisms in place to offset impacts to schools include developer school impact fees and property tax revenue. The project is required to pay statutory development fees. Currently the fee for residential space is $2.62 per square foot regardless of housing type, required prior to the issuance of building permits for residential construction.

In October 2006, HUSD completed a District-Wide Facilities Master Plan (Plan). As noted in the Plan, on May 24, 2006, the Board of Education made the decision to close six elementary schools and on September 26, 2006, HUSD began formally realigning boundaries in order to implement the consolidation and closure of these six elementary sites. The Plan also identified declining enrollment patterns at all levels. This decline is forecasted to continue then stabilize in the next three to five years. As described in the latest Fee Impact Analysis Study for HUSD, the average student yield per household throughout the District is currently estimated at 0.300 for single-family households and 0.113 for multi-family households (HUSD 2005).

Currently, the nearest elementary school is Lorin Eden located at 27790 Portsmouth Avenue, approximately one mile from the project site. The nearest middle school (7-8) is Anthony Ochoa at 2121 Depot Road and Mt. Eden is the closest high school to the project site located at 27035 Whitman Road.

In the past, a financial shortfall, or "impact" to the provision of schools could have been used to delay or deny development proposals by a local agency such as a City. However, this authority has been removed from cities by state law. Sections 65996 and 65997 of the California Planning and Zoning Laws address the "exclusive provisions for mitigating impacts on schools."

- Section 65996(b) of the California Planning and Zoning Law Government Code. "The provisions of this chapter are hereby deemed to provide full and complete school facilities mitigation and notwithstanding Section 65858, or Division 13 (commencing with Section 21000) of the Public Resources Code, or any other provision of state or local law, a state or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property or any change in governmental organization or reorganization, as defined in Section 56021 or 56073, on the basis that school facilities are inadequate."

Currently, to provide new schools the District is dependent upon state funding as well as developer fee funds and local bond funds. The Legacy Eden Shores project would be required to pay statutory development fees prior to the issuance of building permits for the proposed residential construction at the current rate of $2.62 per square foot. Therefore, with the payment of statutory fees, and Section 65996 of the Planning and Zoning Laws, the impacts are anticipated to be less than significant.

Based on a 2005 Fee Impact Analysis Study, the HUSD Board of Directors voted to approve a reduction in the District's Level 2 fee from $3.25 per square foot of residential space to $2.62. The reduction to $2.62 is based on a lower student generation factor and fewer housing starts in the City.

d) ***Less than Significant Impact.*** The project site is located within the boundaries of the Hayward Area Recreation and Park District. HARD is an independent special district providing park and recreation services for over 250,000 residents living within a 64 square-mile area, which includes the City of Hayward, Castro Valley, San Lorenzo and the unincorporated Ashland, Cherryland and Fairview districts. State law requires each new residential development to dedicate land for park facilities or pay an in-lieu fee to cover the cost of acquiring park land elsewhere. The District uses a dedication formula of 5-acres per 1,000 persons for community parks and 1.5 acres per 1,000 population for local parks. The proposed project would add up to 174 new residential units and generate approximately 552 residents (based on a generation factor of 3.17 persons per household from the 2000 Census) (City of Hayward, 2002). The amount of in-lieu fees that are currently collected by the City are $11,953 for single-family units and $11,395 for multi-family units.

Two new public parks have been constructed in the Specific Plan area (5-acre community park and 25-acre sports park). The prior conditions of approval for the original Eden Shores project required, in addition to land dedication for the Sports Park, expenditures of $3 million for its construction. HARD has expressed concern that there may be a need for "overflow" parking from event users of the Sports Park necessitating extra parking spaces nearby. The City has agreed to work closely with HARD to ensure that such spaces are provided, including the provision of on street spaces along Eden Park Place. Although it should be noted that the Specific Plan for the area calls for the potential "joint use" of parking in the Business Park, which could serve Sports Park events in the evening or on weekends, the change from business park to a combination of residential and retail would result in minimal opportunity for joint parking. The Legacy Eden Shores applicant does propose to maximize the pedestrian/bicycle connection from the north end of the project site (Parcel 1) to the south end (Parcel 3), as much as feasible. As a result, the project would satisfy park requirements through the payment of in-lieu fees and enhancement of walking trails within the project area. Therefore, impacts to parks and recreation are considered less than significant.

e) ***Less than Significant Impact.*** The project would not create any significant impacts to the service levels of any other public service providers.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. RECREATION Would the project:				
a) 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?	☐	☒	☐	☐
b) 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?	☐	☒	☐	☐

a-b) ***Less than Significant with Mitigation Incorporated.*** The proposed project, with inclusion of the residential development, could increase use of existing recreational facilities. Based on the current population generation factor of 3.17 persons per household (City of Hayward, 2002), the construction of up to 174 new single-family residential units would result in approximately 552 new residents (174 x 3.17 = 552). The City's Subdivision regulations require the dedication of land or in-lieu fees equivalent to 5.0 acres per 1,000 population ([552/1,000] x 5) or 2.76 acres of parkland (Hayward Municipal Code, Article 16, Section 10-16.30). Payment of in-lieu fees typically satisfies the remaining requirement. Therefore, an in-lieu fee would be required per the Quimby Act.

Although the project would increase the use of existing neighborhood and regional parks, or other recreational facilities, it would not result in substantial physical deterioration of the facility or undue acceleration of same. However, HARD has expressed concern that maintenance is needed for the 25-acre community park that serves the existing Eden Shores community and would be taxed by the additional 551 potential new residents.

MM XIV-1 The applicant shall establish a Landscape Lighting and Assessment District (LLD) or other funding mechanism prior to selling the 174 residential units to individual homeowners that would be prorated to the fair share of the project. Implementation of the LLD would provide a portion of funds necessary to maintain the community-oriented facilities in the Sports Park and mitigate the impacts of increased usage of the Sports Park as a neighborhood facility.

Timing/Implementation: *Prior to the sale of the residential lots.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

Implementation of Mitigation Measure **MM XIV-1** will reduce the project's recreation impacts to less than significant levels.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
V. TRANSPORTATION/TRAFFIC Would the project:				
a) 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)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐
c) 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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

EXISTING SETTING

The study area for the purposes of the traffic analysis is bounded by State Route 92 to the north, Whipple Road to the south, Eden Landing Road to the west and Interstate 880 to the east. The proposed project site itself is bounded by Industrial Boulevard to the north, Eden Park Place to the south, the Union Pacific (UPRR) Railroad Line to the west and Hesperian Boulevard to the east. The site location and surrounding roadway network are illustrated in **Figure XV.1.**

DISCUSSION

The impact analysis for this section is based on the *South of Route 92 Specific Plan Amendment Traffic Impact Analysis* prepared by DKS Associates**.** The entire DKS report is available for review at the City's Planning Division. The DKS report provides an evaluation of traffic and transportation issues related to the proposed revisions to the South of Route 92 Specific Plan, originally adopted in 1998. For the purpose of this analysis, a cumulative condition analysis was not conducted as that condition was analyzed in the General Plan as part of the previous South of Route 92 Specific Plan Amendment (City of Hayward 2002).

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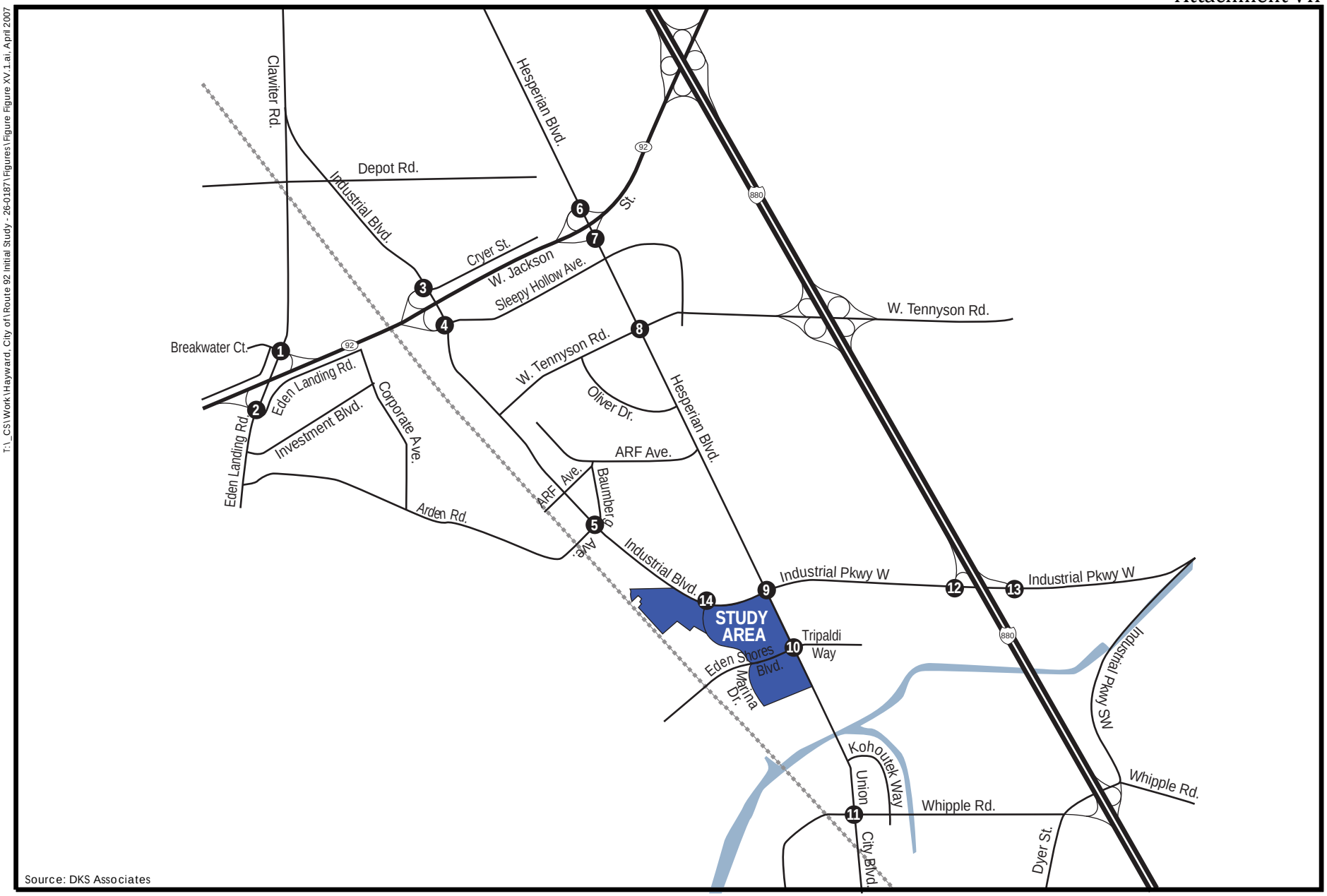

Figure XV.1

Project Site Location and Roadway Network

PMC

a) ***Less than Significant.*** The project site is located at the southwestern portion of the intersection of Industrial Boulevard and Hesperian Boulevard. In the *1997 Plan EIR* the 2010 Level of Service for this intersection was forecast at "F" for this intersection. The intersection at Industrial and Hesperian Blvd. operated at LOS E in 2001 according to the *Hayward General Plan* (City of Hayward, 2002). The deterioration in level of service is based on project local growth as well as regional growth according the General Plan EIR (Hayward 2001). The General Plan Update includes comprehensive policies and strategies that address regional and local traffic through a coordinated effort to provide roadway improvements, transit service, encourage bicycling and walking, carpooling, traffic calming (speed humps, barriers, etc.) and land use strategies to reduce private auto use. The Trip Generation Analysis for Alternative 2 (Legacy Eden Shores project) determined that the proposed project would generate 22,499 daily new trips, including 1,281 AM peak hour trips (945 in, 335 out) and 1,919 PM peak hour trips (711 in, 1,208 out).[3] This estimate is conservative, as no internal trip capture was considered for the proposed project. This would be a net decrease of 449 trips in the PM peak hour, as compared to the trip generation projected for Alternative 1, which is based on uses allowed by the current land use designation and zoning in the 1997 Specific Plan and amended in 2005. When accounting for the change in methodology in calculating the trip generation for office uses in 2007 versus that used in the 1997 Specific Plan EIR, and as amended in the 2005 Specific Plan Mitigated Negative Declaration, (square feet vs. acres), the trip generation is comparable. Since there would be a net decrease in PM peak hour trips for Alternative 2 as compared to Alternative 1, the project impact is less than significant.

Construction

During construction activities truck traffic would increase in the surrounding area roadways. Project construction is expected to be completed in approximately five to ten years. This construction impact is based on the build out of all the uses in the Specific Plan area. Because there would be no additional importation of fill for the Legacy Eden Shores project, construction truck trips would be limited to the importation of building materials and equipment.

Operations

The change in land use from the project approved in the *1997 Specific Plan EIR* is the addition of 128 single-family homes and 46 townhomes, replacement of 1,028 ksf of office (business park) with 396 ksf of office and the replacement of 33 ksf of retail with 227 ksf retail plus 16 fs for a fueling station.[4]

Since the business park designation has a higher trip generation rate than does residential or commercial land use, the number of trips generated by the revised project is similar to or less than the project as originally approved in the *1997 Plan EIR*. As noted above, the units of measure used in the 1997 Specific Plan EIR and the 2005 Mitigated Negative Declaration to calculate trip generation was different than used in the 2007 Specific Plan amendment. However, the baseline assumptions relative to FAR were nearly identical. For example, although the trip generation in the 1997 Specific Plan and 2005 Mitigated Negative Declaration is based on acres, the Specific Plan actually assumed 1,415,960 of office square footage, which is approximately a FAR of about 0.6. If

[3] Trip rates are from Trip Generation, Institute of Transportation Engineers, Seventh Edition, 2003.

[4] ksf = 1,000 square feet, fs = fueling station

the PM peak hour trip generation rate of 1.55 trips per 1,000 square feet from the ITE Seventh Edition is applied to this square footage, then 2,194 trips would be generated by the office use. Alternative 1 in the 2007 traffic study results in 2,076 trips, which is comparable (see **Table XV.1**). The 2007 DKS traffic study shows 2,368 total PM peak hour trips attributed to Alternative 1 (the existing General Plan), while the proposed project (Alternative 2) shows 1,919 PM peak hour trips.

Consequently, the proposed project would not result in a substantial increase in vehicle trips, or in congestion along Hesperian Boulevard. Therefore, project-related traffic impacts are less than significant.

b) ***Less than Significant with Mitigation Incorporated.*** According to the City of Hayward intersection level of service standards, all study intersections would continue to operate at acceptable levels of service for the project condition, with the exception of the intersection of Hesperian Boulevard & Industrial Boulevard and the intersection of Industrial Boulevard & I-880 NB ramps.

Intersection operational levels of service along with their associated critical and average delays are summarized in **Table XV.2.** Detailed level of service analysis sheets for the project condition, are included in **Appendix C**.

The addition of project-generated trips would cause the intersection of Hesperian Boulevard & Industrial to degrade from LOS D to LOS F during the AM peak hour. Similarly, the intersection of Industrial Boulevard & I-880 NB ramps would degrade from LOS C to LOS F during the PM peak hour. This would be considered a ***potentially significant impact.***

The following mitigation measures would reduce the impacts at both intersections to LOS E. Appendix F in the DKS report includes the mitigation layout at the intersection of Hesperian Blvd. & Industrial Blvd.

MM XV.1 **Hesperian Boulevard & Industrial Boulevard Intersection**

To achieve acceptable levels of service under the Project Condition, the intersection requires an additional left-turn lane in the westbound direction. This improvement will convert the Hesperian Blvd. & Industrial Blvd. Intersection to: two left-turn lanes, two through lanes and one exclusive right-turn lane in the westbound direction. Adding a left-turn lane would require modification to the east, west and south legs of the intersection as well as modification to the traffic signal. These improvements can be accommodated within the existing right-of-way. This improvement will mitigate the impacts to LOS E or better for each of the alternatives during the peak hours.

MM XV.2 **Industrial Boulevard and I-880 NB Ramps Intersection**

Each of the three alternatives also results in the unsignalized left turn from Industrial Parkway to the NB I-880 ramps deteriorating to LOS F in the PM peak hour. This impact is significant and is essentially the result of homeward bound business park workers accessing northbound I-880 since the trip distribution assumption for this type of use indicates that 42% of those office workers will use this ramp to return home. The analysis indicates that constructing a left turn only signal on Industrial Parkway will achieve LOS D under Alternative 1 and LOS B under Alternatives 2 and 3. Hayward's General Plan circulation

Element also identifies the need for an improvement to the Industrial Parkway Interchange to add a northbound I-880 off-ramp, which would include a signal, at this location. Timing of this mitigation should be coordinated with any other improvements at this interchange, and because there is uncertainty in when that might occur, it should also be tied to the amount of development in each alternative at which the intersection would expect to be at LOS E. It would be reasonable to tie this to office development: for Alternative 1 that would be 25%, for Alternative 2 it would be 50% and for Alternative 3 it would be 20%. Coordination will also be needed with Caltrans since, even today, the metering lights at the northbound ramps impact through movements on Industrial.

Timing/Implementation:	*Implement per above schedule.*
Enforcement/Monitoring:	*City of Hayward Public Works Department. Caltrans for MM XV.2.*

TABLE XV.1
PROPOSED PROJECT TRIP GENERATION

Land Use	Size	Units	Daily (ADT)		A.M. Peak Hour						P.M. Peak Hour					
					Trip Rate	Percentage		Trips		Total Trips	Trip Rate	Percentage		Trips		Total Trips
			Trip Rate	Total Trips		In	Out	In	Out			In	Out	In	Out	
Parcel 1																
Residential[5]	100	d.u.	5.86	586	0.44	17%	83%	7	37	44	0.52	67%	33%	35	17	52
Office[1]	105.5	ksf	11.01	1,173	1.55	88%	12%	145	20	165	1.49	17%	83%	27	132	159
Subtotal				**1,759**				**153**	**53**	**209**				**62**	**149**	**211**
Parcel 2A																
Office[1]	396	ksf	11.01	4,360	1.55	88%	12%	540	74	614	1.49	17%	83%	100	490	590
Subtotal				**4,360**				**540**	**74**	**614**				**100**	**490**	**590**
Parcel 2B																
Shopping Center[2]	160	ksf	--	9,218	--	61%	39%	127	81	207	--	48%	52%	261	283	544
Gasoline/Service Station[3]	16	fs	168.6	1,349	5.07	50%	50%	41	41	81	8.04	50%	50%	64	64	129
Subtotal				**10,567**				**167**	**121**	**289**				**326**	**347**	**673**
Parcel 3																
Shopping Center[2]	66.5	ksf	--	5,209	--	61%	39%	75	48	123	--	48%	52%	185	200	385
Residential[4]	46	d.u.	9.57	440	0.75	25%	75%	9	26	35	1.01	63%	37%	29	17	46
Residential[5]	28	d.u.	5.86	164	0.44	88%	12%	2	10	12	0.52	67%	33%	10	5	15
Subtotal				**5,813**				**85**	**84**	**169**				**224**	**222**	**446**
TOTAL				**22,499**				**945**	**335**	**1,281**				**711**	**1,208**	**1,919**

Source: Institute of Transportation Engineers – Trip Generation Manual, 7th Edition, 2003.
Notes:
d.u.: dwelling units ksf: 1,000 square feet ADT: Average Daily Traffic

[1] General Office Building, ITE Land Use Code No. 710.
[2] Shopping Center, ITE Land Use Code No. 820. Rate varies with building size according to the following equations.
Weekday: Ln (T) = 0.65 Ln (X) + 5.83 AM Peak Hour: Ln (T) = 0.60 Ln (X) + 2.29 PM Peak Hour: Ln (T) = 0.66 Ln (X) + 3.40; where X=size in 1,000 square feet gross leasable area and T=number of peak hour trips.
[3] Gasoline/Service Station
[4] Single-Family Residential, ITE Land Use Code No. 210.
[5] Townhomes Residential, ITE Land Use Code No. 230.

TABLE XV.2
PROJECT CONDITION LEVEL OF SERVICE SUMMARY

#	Intersection	Traffic Control	A.M.		P.M.	
			Avg. Delay	LOS	Avg. Delay	LOS
1.	Clawiter Rd & SR92 WB Ramps	Signal	23.8	C	23.2	C
2.	Clawiter Rd - Eden Landing Rd & SR92 EB Ramps	AWSC [1]	22.2	C	24.5	C
3.	Industrial Blvd & SR92 WB Ramps	Signal	23.6	C	13.1	B
4.	Industrial Blvd & SR92 EB Ramps	Signal	14.2	B	39.5	D
5.	Industrial Blvd & Baumberg Ave	Signal	13.1	B	16.7	C
6.	Hesperian Blvd & SR92 WB Ramps	Signal	6.9	B	2.4	A
7.	Hesperian Blvd & SR92 EB Ramps	Signal	8.1	B	27.8	D
8.	Hesperian Blvd & Tennyson Rd	Signal	21.3	C	24.5	C
9.	Hesperian Blvd & Industrial Blvd	Signal	31.3	D	>60	**F**
10.	Hesperian Blvd & Tripaldi Way	Signal	14.8	B	18.6	C
11.	Union City Blvd & Whipple Rd	Signal	25.5	D	24.6	C
12.	Industrial Blvd & I-880 SB Ramps	Signal	11.7	B	15.1	C
13.	Industrial Blvd & I-880 NB Ramps	TWSC [2]	17.8	C	>50	**F**
14.	Industrial Blvd & Marina Dr	Signal	10.0	B	9.4	B

Source: Highway Capacity Manual
Notes: Avg. Delay: Average Delay in seconds per vehicle for signalized and All-way stop controlled intersections; for two-way stop controlled intersections, delay is based on worst approach delay. LOS: Level of Service
[1] AWSC : All-way stop controlled intersection [2] TWSC : Two-way stop controlled intersection

c) ***No Impact.*** The proposed project is located approximately 3.0 miles south of the Hayward Executive Airport and is not located within any of the airport's safety zones. Furthermore, the project does not propose any structures which would interfere with air traffic patterns. Therefore, no impacts to air traffic patterns would occur.

d) ***No Impact.*** The project would serve as a residential, business and commercial development in an area currently developed with residential, commercial and light industrial uses. The circulation plan for the project includes four accesses along Marina Drive for the single-family homes and two accesses for the town homes, one along Industrial Boulevard, one along Marina Drive and one off Eden Shores Boulevard. (see **Figure 6**). These access locations are consistent with City street standards. The interior roads would be private entrances without gates.

Project access and circulation were analyzed in the DKS report for the proposed project to assess operational issues. The site plan indicates access from Marina Drive (signalized intersection), Eden Shores Blvd-Tripaldi Way (signalized intersection) and several project driveways with right-in, right-out access only along Industrial Boulevard and Hesperian Boulevard. Full access driveways are provided along Marina Drive.

Sight distance is expected to be adequate; there are no roadway configurations, natural hills, or sharp horizontal curves in the roadway that are anticipated to impede with vehicular sight distance. The overall project internal design appears acceptable. No adverse internal circulation impacts related to the proposed project are anticipated.

e) ***No Impact.*** The project has been designed with four access points on the east side of Marina Drive off Eden Shores Boulevard, and three access points off Hesperian Blvd. In addition, the circulation plan proposes connections to the public roadways via private streets throughout the three parcels. Therefore, emergency access is considered adequate and no impact would occur.

f) ***No Impact.*** For the residential project, parking would be provided on each individual lot (driveways) and visitor parking would be provided per City standards. Each residential unit would have a two-car garage. The parking analysis for the other units conducted by DKS consisted of an evaluation of the proposed parking supply and comparison to the requirements of the City of Hayward. Based on the proposed site plan, the project would provide 3,306 on-site parking spaces. **Table XV.3** summarizes the City's parking standards requirement and the parking spaces provided for the proposed project.

TABLE XV.3
PARKING ANALYSIS SUMMARY

Land Use	Size	Parking Required		Parking Spaces Provided	Surplus/Shortfall
		Parking Standards	No. of Spaces		
Office	502,500 sq. ft	4:1,000 sq. ft	2,010	2,025	+15
Retail	33,000 sq. ft	5:1,000 sq. ft	1,133	1,281	+148
Total			3,143	3,306	+163

Notes: Maximum Floor Area Ratio (F.A.R) Area allowed for office is 0.6. FAR provided is 0.32 (106,500 sq. ft) and 0.73 (396,000 sq. ft). For retail, the Maximum Floor Area Ratio (F.A.R) Area allowed is 0.3.

With the provision of 3,306 parking spaces, the proposed development project would satisfy the City of Hayward Parking Space Standards, which requires a total of 3,143 spaces. Therefore, no impacts to parking would occur.

g) ***No Impact.*** The project does not conflict with adopted policies, plans or programs supporting alternative transportation. The proposed project includes a pedestrian walkway starting from the northern parcel (Parcel 1) and connecting to Marina Drive to the pedestrian access via overpass to the Bay Trail. School bus stops are planned within the Plan area. The Specific Plan as amended provides bikeways between the residential, office, retail, the Bay Trail, and the Sports Park. Bicycle and pedestrian travelways are currently in place. Therefore, no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐
c) 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?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

a) ***Less than Significant Impact.*** The estimated amount of dry weather wastewater flow that would be generated from 174 homes is 261 units x an estimated 270 gallons per day (gpd) or 46,980 gpd, with a peak flow of four times this amount of 187,920 gallons per day. The proposed project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. The project would be serviced by City of Hayward, which has sufficient wastewater treatment capacity for this development. The City's Water Pollution Control Facility (WPCF), aka Wastewater Treatment Plan, provides for the treatment and disposal of the combined domestic and industrial/commercial wastewater from the City of Hayward. The WPCF currently treats dry weather flow of between 13 and 14 million gallons per day (MGD), and has a rated capacity of 16.5 MGD. This project would add a less than significant amount of sewage to the existing amount treated by the WPCF.

b) ***Less than Significant Impact.*** The proposed project would be served by the City of Hayward Utilities Division, which owns and operates the local water distribution and supplies water to the City and some unincorporated areas of the County. In 1962, the Hayward City Council entered into an agreement with San Francisco for a perpetual supply of all the Hetch Hetchy water that the City will ever require. Over the years, the

City has increased its physical capacity to deliver water from the Hetch Hetchy system to approximately 32 million gallons per day (mgd) through the construction of new reservoirs and distribution lines. The City has also developed emergency interties with the Alameda County Water District and other systems. The present system can provide enough water to serve existing needs and still have reserve capacity for protection against fire, peak demands, and other emergencies.

Water Supply

The 1997 EIR states that at buildout, the Specific Plan would use approximately 0.25 mgd, an increase of 1.5 percent of the use of 17 mgd at that time. With the proposed change of the Oliver East parcel from business park to residential, commercial and business use that usage would increase by 7,295 gallons per day[5]. The average demand for water for the City in 2000 was 18.8 mgd. The 1997 EIR proposed that the City of Hayward would need to construct the pump capacity required to boost distribution capacity to meet project-related water demand. As a condition of providing water services, the City would recover the project's proportional share of the cost of developing the required pumping capacity. The project's demand would not trigger the need for new water treatment facilities. Infrastructure would be extended to the site from existing lines located within Marina Boulevard and Eden Shores Boulevard. Extensions would occur within previously disturbed areas and would not result in any new environmental effects. Pursuant to the requirements of utilities service provision, the project sponsor would be responsible for on-site and its fair share of off-site water supply improvements required to serve the proposed project, and would pay the City water service hookup fees. Therefore, impacts to water treatment would be less than significant.

Wastewater Treatment

Wastewater infrastructure for the proposed project would be placed within roadway right-of-ways throughout the project site. The City of Hayward sewage system serves almost all of the developed areas within the city as well as limited portions of adjacent unincorporated areas. The City has separate sewage and storm water collection systems. The City's Water Pollution Control Facility, WPCF (aka, Wastewater Treatment Plant) provides for the treatment and disposal of the combined domestic and industrial/commercial wastewater from the City of Hayward. The WPCF currently treats dry weather flows of between 13 and 14 MGD, and has a rated capacity of 16.5 MGD. Additional improvements may be implemented with the construction of the Russell City Energy Center, which would add tertiary treatment to the WPCF in order to produce highly purified water for use by the Energy Center.

The proposed Specific Plan project would generate approximately 0.21 mgd of wastewater, an increase of 1.8 percent over the 1997 flow of 12 mgd average dry weather flow.[6] The wastewater generation for the proposed Legacy Eden Shores East project would also be 6,566 gpd higher than the projected 21,114 gpd estimated in 1997 due to the proposed change in land use from business park to residential. Pursuant to the requirements of utilities service provision, the project sponsor would be responsible for on-site and its fair share of off-site water supply improvements required to serve the

[5] Factor for office and retail is 1,200 gpad x number of acres, for residential the factor is 1,250 gpad x number of acres. An increase of 50 gpad for residential x 14.59 acres = 7,295 gpad.

[6] Wastewater flow is estimated from water use at 90% of water use for all but parks, which are estimated at 60% of water use due to the larger water use anticipated for irrigation.

proposed project, and would pay the City water service hookup fees. The 1997 Specific Plan EIR included Mitigation Measure 3.1.6-1, which stated that *as a condition of providing water services, the City would recover the project's proportional share of the cost of developing the required pumping capacity, and that amount would be equal to the share of the project's use of the increased capacity*. Since the project would follow the previous mitigation requirement and would not require new facilities that in turn would have significant environmental impacts, the impact would be less than significant.

The wastewater from the Oliver East/Eden Shores East area flows via gravity to a sewer lift station located north of the emergency vehicle access road, adjacent to the Union Pacific Railroad right-of-way. From that point, a 6" sanitary sewer force main conveys the wastewater to the existing 39" gravity sewer line near Danti Court. The force main parallels the UPRR track alignment then crosses under the railroad and flood control channel at the Arden Road extension. The wastewater from the Oliver West/Eden Shores residential area runs via gravity flow to a low point near the emergency road access road, and then flows under the railroad and flood control channels to connect with the lift station at Eden Shores East. This pump station has already been constructed on the east side of the UPRR tracks and has sufficient capacity to serve the Legacy Eden Shores East project based on discussion with the Deputy Director of Public Works for the City (Ameri 2007).

As the number of units proposed by the Legacy project would not substantially add to flows anticipated under the general plan and no expansions in treatment capacity would be necessary, impacts to wastewater treatment are considered less than significant.

c) ***Less than Significant Impact.*** Storm water drainage for the project would be provided by the City of Hayward Public Works Department and Alameda Flood Control and Water Conservation District.

d) ***Less than Significant Impact.*** The Hayward General Plan EIR included an analysis of General Plan future water demands. The water system is generally in good condition and does not pose significant concerns in terms of accommodating additional development (Hayward GP 2002). Local storage and distribution facilities are adequate, with needed improvements programmed in the Capital Improvement Program. Currently Hayward has sufficient water supplies available to serve the project from existing entitlements and resources. Therefore, impacts to water supply are considered less than significant.

f, g) ***Less than Significant Impact.*** The project would generate solid waste and would contribute incrementally to the loss of landfill capacity in the County. Solid waste from the project site would be disposed of at the Altamont Landfill, which is owned and operated by Waste Management Inc., and is located in the eastern part of the County. The other two disposal sites located in Alameda County are the Vasco Road Landfill and the Tri-Cities Landfill. The combined disposal capacity of the three facilities is 28 years (2033), based on the rate of fill in 2000. The Altamont Landfill has sufficient disposal capacity to handle the current and estimated waste stream until at least year 2024 for the land uses associated with the General Plan. The City may obtain service from landfill facilities outside the County to fulfill its solid waste disposal needs. Recycling efforts will also help in prolonging the disposal capacity. The City operates a solid waste management system that has been effective in reducing the amount of solid waste

almost 50 percent. The project would comply with federal, state and local statutes and regulations related to solid waste.

The 1997 Specific Plan EIR noted that at buildout, the proposed Plan land uses would generate approximately 4,614 tons per year of solid waste. According to the solid waste generation factors in the EIR, residential use would generate slightly more tonnage annually than light industrial (174 dwelling units at 15 lbs./du/day X 365 = 432 tons/yr). Mitigation measure 3.1.7-4 in the EIR stipulated that implementation of existing recycling programs at the City and County level would be expected to reduce this potential impact to less than significant. The City has recently implemented an expanded residential recycling program whereby Waste Management of Alameda County contracts to provide weekly collection of recyclables.

In addition, the proposed project would implement Mitigation Measure 3.1.7-5 from the 1997 EIR, which stipulates that construction materials would be recycled and the measures used documented through a Construction Waste Recycling Plan. That Plan must be submitted to the City Department of Public Works prior to issuance of the grading and building permits.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.				
XVII. MANDATORY FINDINGS OF SIGNIFICANCE Does the project:				
a) 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) 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) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) ***Less than Significant Impact with Mitigation Incorporated.*** The proposed project would not degrade the quality of the environment; result in an adverse impact on fish, wildlife, or plant species including special status species, or prehistoric or historic cultural resources because project components would be constructed on areas that are not identified as sensitive.

Prehistoric or historic cultural resources would not be adversely affected because no archeological or historic resources are known to exist in the project areas. Further, project implementation includes compliance with appropriate procedures for avoiding or preserving artifacts or human remains if they are discovered during project excavation.

b) ***Less than Significant Impact with Mitigation Incorporated.*** The project is not consistent with the City's General Plan and Specific Plan and would require the approval of a General Plan and Specific Plan Amendment, rezone and change to the Plan Area Development Guidelines. The project applicant has applied to the City for amendments, a rezone and a change in the Development Guidelines. Implementation of the proposed project is contingent on approval of these applications.

A summary of expected cumulative impacts as discussed in this Initial Study follows:

- Aesthetics and Light and Glare: Limited cumulative impacts on aesthetic resources would occur, including incremental increases in light and glare. However, since the site is located in a substantially urbanized and industrial area with existing sources of light and glare, cumulative impacts are considered less than significant.

- Agriculture: No prime farmland is identified on the latest DOC map.

- Air Quality: Cumulative air quality impacts are addressed in III.c.

- Biological Resources: Impacts of the project on biological impacts are limited and would not be considered cumulative.

- Cultural Resources: Potential impacts to cultural resources are not considered cumulative.

- Geology and Soil: Potential impacts to geology and soils are not considered cumulative.

- Hazards: Potential impacts to hazards are not considered cumulative.

- Water and Hydrology: No cumulative drainage and stormwater runoff impacts are anticipated, since development of the project area was considered in the 1997 Plan EIR. In addition, the project would comply with all state and local requirements for construction and post-construction water quality impacts. Approval and implementation of the proposed project would increase the amount of pervious surfaces within the area.

- Land Use: Potential impacts to land use are not considered cumulative.

- Noise: The project area is an established industrial corridor. As such, the proposed residential project would not contribute cumulative impacts to noise.

- Public Services: Potential impacts to public services are not considered cumulative.

- Recreation: Potential impacts to public services are not considered cumulative.

- Traffic: The net increase in trip generation for AM and PM peak hours from the proposed residential project would be less than anticipated for the buildout of the *1997 South of Route 92 Specific Plan*. Therefore, cumulative impacts are not considered cumulatively significant.

- Utilities/Service Systems: Potential impacts to utilities/service systems are not considered cumulative.

c) ***Less than Significant Impact with Mitigation Incorporated.*** The proposed project may temporarily impact the area by construction-related air quality, noise and traffic impacts. There may also be permanent noise impacts due to the location of the project near the Union Pacific Railroad. However, by implementing basic regulatory requirements and project conditions of approval, as well as specific construction air quality mitigation measure MM III-1 and noise mitigation measures MM XI.1 through MM XI.3 these impacts

would be effectively mitigated to a less than significant level. The proposed project would not have any direct or indirect adverse impacts on humans because construction effects would be temporary and have been reduced or eliminated by environmental control measures incorporated into the project design. Potential post-construction effects to water quality due to stormwater runoff would be mitigated by MM VIII.1. In addition, impact to recreation facilities would be mitigated by MM XIV.1. Impacts to traffic would be mitigated by MM XV.1 and MM XV.2. Therefore, the proposed project would not have any direct or indirect adverse impacts on humans.

REFERENCES

All documents referenced in this Initial Study that are not included as appendices, such as the 1997 Specific Plan EIR, City of Hayward General Plan, DKS Traffic Impact Analysis and the Eden Shores East Draft IS/MND, are located in the City of Hayward Planning Division.

1. Ambient Air Quality and Noise Consulting. 2007.

2. Ameri, Alex. Deputy Director of Public Works. City of Hayward Public Works Department. Personal communication with Janet Palma via phone. May 3, 2007.

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APPENDICES

APPENDIX A – BIOLOGICAL RESOURCES ASSESSMENT

SOUTH OF ROUTE 92 SPECIFIC PLAN AMENDMENT STUDY

Biological Resources Assessment

Prepared for

City of Hayward, California

Prepared by

10461 Old Placerville Road, Suite 100
Sacramento, CA 95827

February 1, 2007

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FIGURES

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INTRODUCTION

The purpose of this Biological Resource Assessment (BRA) is to describe on-site vegetation communities, identify potentially jurisdictional waters of the U.S., and assess the potential for occurrence of special-status plant and wildlife species within the project study area (PSA).

The PSA is approximately 60 acres and is located in the City of Hayward, in Alameda County, California. The PSA is located southwest of the intersection at Industrial Boulevard and Hesperian Boulevard (**Figure 1**). The PSA consists of three sections separated by newly paved and landscaped roads, Marina Drive and Eden Shores Boulevard. The sections within the PSA are labeled A, B and C on **Figure 1** for reference in this document.

The original South of Route 92 Specific Plan (Specific Plan) provided for a mixed-use development consisting of business park, high-quality single-family housing, light manufacturing, open space, and a 25-acre sports park on 333.5 acres. The sports park and the Eden Shores residential community have been completed. The PSA includes the remaining property known as Oliver East (excluding the Bridgeport and Crossings projects). Proposed amendments to the Specific Plan would allow for consideration of a greater variety of land uses in the undeveloped portions of the Specific Plan area.

METHODS

PRE-SURVEY INVESTIGATION

Prior to the a field survey, a background information search for previously documented occurrences of special-status species within the project vicinity was conducted utilizing the California Natural Diversity Data Base (CNDDB) (CDFG 2006a), CNDDB QuickViewer for unprocessed data (CDFG 2006b), U.S. Fish and Wildlife Service (USFWS 2006), and California Native Plant Society (CNPS 2006 online species list) for the Newark United States Geologic Survey (USGS) 7.5-minute quadrangle and surrounding quadrangles (Milpitas, Mountain View, Palo Alto, Dublin, Niles, Hayward, San Leandro, and Redwood Point) (**Appendix A**). The results of these database searches are summarized in **Table 1**, located at the end of this report. **Figure 2** illustrates the location of previously recorded special-status species occurrences within 1 mile of the PSA.

FIELD SURVEY

A pedestrian reconnaissance-level survey was conducted by PMC biologist, Angela Calderaro, on December 10, 2006. Weather during the site visit was overcast with slight showers at a cool 48 degrees Fahrenheit. Vegetation communities and other biological resources were noted on an aerial photograph of the PSA and were digitized using ArcGIS software (**Figure 3**). Plant and wildlife species observed within and adjacent to the PSA were noted and are included in **Appendix B**. Photographs were taken along the PSA boundaries and at points of interest (**Appendix C**).

RESULTS

PROJECT STUDY AREA

The PSA consists of undeveloped subdivided parcels, traversed by local streets with significant landscaping, and includes interspersed urban, shrub, grassland, and wetland habitats. The PSA is predominantly flat with an elevation between approximately 7 to 9 feet (2.1 to 2.7 meters) above mean sea level, with Section A at the highest elevation.

The section of the PSA to the west of Marina Drive (Section A) is relatively undisturbed, consisting of mostly shrub habitat and a fenced off wetland area. Although Section A has been disturbed in the past, the area is relatively undisturbed in comparison with sections B and C. Section B and Section C include areas that have been subdivided and the area is traversed by local streets with significant landscaping, ground disturbance, and evidence of recent construction activities.

Sections B and C of the PSA consist of highly disturbed land which was formerly disced (as noted by the corrugated dirt formation) with low-growing invasive vegetation. The dominant vegetation includes biennial sagewort (*Artemisia biennis*) which is native to Europe and highly invasive. The three sections of the PSA are separated by paved and landscaped roads. In addition, dirt roads dissect each individual section of the PSA. There are piles of concrete, large 55-gallon drums, and other debris, in addition to places where gravel had been laid in the two eastern sections of the PSA (sections B and C). Section C also contains a temporary commercial building (a sales office for the housing units which are currently under construction) off of Eden Shores Boulevard with a small parking lot.

HABITAT TYPES

Built Environment

The built environment within the PSA includes the temporary commercial building and adjacent parking lot within Section C of the PSA (**Figure 3**). Around the parking structure and building is ornamental vegetation. Wildlife that generally occurs in urban or built environment typically include introduced species adapted to human habitation, including house sparrow (*Passer domesticus*), house finch (*Carpodacus mexicanus*), mourning dove *(Zenaida macroura)*, house mouse (*Mus musculus*) and Norway rat (*Rattus norvegicus*). **Appendix C** lists all the species observed within the PSA.

Ruderal

Ruderal (roadside) communities include areas of disturbances such as along roadsides, parking lots, and areas adjacent to the built environment. Ruderal communities also include areas that have been recently disturbed by human activity such as ground disturbance. Within the PSA, the ruderal environment includes the areas within sections B and C except for the areas designated as possible wetland areas and built environment (**Figure 3**).

Ruderal habitat is subject to ongoing or past human disturbances. Ruderal habitat in these disturbed areas supports a diverse weedy flora. Plant species observed within these areas include biennial sagewort, yellow star thistle (*Centaurea solstitialis*), field bindweed (*Convolvulus arvensis*), prickly sow thistle (*Sonchus asper*), pampas grass (*Cortaderia selloana*), and Mediterranean hoary-mustard (*Hirschfeldia incana*).

A distinguishing characteristic of ruderal habitats is the mixture of native and exotic plant species. Native and introduced wildlife species that are tolerant of human activities often thrive in ruderal habitats. Ruderal habitat is generally not of high value for wildlife; however the ruderal habitat within the PSA provides foraging habitat for many avian species. Species observed within ruderal habitat onsite include mourning dove (*Zenaida macroura*), Brewer's blackbird (*Euphagus cyanocephalus*), American crow (*Corvus brachyrhynchos*), rock pigeon (*Columba livia*), and house finch (*Carpodacus mexicanus*). An American kestrel (protected under California Fish and Game Code 3503.5; *Falco sparverius*) was observed roosting on the power lines in an adjacent property to the west and may use the ruderal habitat within the PSA as foraging habitat. A white-tailed kite (*Elanus leurcurus*), a California fully protected species and protected under the Migratory Bird Treaty Act, was observed foraging in the ruderal habitat within the PSA.

Coastal Scrub

The majority of the area within Section A consists of varied terrain with larger shrubs. There is a higher diversity of plant species in this section of the PSA including tree mallow (*Lavatera arborea*), biennial sagewort, silver-sheath knotweed (*Polygonum argyrocoleon*), clover species (*Trifolium* sp.) and Mediterranean hoary mustard.

Since the habitat value is greater in Section A due to the lower level of disturbance and greater diversity of vegetation, more wildlife species were also observed during the site visit. Numerous unidentified passerine birds (songbirds) were observed in Section A of the PSA. Migratory songbirds may nest within the shrubs and other vegetation within the coastal scrub within the PSA. Raptor species may also use the scrub as foraging habitat. Evidence of mammals was observed within the PSA including mounds of Botta's pocket gophers (*Thomomys bottae*), burrows of California ground squirrels (*Spermophilus beecheyi*) and scat by a large omnivore, probably either coyote (*Canis latrans*) or domestic dog (*Canis lupus familiaris*). Other species observed include numerous Audubon's cottontails (*Sylvilagus audubonii*). **Appendix B** lists all the species observed within the PSA. No special-status plant species were observed during the site visit; however no species-specific surveys were conducted.

Wetland Areas

Several wetland delineations have been conducted within the project vicinity; however, they are all over five years old and thus no longer considered as valid delineations. These delineations are available for review from the Army Corps of Engineers. Relevant reports include the following:

- July 31, 2000 Oliver East property wetland determination (LSA 2002)
- Addendum to Section 10 Rivers and Harbors Act of 1899 and Section 404 Clean Water Act Delineation Report for the Oliver Properties (East and West) and the adjacent parcel Owned by the City of Hayward (EIP 1999).

Although wetlands were previously identified within the PSA as noted in the documents described above, the verification of these wetland delineations has expired since it has been more than five years since the last wetland determination.

During the recent site visit, three potential wetland areas were observed within the PSA. One is in a fenced off area in the far west portion of the PSA (Section A). This wetland contained hydrophytic (water-loving) vegetation such as giant European reed (*Arundo donax*). Outside

and to the south of the fenced area, there is a low area that may be considered to be a wetland that seemed to flow into the fenced off wetland.

Another potential wetland area is located in a low area adjacent to the landscaped border to the southwest of the intersection at Eden Shores Boulevard and Hersperian Boulevard. This wetland area contains hydrophytic vegetation such as cattails (*Typha latifolia*), annual beard grass (*Polypogon monospeliensis*), curly dock (*Rumex crispus*), tall nutsedge (*Cyperus eragrostis*), and hyssop loosestrife (*Lythrum hyssopifolium*). There are several other low areas or depressions within the PSA that may also be considered wetlands. Photographs of the wetland areas are included in **Appendix B**.

It is recommended that a new wetland delineation be conducted since the verification of those wetland determinations has expired.

Wetland areas provide foraging habitat for herons, egrets, and other wading birds and shorebirds. Species observed within and around these wetland areas include bullfrog (*Rana catesbeiana*) and black phoebe (*Sayornis nigricans*). California gulls (*Larus californicus*), a great egret (*Ardea alba*) and unidentified ducks were also observed flying overhead, probably because there are extensive wetland areas to the west of the PSA.

SPECIAL-STATUS SPECIES

Special-status species are commonly characterized as species that are at potential risk or actual risk to their persistence in a given area or across their native habitat (locally, regionally, or nationally) and are identified by a state and/or federal resource agency as such. These agencies include governmental agencies such as, California Department of Fish and Game (CDFG) and U.S. Fish and Wildlife Service (USFWS), or private organizations such as the California Native Plant Society (CNPS). The degree to which a species is at risk of extinction is the limiting factor on a species status designation. Risk factors to a species' persistence or population's persistence include: habitat loss, increased mortality factors (take, electrocution, etc.), invasive species, and environmental toxins.

In context of environmental review, special-status species are defined by the following codes:

- Species that are listed, proposed, or candidates for listing under the Federal Endangered Species Act (FESA) (50 CFR 17.11 – listed; 61 FR 7591,)
- Species that are listed or proposed for listing under the California Endangered Species Act (CESA) (Fish and Game Code 1992 §2050 et seq.; 14 CCR §670.1 et seq.)
- Species that are designated as Species of Special Concern by CDFG.
- Species that are designated as Fully Protected by CDFG (Fish and Game Code, §3511, §4700, §5050, §5515)
- Species that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) (14 CCR §15380)

Special-status plant and wildlife species were determined using a California Natural Diversity Database (CNDDB) using a nine USGS quadrangle search (CNDDB 2006a), CNDDB QuickViewer nine-quadrangle search of unprocessed data (CNDDB 2006b), California Native Plant Society (CNPS) nine-quadrangle search (CNPS 2006), and a United States Fish and Wildlife Service nine-

quadrangle search all completed on December 8, 2006 (USFWS 2006). Each special-status species identified within the database search has been addressed individually in **Appendix D** of this report. The potential for each special-status species to occur within the PSA was assessed based on known occurrences of the species within a 5-mile radius of the PSA, suitability of habitat within the PSA, and professional expertise. The potential to occur for each species from the database searches is presented in **Appendix D**. **Table 1** shows the habitat types within the PSA and the special-status species associated with those habitats which have the potential to occur within the PSA. Those species with moderate to high potential to occur within the PSA are addressed further in the impacts section below.

TABLE 1
HABITAT TYPES AND SPECIAL-STATUS SPECIES PROJECT STUDY AREA

Habitat	Special-status Species	Acreage within the PSA
Ruderal	Western burrowing owl (*Athene cunicularia hypugea*)- nesting and foraging Sharp-shinned hawk (*Accipiter striatus*) - foraging Golden eagle (*Aquila chrysaetos*) - foraging Northern harrier (*Circus cyaneus*) - foraging White-tailed kite (*Elanus leucurus*) - foraging California horned lark (*Eremophila alpestris actia*) – nesting and foraging	41
Coastal Scrub	Alkali milk-vetch *(Astragalus tener var. Tener)* Santa Cruz tarplant (*Holocarpha macradenia)* Contra Costa goldfields (*Lasthenia conjugens)* Western burrowing owl (*Athene cunicularia hypugea*)- nesting and foraging Sharp-shinned hawk (*Accipiter striatus*) - foraging Golden eagle (*Aquila chrysaetos*) - foraging Northern harrier (*Circus cyaneus*) - foraging White-tailed kite (*Elanus leucurus*) - foraging California horned lark (*Eremophila alpestris actia*) – nesting and foraging	17
Wetland areas	Sharp-shinned hawk (*Accipiter striatus)*- foraging Golden eagle (*Aquila chrysaetos*) - foraging Northern harrier (*Circus cyaneus*)- foraging White-tailed kite (*Elanus leucurus*)- foraging Black-crowned night heron (*Nycticorax nycticorax)* – nesting and foraging	1

IMPACTS AND MITIGATION MEASURES

The impact analysis assumes full build out of PSA.

IMPACTS TO SPECIAL-STATUS PLANT SPECIES

There is moderate potential for the following CNPS list 1B plant species to occur within the PSA: alkali milk-vetch (*Astragalus tener var. tener*), Santa Cruz tarplant (*Holocarpha macradenia*), and Contra Costa goldfields (*Lasthenia conjugens*). **Figure 2** illustrates that there is a record for alkali milk-vetch within the PSA. Santa Cruz tarplant and Contra Costa goldfields also have previously recorded occurrences within 5 miles of the PSA. The following mitigation is recommended to avoid impacts to special-status plant species.

MM 1a A focused pre-construction survey for special-status plant species with moderate to high potential to occur within the PSA shall be conducted within the species blooming period, prior to the start of construction activities. If no species are found then the project will not have any impacts to the species and no additional mitigation measures are necessary.

Timing/Implementation: *As a condition of project approval.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

MM 1b If special-status plant species are found within the PSA, then the project applicant shall consult with the appropriate agency on the mitigation to reduce impacts to a less than significant level, including but not limited to, fencing off the area where this species is found and posting of signs to publicize the sensitive nature of the area. The protective fencing would be required to ensure that the plant or plants are not destroyed, crushed, or damaged during construction. Other mitigation will likely include avoidance and minimization measures to apply to both the construction and post construction phases of the project.

Timing/Implementation: *As a condition of project approval.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

IMPACTS TO WESTERN BURROWING OWL

Western burrowing owl habitat is present within the PSA. Burrowing owls and evidence of burrowing owls have been observed in 1997 and 1995 within the PSA (City of Hayward 2005). Although protocol-level surveys for burrowing owl were not conducted during the site visit, small mammal burrows were observed. This species frequently occurs in areas used by ground squirrels and the owls will excavate old burrows to use as their own. Additionally there is a suitable prey base of rabbits and rodents within the PSA for this species to feed on. Therefore, there is a high potential that this species still occurs within the PSA. The following mitigation is recommended to avoid impacts to burrowing owls.

MM 2a The Applicant shall hire a qualified biologist to survey for burrowing owl activities to assess owl presence and need for further mitigation within thirty

(30) days prior to site mobilization using CDFG and California Burrowing Owl Consortium guidelines (CBOC 1993). If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed.

- Surveys shall be completed for occupied burrows within all construction areas and within 150 meters (500 feet) out from the construction areas (where possible and appropriate based on habitat and site access). All occupied burrows will be mapped on an aerial photo.

- At least 15 days prior to the expected start of any project-related ground disturbance activities, or restart of activities, the Applicant shall provide the burrowing owl survey results and mapping to CDFG.

Timing/Implementation: *As a condition of project approval.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

MM 2b Based on the burrowing owl survey results, the following actions shall be taken by the project Applicant to offset impacts during construction in accordance with the burrowing owl guidelines (CBOC 1993):

- If any owls are present in areas scheduled for disturbance or degradation (e.g. grading) or within 50 meters (160 feet) of a permanent project feature, and nesting is not occurring, owls are to be passively relocated by a qualified biologist per CDFG-approved relocation as described in the burrowing owl guidelines (CBOC 1993),

- If any owls are present within 50 meters (160 feet) of a temporary project disturbance areas (i.e. parking areas) then active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify additional losses from nest abandonment and/or loss of reproductive effort (e.g., killing of young). If additional losses occur then the qualified biologist/monitor has the authority to stop construction and consult with CDFG to determine further mitigation.

- If any owls are nesting in areas scheduled for disturbance or degradation, nest(s) should be avoided from February 1 through August 31 by a minimum of a 75 meters (250-foot) buffer or until fledging has occurred. Following fledging, owls may be passively relocated as described in the burrowing owl guidelines (CBOC 1993).

- Active burrows shall be monitored by a qualified biologist(s)/monitor(s) throughout construction to identify additional losses from nest abandonment.

Timing/Implementation: *As a condition of project approval.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

IMPACTS TO RAPTORS AND MIGRATORY BIRDS

Habitat conditions within and surrounding the PSA provide suitable foraging and nesting habitat for many avian species, including some raptors and migratory birds. Raptors and raptor nests are considered to be a special resource by federal and state agencies and are protected under the Migratory Bird Treaty Act (MBTA) and nesting raptors protected under Section 3503.5 of the California Fish and Game Code. Migratory birds are also protected under the MBTA. Construction activities associated with the proposed project may impact protected avian species if vegetation is removed while nesting raptors and/or migratory birds are present.

Noise and other human activity may also result in nest abandonment if nesting raptors and/or migratory birds are present within 100 feet of the work site for raptors and 50 feet for migratory birds. Suitable raptor nesting habitat occurs in the mature eucalyptus trees adjacent to the PSA along Industrial Boulevard. Construction activities proposed within the BSA could potentially result in significant adverse impacts to raptors and/or migratory birds and therefore is considered a **potentially significant** impact if mortality is to occur. The following mitigation is required to reduce impacts to a less than significant level.

MM 3a If proposed construction activities are planned to occur during the nesting season for avian species (typically March 1st through August 31st), the City shall retain a qualified biologist to conduct a focused survey for nesting raptors and migratory birds within 100 feet of the construction area no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys, USFWS and/or CDFG shall be notified regarding the status of the nests. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with USFWS and/or CDFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius around the nest of 100 feet for raptors and 50 feet for migratory birds. No action is necessary if construction will occur during the non-breeding season (generally September 1st through February 28th). Reference to this requirement, the MBTA, and Section 3503.5 of the California Fish and Game Code shall be included in the construction specifications.

Timing/Implementation: *Prior to any site disturbance.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

IMPACTS TO WETLANDS AND OTHER WATERS OF THE U.S.

Jurisdictional wetlands have been previously identified within the PSA; however, these delineations are over five years old and no longer valid. During the field visit conducted on December 10, 2006, features which exhibit wetland characteristics were observed within the PSA (**Figure 3**). The PSA may contain jurisdictional wetlands or other waters of the U.S. as defined by Section 404 of the Clean Water Act. Because the wetland areas within the PSA are potentially jurisdictional waters, project activities could possibly be regulated by the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. Therefore, disruption of federally protected wetlands and other waters of the U.S. from implementation of the proposed project is considered a significant impact. Even though wetland delineations have previously been conducted, it is recommended that a new wetland delineation be conducted before any ground disturbance since the verification of those wetland determinations has expired.

MM 4a Conduct a wetland delineation to confirm or deny the presence of wetlands or other waters of the U.S. within the PSA before any ground disturbance.

Timing/Implementation: *As a condition of project approval.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

MM 4b If the wetland delineation determines that jurisdictional wetland features are present within the PSA, the Applicant must apply for a Section 404 permit and a Section 401 permit. Adherence to the federal and state permitting requirements identified above would ensure that impacts to wetlands and waters of the United States would be less than significant.

Timing/Implementation: *As a condition of project approval.*

Enforcement/Monitoring: *City of Hayward Planning Division.*

CONCLUSION

The proposed project has the potential to impact special-status plant species, western burrowing owls, migratory birds and raptors, and wetlands or other waters of the U.S. under jurisdiction of the USACE. Mitigation measures presented in this report would reduce these impacts to a less than significant level.

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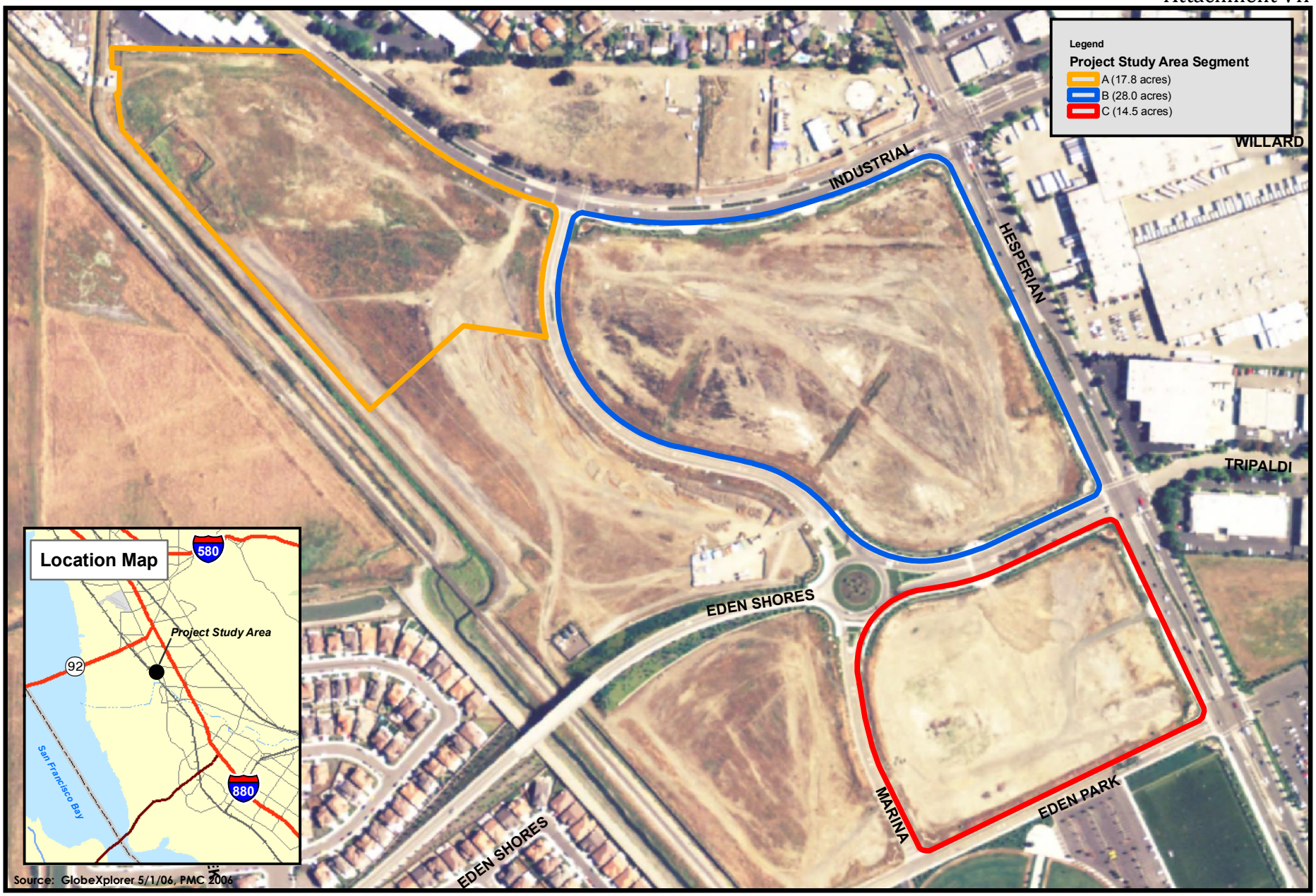

Figure 1
Project Study Area

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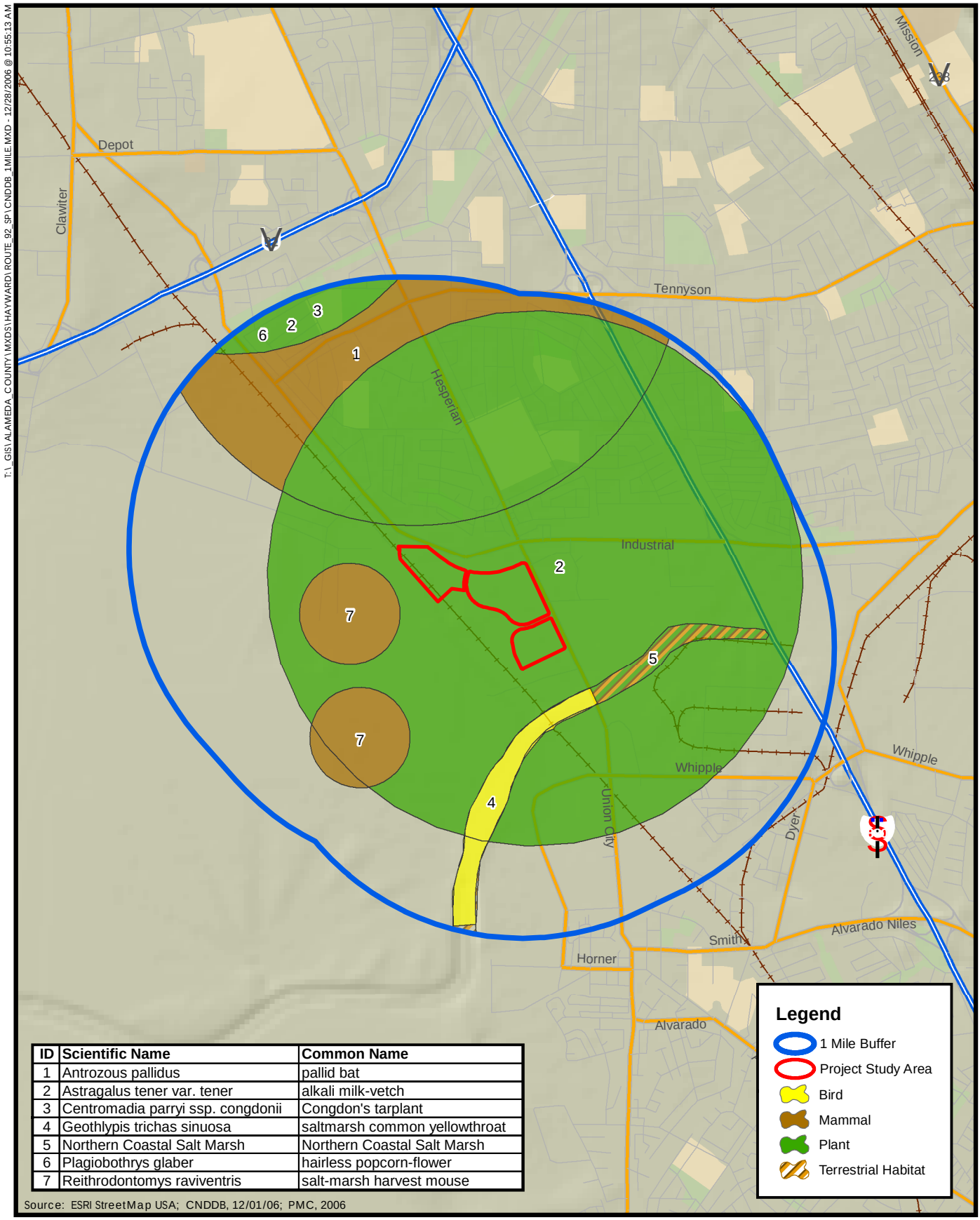

ID	Scientific Name	Common Name
1	Antrozous pallidus	pallid bat
2	Astragalus tener var. tener	alkali milk-vetch
3	Centromadia parryi ssp. congdonii	Congdon's tarplant
4	Geothlypis trichas sinuosa	saltmarsh common yellowthroat
5	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh
6	Plagiobothrys glaber	hairless popcorn-flower
7	Reithrodontomys raviventris	salt-marsh harvest mouse

Figure 2
Recorded Occurrences of Special Status Species
Within 1 Mile of the Project Study Area

PMC

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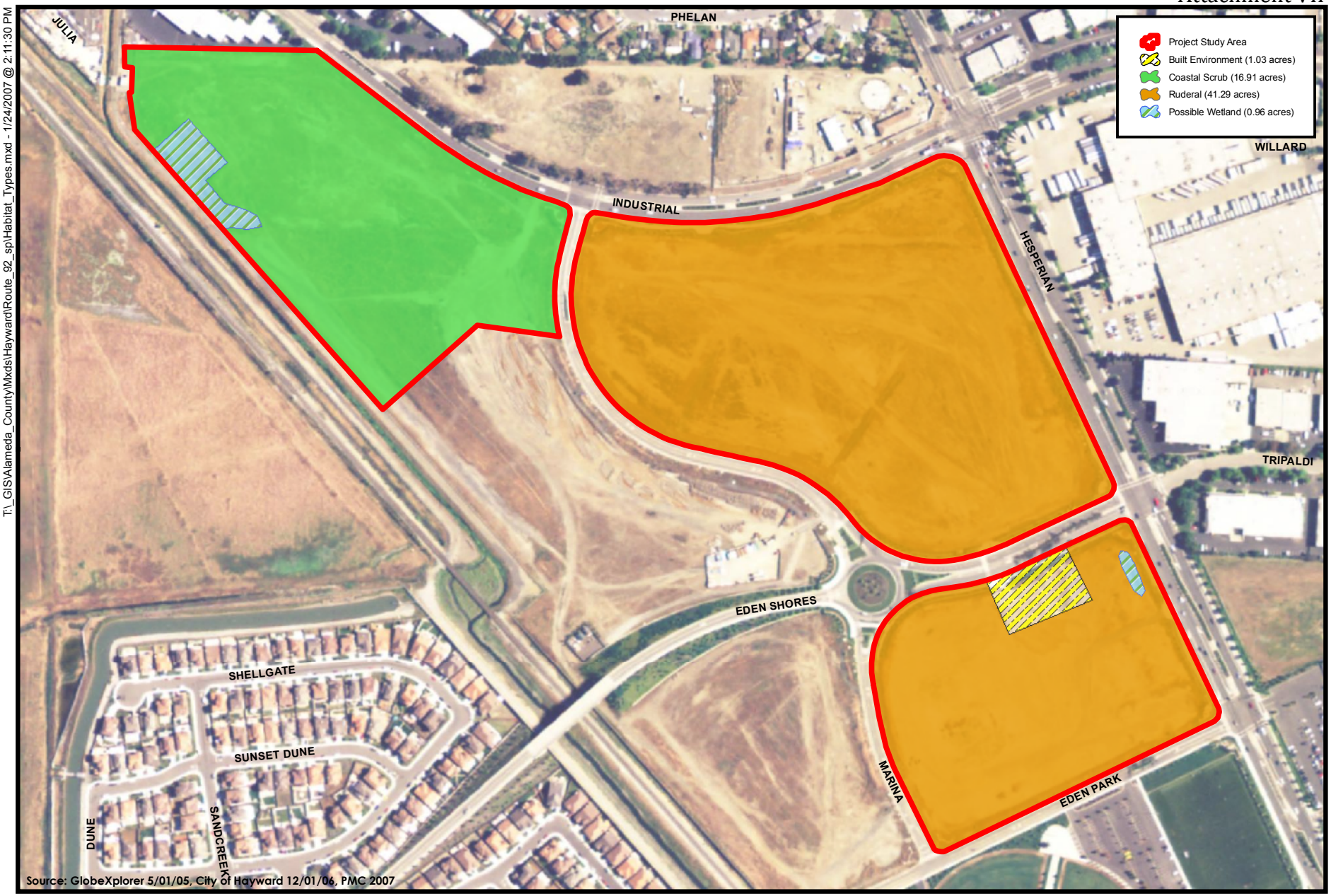

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FIGURE 3
HABITAT TYPES WITHIN THE PROJECT STUDY AREA

PMC

Appendix A: Database Search Results for the Route 92 Specific Plan Amendment Project

City of Hayward, Alameda County, California

Attachment VII

United States Department of the Interior

Department of the Interior logo

FISH AND WILDLIFE SERVICE

Fish & Wildlife Service logo

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

December 14, 2006

Document Number: 061214044052

Angela Calderaro
PMC
10461 Old Placerville Road
Suite 100
Sacramento, CA 95827

Subject: Species List for Amendment to the Route 92 Specific Plan

Dear: Interested party

We are sending this official species list in response to your December 14, 2006 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

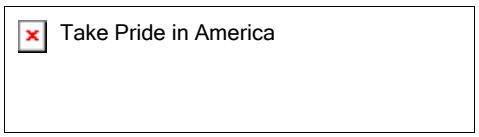
Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be March 14, 2007.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division

Attachment VII



Attachment VII

These buttons will not appear on your list.

<- Revise Selection

Print this page

Make Official Letter ->

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 061214044052

Database Last Updated: December 1, 2006

Quad Lists

Listed Species

Invertebrates

- Branchinecta conservatio
  - Conservancy fairy shrimp (E)
- Branchinecta longiantenna
  - longhorn fairy shrimp (E)
- Branchinecta lynchi
  - vernal pool fairy shrimp (T)
- Euphydryas editha bayensis
  - bay checkerspot butterfly (T)
  - Critical habitat, bay checkerspot butterfly (X)
- Incisalia mossii bayensis
  - San Bruno elfin butterfly (E)
- Lepidurus packardi
  - Critical habitat, vernal pool tadpole shrimp (X)
  - vernal pool tadpole shrimp (E)

Fish

- Eucyclogobius newberryi
  - tidewater goby (E)
- Hypomesus transpacificus

- delta smelt (T)

- Oncorhynchus kisutch
  - coho salmon - central CA coast (E) (NMFS)

- Oncorhynchus mykiss
  - Central California Coastal steelhead (T) (NMFS)
  - Central Valley steelhead (T) (NMFS)
  - Critical habitat, Central California coastal steelhead (X) (NMFS)

- Oncorhynchus tshawytscha
  - Central Valley spring-run chinook salmon (T) (NMFS)
  - winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- Ambystoma californiense
  - California tiger salamander, central population (T)
  - Critical habitat, CA tiger salamander, central population (X)

- Rana aurora draytonii
  - California red-legged frog (T)

Reptiles

- Masticophis lateralis euryxanthus
  - Alameda whipsnake [=striped racer] (T)
  - Critical habitat, Alameda whipsnake (X)

Birds

- Brachyramphus marmoratus
  - marbled murrelet (T)

- Charadrius alexandrinus nivosus
  - western snowy plover (T)

- Haliaeetus leucocephalus
  - bald eagle (T)

- Pelecanus occidentalis californicus
  - California brown pelican (E)

- Rallus longirostris obsoletus
  - California clapper rail (E)

- Sternula antillarum (=Sterna, =albifrons) browni
  - California least tern (E)

Mammals

- Reithrodontomys raviventris
  - salt marsh harvest mouse (E)

- Vulpes macrotis mutica
  - San Joaquin kit fox (E)

Plants

- Lasthenia conjugens
  - Contra Costa goldfields (E)
  - Critical habitat, Contra Costa goldfields (X)

- Suaeda californica
  - California sea blite (E)

Candidate Species

Fish

- Oncorhynchus tshawytscha
  - Central Valley fall/late fall-run chinook salmon (C) (NMFS)
  - Critical habitat, Central Valley fall/late fall-run chinook (C) (NMFS)

Quads Containing Listed, Proposed or Candidate Species:

MILPITAS (427B)

MOUNTAIN VIEW (428A)

PALO ALTO (428B)

DUBLIN (446B)

NILES (446C)

HAYWARD (447A)

SAN LEANDRO (447B)

REDWOOD POINT (447C)

NEWARK (447D)

County Lists

No county species lists requested.

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed fo
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minu quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the qu covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad o water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carrie their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants m exist in an area without ever having been detected there. You can find out what's in the surrounding quac through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habit suitable for them may be affected by your project. We recommend that your surveys include any propose and candidate species on your list.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared f your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap,

capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.
- During formal consultation, the Federal agency, the applicant and the Service work together to avc or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
- If no Federal agency is involved with the project, and federally listed species may be taken as part the project, then you, the applicant, should apply for an incidental take permit. The Service may is such a permit if you submit a satisfactory conservation plan for the species that would be affected your project.
- Should your survey determine that federally listed or proposed species occur in the area and are lik to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include th plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, ai light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproductic rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for t on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. Th information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our critical habitat page for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candida list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, vario

other agencies and organizations maintain lists of at-risk species. These lists provide essential informatic for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigati and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed a candidate species in your planning, this should not be a problem. However, we recommend that you get a updated list every 90 days. That would be March 14, 2007.

	Scientific Name	Common Name	Element Code	Federal Status	State Status	Global Rank	State Rank	CNPS	R-E-D	CDFG
1	Acanthomintha duttonii	San Mateo thorn-mint	PDLAM01040	Endangered	Endangered	G1	S1.1	1B	3-3-3	
2	Accipiter striatus	sharp-shinned hawk	ABNKC12020			G5	S3			SC
3	Agelaius tricolor	tricolored blackbird	ABPBXB0020			G2G3	S2			SC
4	Allium peninsulare var. franciscanum	Franciscan onion	PMLIL021R1			G5T2	S2.2	1B	2-2-3	
5	Ambystoma californiense	California tiger salamander	AAAAA01180	Threatened		G2G3	S2S3			SC
6	Aquila chrysaetos	golden eagle	ABNKC22010			G5	S3			SC
7	Arctostaphylos regismontana	Kings Mountain manzanita	PDERI041C0			G2	S2.2	1B	2-2-3	
8	Ardea herodias	great blue heron	ABNGA04010			G5	S4			
9	Asio flammeus	short-eared owl	ABNSB13040			G5	S3			SC
10	Astragalus tener var. tener	alkali milk-vetch	PDFAB0F8R1			G1T1	S1.1	1B	3-2-3	
11	Athene cunicularia	burrowing owl	ABNSB10010			G4	S2			SC
12	Atriplex depressa	brittlescale	PDCHE042L0			G2Q	S2.2	1B	2-2-3	
13	Atriplex joaquiniana	San Joaquin spearscale	PDCHE041F3			G2	S2.1	1B	2-2-3	
14	Balsamorhiza macrolepis var. macrolepis	big-scale balsamroot	PDAST11061			G3G4T2	S2.2	1B	2-2-3	
15	Campanula exigua	chaparral harebell	PDCAM020A0			G2	S2.2	1B	2-2-3	
16	Centromadia parryi ssp. congdonii	Congdon's tarplant	PDAST4R0P1			G4T3	S3.2	1B	2-2-3	
17	Charadrius alexandrinus nivosus	western snowy plover	ABNNB03031	Threatened		G4T3	S2			SC
18	Chorizanthe robusta var. robusta	robust spineflower	PDPGN040Q2	Endangered		G2T1	S1.1	1B	3-3-3	
19	Circus cyaneus	northern harrier	ABNKC11010			G5	S3			SC
20	Cirsium praeteriens	lost thistle	PDAST2E2B0			GX	SX	1A	*	
21	Collinsia multicolor	San Francisco collinsia	PDSCR0H0B0			G2	S2.2	1B	2-2-3	
22	Cordylanthus maritimus ssp. palustris	Point Reyes bird's-beak	PDSCR0J0C3			G4?T2	S2.2	1B	2-2-2	
23	Danaus plexippus	monarch butterfly	IILEPP2010			G5	S3			
24	Dendroica petechia brewsteri	yellow warbler	ABPBX03018			G5T3?	S2			SC
25	Dipodomys venustus venustus	Santa Cruz kangaroo rat	AMAFD03042			G4T1	S1			
26	Dirca occidentalis	western leatherwood	PDTHY03010			G2G3	S2S3	1B	2-2-3	
27	Elanus leucurus	white-tailed kite	ABNKC06010			G5	S3			
28	Emys (=Clemmys) marmorata	western pond turtle	ARAAD02030			G3G4	S3			SC
29	Eremophila alpestris actia	California horned lark	ABPAT02011			G5T3	S3			SC
30	Eryngium aristulatum var. hooveri	Hoover's button-celery	PDAPI0Z043			G5T2	S2.1	1B	3-3-3	
31	Euphydryas editha bayensis	Bay checkerspot butterfly	IILEPK4055	Threatened		G5T1	S1			
32	Fritillaria liliacea	fragrant fritillary	PMLIL0V0C0			G2	S2.2	1B	2-2-3	
33	Geothlypis trichas sinuosa	saltmarsh common yellowthroat	ABPBX1201A			G5T2	S2			SC
34	Helianthella castanea	Diablo helianthella	PDAST4M020			G3	S3.2	1B	2-2-3	

	Scientific Name	Common Name	Element Code	Federal Status	State Status	Global Rank	State Rank	CNPS	R-E-D	CDFG
35	Hesperolinon congestum	Marin western flax	PDLIN01060	Threatened	Threatened	G2	S2.1	1B	3-3-3	
36	Holocarpha macradenia	Santa Cruz tarplant	PDAST4X020	Threatened	Endangered	G1	S1.1	1B	3-3-3	
37	Horkelia cuneata ssp. sericea	Kellogg's horkelia	PDROS0W043			G4T1	S1.1	1B	3-3-3	
38	Lasthenia conjugens	Contra Costa goldfields	PDAST5L040	Endangered		G1	S1.1	1B	3-3-3	
39	Laterallus jamaicensis coturniculus	California black rail	ABNME03041		Threatened	G4T1	S1			
40	Lepidurus packardi	vernal pool tadpole shrimp	ICBRA10010	Endangered		G3	S2S3			
41	Linderiella occidentalis	California linderiella	ICBRA06010			G3	S2S3			
42	Malacothamnus arcuatus	arcuate bush mallow	PDMAL0Q0E0			G2Q	S2.2	1B	2-2-3	
43	Malacothamnus davidsonii	Davidson's bush mallow	PDMAL0Q040			G1	S1.1	1B	2-2-3	
44	Masticophis lateralis euryxanthus	Alameda whipsnake	ARADB21031	Threatened	Threatened	G4T2	S2			
45	Melospiza melodia pusillula	Alameda song sparrow	ABPBXA301S			G5T2?	S2?			SC
46	Microcina lumi	Lum's micro-blind harvestman	ILARA47050			G1	S1			
47	Monardella villosa ssp. globosa	robust monardella	PDLAM180P7			G5T2	S2.2	1B	2-2-3	
48	Navarretia prostrata	prostrate navarretia	PDPLM0C0Q0			G2?	S2.1?	1B	2-3-3	
49	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA			G3	S3.2			
50	Oncorhynchus mykiss irideus	steelhead-central California coast esu	AFCHA0209G	Threatened		G5T2Q	S2			
51	Phalacrocorax auritus	double-crested cormorant	ABNFD01020			G5	S3			SC
52	Plagiobothrys glaber	hairless popcorn-flower	PDBOR0V0B0			GH	SH	1A	*	
53	Potamogeton filiformis	slender-leaved pondweed	PMPOT03090			G5	S1S2	2	3-2-1	
54	Rallus longirostris obsoletus	California clapper rail	ABNME05016	Endangered	Endangered	G5T1	S1			
55	Rana aurora draytonii	California red-legged frog	AAABH01022	Threatened		G4T2T3	S2S3			SC
56	Reithrodontomys raviventris	salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S1S2			
57	Riparia riparia	bank swallow	ABPAU08010		Threatened	G5	S2S3			
58	Rynchops niger	black skimmer	ABNNM14010			G5	S1S3			SC
59	Sanicula maritima	adobe sanicle	PDAPI1Z0D0		Rare	G2	S2.2	1B	3-3-3	
60	Scapanus latimanus parvus	Alameda Island mole	AMABB02031			G5T1Q	S1			SC
61	Serpentine Bunchgrass	Serpentine Bunchgrass	CTT42130CA			G2	S2.2			
62	Sorex vagrans halicoetes	salt-marsh wandering shrew	AMABA01071			G5T1	S1			SC
63	Sterna antillarum browni	California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2S3			
64	Streptanthus albidus ssp. peramoenus	most beautiful jewel-flower	PDBRA2G012			G2T2	S2.2	1B	2-2-3	
65	Suaeda californica	California seablite	PDCHE0P020	Endangered		G1	S1.1	1B	3-3-3	
66	Taxidea taxus	American badger	AMAJF04010			G5	S4			SC
67	Thamnophis sirtalis tetrataenia	San Francisco garter snake	ARADB3613B	Endangered	Endangered	G5T2	S2			
68	Trifolium depauperatum var. hydrophilum	saline clover	PDFAB400R5			G5T2?	S2.2?	1B	3-2-3	

	Scientific Name	Common Name	Element Code	Federal Status	State Status	Global Rank	State Rank	CNPS	R-E-D	CDFG
69	Tropidocarpum capparideum	caper-fruited tropidocarpum	PDBRA2R010			G1	S1.1	1B	3-3-3	
70	Tryonia imitator	mimic tryonia (=California brackishwater snail)	IMGASJ7040			G2G3	S2S3			
71	Valley Needlegrass Grassland	Valley Needlegrass Grassland	CTT42110CA			G1	S3.1			
72	Valley Oak Woodland	Valley Oak Woodland	CTT71130CA			G3	S2.1			
73	Vulpes macrotis mutica	San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2T3	S2S3			

Attachment VII

California Native Plant Society

Inventory of Rare and Endangered Plants v7-06d 10-03-06

Status: Search Results - Thu, Dec. 14, 2006 15:38 c

{QUADS_123} =~ m/447D|428A|428B|446B|446C|427B|447A|447E Search

Tip: `CNPS_LIST:"List 3"` (note the field name) returns only taxa on List 3. `"List 3"` by itself, matches the phrase wherever found. Browse the list of **field names**.[all tips and help.][search history]

Your Quad Selection: Newark (447D) 3712251, Mountain View (428A) 3712241, Palo Alto (428B) 3712242, Dublin (446B) 3712168, Niles (446C) 3712158, Milpitas (427B) 3712148, Hayward (447A) 3712261, San Leandro (447B) 3712262, Redwood Point (447C) 3712252

Hits 1 to 36 of 36

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
		1	**Acanthomintha duttonii**	San Mateo thorn-mint	Lamiaceae	List 1B.1
		1	**Allium peninsulare var. franciscanum**	Franciscan onion	Liliaceae	List 1B.2
		1	**Arctostaphylos andersonii**	Santa Cruz manzanita	Ericaceae	List 1B.2
		1	**Arctostaphylos regismontana**	Kings Mountain manzanita	Ericaceae	List 1B.2
		1	**Astragalus tener var. tener**	alkali milk-vetch	Fabaceae	List 1B.2
		1	**Atriplex depressa**	brittlescale	Chenopodiaceae	List 1B.2
		1	**Atriplex joaquiniana**	San Joaquin spearscale	Chenopodiaceae	List 1B.2
		1	**Balsamorhiza macrolepis var. macrolepis**	big-scale balsamroot	Asteraceae	List 1B.2
		1	**Campanula exigua**	chaparral harebell	Campanulaceae	List 1B.2
		1	**Centromadia parryi ssp. congdonii**	Congdon's tarplant	Asteraceae	List 1B.2
		1	**Cirsium fontinale var. fontinale**	fountain thistle	Asteraceae	List 1B.1
		1	**Cirsium praeteriens**	lost thistle	Asteraceae	List 1A
		1	**Collinsia multicolor**	San Francisco collinsia	Scrophulariaceae	List 1B.2
		1	**Cordylanthus maritimus ssp. palustris**	Point Reyes bird's-beak	Scrophulariaceae	List 1B.2
		1	**Dirca occidentalis**	western leatherwood	Thymelaeaceae	List 1B.2
		1	**Eryngium aristulatum var.**	Hoover's button-	Apiaceae	List

Attachment VII

			hooveri	celery		1B.1
		1	**Fritillaria liliacea**	fragrant fritillary	Liliaceae	List 1B.2
		1	**Helianthella castanea**	Diablo helianthella	Asteraceae	List 1B.2
		1	**Holocarpha macradenia**	Santa Cruz tarplant	Asteraceae	List 1B.1
		1	**Lasthenia conjugens**	Contra Costa goldfields	Asteraceae	List 1B.1
		1	**Lathyrus jepsonii var. jepsonii**	Delta tule pea	Fabaceae	List 1B.2
		1	**Lessingia hololeuca**	woolly-headed lessingia	Asteraceae	List 3
		1	**Malacothamnus arcuatus**	arcuate bush mallow	Malvaceae	List 1B.2
		1	**Malacothamnus davidsonii**	Davidson's bush mallow	Malvaceae	List 1B.2
		1	**Malacothamnus hallii**	Hall's bush mallow	Malvaceae	List 1B.2
		1	**Micropus amphibolus**	Mt. Diablo cottonweed	Asteraceae	List 3.2
		1	**Monardella antonina ssp. antonina**	San Antonio Hills monardella	Lamiaceae	List 3
		1	**Monardella villosa ssp. globosa**	robust monardella	Lamiaceae	List 1B.2
		1	**Navarretia myersii ssp. myersii**	pincushion navarretia	Polemoniaceae	List 1B.1
		1	**Navarretia prostrata**	prostrate navarretia	Polemoniaceae	List 1B.1
		1	**Plagiobothrys glaber**	hairless popcorn-flower	Boraginaceae	List 1A
		1	**Potamogeton filiformis**	slender-leaved pondweed	Potamogetonaceae	List 2.2
		1	**Streptanthus albidus ssp. peramoenus**	most beautiful jewel-flower	Brassicaceae	List 1B.2
		1	**Suaeda californica**	California seablite	Chenopodiaceae	List 1B.1
		1	**Trifolium depauperatum var. hydrophilum**	saline clover	Fabaceae	List 1B.2
		1	**Tropidocarpum capparideum**	caper-fruited tropidocarpum	Brassicaceae	List 1B.1

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

No more hits.

Attachment VII

CNPS Inventory of Rare and Endangered Plants

Status: Plant Press Manager window with 36 items - Thu, Dec. 14, 2006 15:37 c

Reformat list as: Standard List - with Plant Press controls

STATUS and RARITY REPORT

scientific	family	CNPS	R-E-D	STATE	State Rank	FEDERAL	Global Rank
Acanthomintha duttonii	Lamiaceae	List 1B.1	3-3-3	CE	S1.1	FE	G1
Allium peninsulare var. franciscanum	Liliaceae	List 1B.2	2-2-3	None	S2.2	None	G5T2
Arctostaphylos andersonii	Ericaceae	List 1B.2	2-2-3	None	S2?	None	G2
Arctostaphylos regismontana	Ericaceae	List 1B.2	2-2-3	None	S2.2	None	G2
Astragalus tener var. tener	Fabaceae	List 1B.2	3-2-3	None	S1.1	None	G1T1
Atriplex depressa	Chenopodiaceae	List 1B.2	2-2-3	None	S2.2	None	G2Q
Atriplex joaquiniana	Chenopodiaceae	List 1B.2	2-2-3	None	S2.1	None	G2
Balsamorhiza macrolepis var. macrolepis	Asteraceae	List 1B.2	2-2-3	None	S2.2	None	G3G4T2
Campanula exigua	Campanulaceae	List 1B.2	2-2-3	None	S2.2	None	G2
Centromadia parryi ssp. congdonii	Asteraceae	List 1B.2	2-2-3	None	S3.2	None	G4T3
Cirsium fontinale var. fontinale	Asteraceae	List 1B.1	3-3-3	CE	S1.1	FE	G2T1
Cirsium praeteriens	Asteraceae	List 1A	*	None	SX	None	GX
Collinsia multicolor	Scrophulariaceae	List 1B.2	2-2-3	None	S2.2	None	G2
Cordylanthus maritimus ssp. palustris	Scrophulariaceae	List 1B.2	2-2-2	None	S2.2	None	G4?T2
Dirca occidentalis	Thymelaeaceae	List 1B.2	2-2-3	None	S2S3	None	G2G3
Eryngium aristulatum var. hooveri	Apiaceae	List 1B.1	3-3-	None	S2.1	None	G5T2

			3				
Fritillaria liliacea	Liliaceae	List 1B.2	2-2-3	None	S2.2	None	G2
Helianthella castanea	Asteraceae	List 1B.2	2-2-3	None	S3.2	None	G3
Holocarpha macradenia	Asteraceae	List 1B.1	3-3-3	CE	S1.1	FT	G1
Lasthenia conjugens	Asteraceae	List 1B.1	3-3-3	None	S1.1	FE	G1
Lathyrus jepsonii var. jepsonii	Fabaceae	List 1B.2	2-2-3	None	S2.2	None	G5T2
Lessingia hololeuca	Asteraceae	List 3	1-?-3	None	S3	None	G3?
Malacothamnus arcuatus	Malvaceae	List 1B.2	2-2-3	None	S2.2	None	G2Q
Malacothamnus davidsonii	Malvaceae	List 1B.2	2-2-3	None	S1.1	None	G1
Malacothamnus hallii	Malvaceae	List 1B.2	3-2-3	None	S1.2	None	G1Q
Micropus amphibolus	Asteraceae	List 3.2	?-2-3	None	S3.2?	None	G3
Monardella antonina ssp. antonina	Lamiaceae	List 3	?-?-3	None	S3?	None	G4T3Q
Monardella villosa ssp. globosa	Lamiaceae	List 1B.2	2-2-3	None	S2.2	None	G5T2
Navarretia myersii ssp. myersii	Polemoniaceae	List 1B.1	3-3-3	None	S1.1	None	G1T1
Navarretia prostrata	Polemoniaceae	List 1B.1	2-3-3	None	S2.1?	None	G2?
Plagiobothrys glaber	Boraginaceae	List 1A	*	None	SH	None	GH
Potamogeton filiformis	Potamogetonaceae	List 2.2	3-2-1	None	S1S2	None	G5
Streptanthus albidus ssp. peramoenus	Brassicaceae	List 1B.2	2-2-3	None	S2.2	None	G2T2
Suaeda californica	Chenopodiaceae	List 1B.1	3-3-3	None	S1.1	FE	G1
Trifolium depauperatum var. hydrophilum	Fabaceae	List 1B.2	3-2-3	None	S2.2?	None	G5T2?

Tropidocarpum capparideum	Brassicaceae	List 1B.1	3-3-3	None	S1.1	None	G1

APPENDIX B

LIST OF PLANT SPECIES OBSERVED DURING THE DECEMBER 10, 2006 SURVEY

Common Name	Scientific Name	Wetland Indicator Status
Annual beard grass	*Polypogon monospeliensis*	FACW+
Biennial sagewort	*Artemisia biennis*	FAC
Broad-leaved cattatil	*Typha latifolia*	OBL
Bull thistle	*Cirsium arvense*	FAC-
Canadian horseweed	*Conyza canadensis*	FAC
Curly dock	*Rumex crispus*	FACW-
Fennel	*Foeniculum vulgare*	FACU
Field bindweed	*Convolvulus arvensis*	NI
Giant European reed	*Arundo donax*	FACW
Hyssop loosestrife	*Lythrum hyssopifolium*	FACW
Italian wildrye	*Lolium multiflorum*	FAC*
Mediterranean hoary mustard	*Hirschfeldia incana*	UPL
Pampas grass	*Cortaderia selloana*	NI
Prickly sow thistle	*Sonchus asper*	FAC
Silver-sheath knotweed	*Polygonum argyrocoleon*	FAC+
Tall nutsedge	*Cyperus eragrostis*	FACW
Tree mallow	*Lavatera arborea*	NI
Wild oats	*Avena fatua*	NI
Yellow-star thistle	*Centaurea solstitialis*	NI

LIST OF WILDLIFE SPECIES OBSERVED DURING THE DECEMBER 10, 2006 SURVEY

Common Name	Scientific Name	
Amphibians		
Bullfrog	*Rana catesbeiana*	Observed
Birds		
American crow	*Corvus brachyrhynchos*	Observed
American kestrel	*Falco sparverius*	Observed
Black phoebe	*Sayornis nigricans*	Observed
Brewer's blackbird	*Euphagus cyanocephalus.*	Observed
California gull	*Larus californicus*	Flying overhead
Great egret	*Ardea alba*	Flying overhead
House finch	*Carpodacus mexicanus*	Observed

Common Name	Scientific Name	
House sparrow	*Passer domesticus*	Observed
Mourning dove	*Zenaida macroura*	Abundant
Red-winged blackbird	*Agelaius phoeniceus*	Observed
Rock pigeon	*Columba livia*	Observed
White-crowned sparrow	*Zonotrichia leucophrys*	Observed
White-tailed kite	*Elanus leucurus*	Foraging
Mammals		
Botta's pocket gopher	*Thomomys bottae*	Mounds
California ground squirrel	*Spermophilus beecheyi*	Burrows
Coyote	*Canis latrans*	Possible Scat
Domestic dog	*Canis lupus familiaris*	Possible Scat
Audubon's cottontail	*Sylvilagus audubonii*	Abundant

Appendix C: Photos of the Biological Study Area for the Route 92 Specific Plan Amendment Project

City of Hayward, Alameda County, California

Section A of the PSA

1. View of southern portion of Section A facing southwest.

2. View of the adjacent low area to the south of the fenced off wetland area (Section A).

3. Fenced off wetland area in the northwestern section of the PSA (Section A).

4. Fenced off wetland area in the northwestern section of the PSA (Section A).

Section B of the PSA

5. View of Section B of the PSA with piles of concrete in the background.

5. View of the landscape border within the PSA (Section B).

Section C of the PSA

6. View of the southern portion of the PSA (Section C) facing northwest.

7. View of the landscaped border of the PSA (Eden Park and Hesperian Boulevard).

8. View facing northeast of Section C.

9. View of the possible wetland area facing north in the southern portion of the PSA (Section C).

10. View of the disturbed (ruderal) habitat in the southern portion of the PSA (Section C).

11. View of the roadway (Eden Park) bordering the southern edge of the PSA facing west.

APPENDIX D
SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT STUDY AREA

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
Plants				
San Mateo thornmint *Acanthomintha duttonii*	FE/CE/1B	Annual herb. Chaparral, Valley and foothill grassland (serpentinite). Blooming period: April - June Elevation: 50 – 300 m.	None	Although marginal habitat is present within the PSA, there are no serpintinite soils within the PSA; therefore there is no potential for this species to occur within the PSA.
Franciscan onion *Allium peninsulare var. franciscanum*	~/~/1B	Bulbiferous herb. Cismontane woodland, Valley and foothill grassland (clay, often serpentinite). Blooming period: May - June Elevation: 100 – 300 m.	None	Although marginal habitat is present within the PSA, there are no serpintinite soils within the PSA and the PSA is outside of the known elevation range for this species; therefore there is no potential for this species to occur within the PSA.
Santa Cruz manzanita *Arctostaphylos andersonii*	~/~/1B	Evergreen shrub. Broadleafed upland forest, chaparral, North Coast coniferous forest (openings, edges). Blooming period: November - April Elevation: 60 -730 m.	None	No habitat is present for this species and the PSA is outside of the known elevation range for this species; therefore there is no potential for this species to occur within the PSA.
Kings Mountain manzanita *Arctostaphylos regismontana*	~/~/1B	Perennial evergreen shrub. Broad-leafed upland forest, chaparral, North Coast coniferous forest (granitic or sandstone). Blooming period: January - April Elevation: 305 – 730 m.	None	No habitat is present for this species and the PSA is outside of the known elevation range for this species; therefore there is no potential for this species to occur within the PSA.
Alkali milk-vetch *Astragalus tener var. tener*	~/~/1B	Annual herb. Playas, Valley and foothill grassland (adobe clay), vernal pools (alkaline). Blooming period: March - June Elevation: 1 – 60 m.	Moderate	Four known occurrences within 5 miles of the PSA, one of which is generally located in and around the PSA. Even though marginal habitat is present within the PSA, there is moderate potential that this species occurs within the PSA.
Brittlescale *Atriplex depressa*	~/~/1B	Annual herb. Chenopod scrub, meadows and seeps, Playas, Valley and foothill grassland, vernal pools (alkaline, clay).	None	Alkaline soils do not appear to be present. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA. Although there are no known

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		Blooming period: May – October Elevation: 1 - 320 m.		occurrences within 5 miles of the PSA, there is a low potential that this species occurs within the PSA.
San Joaquin spearscale *Atriplex joaquiniana*	~/~/1B	Annual herb. Chenopod scrub, meadows and seeps, playas, Valley and foothill grassland (alkaline). Blooming period: April – October Elevation: 1 – 835 m.	None	Alkaline soils do not appear to be present. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA. Since there are no known occurrences within 5 miles of the PSA, there is no potential that this species occurs within the PSA.
Big-scale balsamroot *Balsamorhiza macrolepis var. macrolepis*	~/~/1B	Perennial herb. Chaparral, cismontane woodland, Valley and foothill grassland (sometimes serpentinite). Blooming period: March - June Elevation: 90 – 1,400 m.	None	Although Marginal grassland habitat is present within the PSA, the PSA is outside of the known elevation range for this species therefore there is no potential for this species to occur within the PSA.
Chaparral harebell *Campanula exigua*	~/~/1B	Annual herb. Chaparral (rocky, usually serpentinite). Blooming period: May - June Elevation: 275 – 1,250 m.	None	The PSA is outside of the known elevation range for this species therefore there is no potential for this species to occur within the PSA.
Condgon's tarplant *Centromadia parryi ssp. congdonii*	~/~/1B	Annual herb. Valley and foothill grassland (alkaline). Blooming period: May – October (November) Elevation: 1 – 230 m.	Low	There are two known occurrences within 5 miles of the PSA, one of which is located within 1 mile of the PSA. Marginal grassland habitat is present within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA.
Robust spineflower *Chorizanthe robusta var. robusta*	FE/~/1B	Annual herb. Cismontane woodland (openings), coastal dunes, coastal scrub (sandy or gravelly). Blooming period: April - September Elevation: 3 – 300 m.	None	Marginal habitat is present within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA. Since there are no known occurrences within 5 miles of the PSA, there is no potential for this species to occur within the PSA.
Fountain thistle *Cirsium fontinale var.*	~/~/1B	Perennial herb. Chaparral (openings), Valley and foothill grassland (serpentinite seeps).	None	The PSA is outside of the known elevation range for this species and serpentinite soils are not present within the PSA therefore there is no

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
fontinale		Blooming period: June - October Elevation: 90-175 m.		potential for this species to occur within the PSA.
Lost thistle *Cirsium praeteriens*	~/~/1A	Perennial herb. Unknown habitat. One known occurrence in Santa Clara County. Blooming period: June - July Elevation: 0 – 100 m.	None	It is unlikely that this species occurs within the PSA since there is only one known occurrence of this species in Santa Clara County, not seen since 1901.
San Francisco collinsia *Collinsia multicolor*	~/~/1B	Annual herb. Closed-cone coniferous forest, coastal scrub (sometimes serpentinite). Blooming period: March - May Elevation: 30 – 250 m.	None	The PSA is outside of the known elevation range for this species and no suitable habitat occurs within the PSA, therefore there is no potential for this species to occur within the PSA.
Point Reyes bird's-beak *Cordylanthus maritumus ssp. palustris*	~/~1B	Hemiparasitic annual herb. Marshes and swamps (coastal salt). Blooming period: June – October Elevation: 0 -10 m.	None	No habitat for this species is present within the PSA and there are no known occurrences within 5 miles of the PSA.
Western leatherwood *Dirca occidentalis*	~/~/1B	Perennial deciduous shrub. Broad-leafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, riparian woodland (mesic). Blooming period: January – March (April) Elevation: 50 – 395 m.	None	No habitat for this species is present within the PSA and the PSA is outside of the known elevation range for this species and there is no suitable habitat within the PSA; therefore there is no potential for this species to occur within the PSA.
Hoover's button-celery *Eryngium aristulatum var. hooveri*	~/~/1B	Annual/perennial herb. Vernal pools. Blooming period: July Elevation: 3 – 45 m.	None	No habitat for this species is present within the PSA and there are no known occurrences within 5 miles of the PSA; therefore there is no potential for this species to occur within the PSA.
Fragrant fritillary *Fritillaria liliacea*	~/~/1B	Perennial bulbiferous herb. Cismontane woodland, coastal prairie, coastal scrub, Valley and foothill grassland (often serpentinite). Blooming period: February - April Elevation: 3 – 410 m.	Low	Marginal grassland and shrub habitat is present within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA, since there are no known occurrences within 5 miles of the PSA.
Diablo helianthella	~/~/1B	Perennial herb. Broad-leafed upland forest,	Low	Although marginal grassland habitat is present

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
Helianthella castanea		chaparral, Cismontane woodland, coastal scrub, riparian woodland, Valley and foothill grassland. Blooming period: March - June Elevation: 60 - 1,300 m.		within the PSA, the PSA is outside of the known elevation range for this species therefore there is low potential for this species to occur within the PSA.
Marin western flax *Hesperolinon congestum*	FT/CT/1B	Annual herb. Chaparral, Valley and foothill grassland (serpentinite). Blooming period: April – July Elevation: 5 – 370 m.	None	Serpintinite soils do not occur within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA, since there are no known occurrences within 5 miles of the PSA.
Santa Cruz tarplant *Holocarpha macradenia*	~/~/1B	Annual herb. Coastal prairie, coastal scrub, Valley and foothill grassland (often clay, sandy). Blooming period: June - October Elevation: 10 - 220 m.	Moderate	Since marginal habitat is present within the PSA and there is one known occurrence within 5 miles of the PSA, there is moderate potential that this species occurs within the PSA.
Kellogg's horkelia *Horkelia cuneata ssp. sericea*	~/~/1B	Perennial herb. Closed-cone coniferous forest, chaparral (maritime), coastal scrub (sandy or gravelly, openings). Blooming period: April - September Elevation: 10 – 200 m.	Low	Marginal scrub habitat is present within the PSA. The PSA has been disturbed in the recent past and there is a low potential that this species would occur within the PSA, since there are no known occurrences within 5 miles of the PSA.
Contra Costa goldfields *Lasthenia conjugens*	~/~/1B	Annual herb. Cismontane woodland, playas (alkaline), Valley and foothill grassland, vernal pools (mesic). Blooming period: March - June Elevation: 0 - 470 m.	Moderate	Marginal habitat is present within the PSA and there is one known occurrence within 5 miles of the PSA, there is moderate potential that this species occurs within the PSA.
Delta tule pea *Lathyrus jepsonii var. jepsonii*	~/~/1B	Perennial herb. Marshes and swamps (freshwater and brackish). Usually on marsh and slough edges. Blooming period: May-July (September) Elevation: 0-4 m.	None	Suitable habitat is not present within the PSA and there are no known occurrences within 5 miles of the PSA.
Arcuate bush mallow *Malacothamnus arcuatus*	~/~/1B	Perennial evergreen shrub. Chaparral, cismontane woodland. Blooming period: April - September	None	No habitat for this species is present within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		Elevation: 15 – 355 m.		would occur within the PSA, since there are no known occurrences within 5 miles of the PSA.
Davidson's bush mallow *Malacothamnus davidsonii*	~/~/1B	Perennial deciduous shrub. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Blooming period: June - January Elevation: 185 -855 m.	None	No habitat for this species is present within the PSA. The PSA is outside of the known elevation range for this species therefore there is no potential for this species to occur within the PSA.
Hall's bush mallow *Malacothamnus hallii*	~/~/1B	Perennial deciduous shrub. Chaparral and coastal scrub. Blooming period: May - September Elevation: 10 – 760 m.	None	Marginal habitat is present within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA, since there are no known occurrences within 5 miles of the PSA.
Robust monardella *Monardella villosa ssp. globosa*	~/~/1B	Perennial rhizomatous herb. Broad-leafed upland forest (openings), chaparral (openings), cismontane woodland, coastal scrub, Valley and foothill grassland. Blooming period: June – July Elevation: 100 – 915 m.	None	Although marginal habitat is present, the PSA is outside of the known elevation range for this species; therefore there is no potential for this species to occur within the PSA.
Pincushion navarretia *Navarretia myersii ssp. myersii*	~/~/1B	Annual herb. Vernal pools. Blooming period: May Elevation: 20 - 330 m.	None	The PSA is outside of the known elevation range for this species therefore there is no potential for this species to occur within the PSA.
Prostrate navarretia *Navarretia prostrata*	~/~1B	Annual herb. Coastal scrub, meadows and seeps, Valley and foothill grassland (alkaline), vernal pools (mesic). Blooming period: April – July Elevation: 15 – 700 m.	None	No habitat for this species is present within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA, since there are no known occurrences within 5 miles of the PSA.
Hairless popcorn flower *Plagiobothrys glaber*	~/~/1A	Annual herb. Meadows and seeps (alkaline), marshes and swamps (coastal salt). Blooming period: March - May Elevation: 15 - 180 m.	Low	There are two known occurrences within 5 miles of the PSA, one of which is located within 1 mile of the PSA. Marginal habitat is present within the PSA; however the PSA is at a lower elevation than the known range for this species. Additionally, this species has not been seen since

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
				1954.
Slender-leaved pondweed *Potamogeton filiformis*	~/~/2	Perennial rhizomatous herb aquatic. Marshes and swamps (assorted shallow freshwater). Blooming period: May – July Elevation: 300 – 2,150 m.	None	No habitat for this species is present within the PSA and the PSA is outside of the known elevation range for this species; therefore there is no potential for this species to occur within the PSA.
Adobe sanicle *Sanicula maritima*	~/CR/1B	Perennial herb. Chaparral, coastal prairie, meadows and seeps, Valley and foothill grassland (clay, serpentinite). Blooming period: February - May Elevation: 30 – 240 m.	None	Although marginal habitat is present, serpentinite soils are not present within the PSA. Additionally, the PSA is outside of the known elevation range for this species; therefore there is no potential for this species to occur within the PSA.
Most beautiful jewel-flower *Streptanthus albidus ssp. peramoenus*	~/~/1B	Annual herb. Chaparral, cismontane woodland, Valley and foothill grassland (serpentinite). Blooming period: (March) April - June Elevation: 110 – 1,000 m.	None	Although there is one known occurrence within 5 miles of the PSA, no serpintinite soils are present within the PSA and the PSA is outside of the known elevation range for this species; therefore there is no potential for this species to occur within the PSA.
California seablite *Suaeda californica*	~/~/1B	Perennial evergreen shrub. Marshes and swamps (coastal salt). Blooming period: July - October Elevation: 0 – 15 m.	None	Suitable habitat is not present within the PSA and there are no known occurrences within 5 miles of the PSA.
Saline clover *Trifolium depauperatum var. hydrophilum*	~/~/1B	Annual herb. Marshes and swamps, Valley and foothill grassland (mesic, alkaline), and vernal pools. Blooming period: April – June Elevation: 0 – 300 m.	None	Marginal habitat is present within the PSA. Alkaline soils are not present within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA, since there are no known occurrences within 5 miles of the PSA.
Caper-fruited tropidocarpum *Tropidocarpum capparideum*	~/~/1B	Annual herb. Valley and foothill grassland (alkaline hills). Blooming period: March - April Elevation: 1 – 455 m.	None	Marginal habitat is present within the PSA. Alkaline soils are not present within the PSA. The PSA has been disturbed in the recent past and it would be unlikely that this species would occur within the PSA, since there are no known

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
				occurrences within 5 miles of the PSA.
Invertebrates				
Conservancy fairy shrimp *Branchinecta conservatio*	FE/~	Inhabits rather large, cool-water vernal pools with moderately turbid water. They have been collected from early November to early April.	None	No suitable habitat is present within the PSA. There are no vernal pools within the PSA.
Longhorn fairy shrimp *Branchinecta longiantenna*	FE/~	A freshwater fairy shrimp. It inhabits the ephemeral water of swales and vernal pools. It has been found in grass-bottomed pools in unplowed grasslands as well as clear-water pools in sandstone depressions. Known to occur in clear, moderately deep, small to medium size pool depressions in bedrock outcrops; moderately deep, medium to large sized turbid alkali pools in the Kesterson National Wildlife Refuge in western Merced County.	None	No suitable habitat is present within the PSA. There are no vernal pools within the PSA.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT/~	Occupies a variety of different vernal pool habitats, from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. Although the species has been collected from large vernal pools, including one exceeding 25 acres, it tends to occur in smaller pools. It is most frequently found in pools measuring less than 0.05 acre most commonly in grass or mud bottomed swales, or basalt flow depression pools in unplowed grasslands. Vernal pool fairy shrimp have been collected from early December to early May.	None	No suitable habitat is present within the PSA. There are no vernal pools within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
Monarch butterfly *Danaus plexippus*	~/~	Habitat is a complex issue for this species. In general breeding areas are virtually all patches of milkweed in North America and some other regions. The critical conservation feature for North American populations is the overwintering habitats, which are certain high altitude Mexican conifer forests or coastal California conifer or Eucalyptus groves as identified in literature. Coastal regions are important flyways and so nectar (wild or in gardens) is an important resource in such places. However, essential overwintering areas for North American populations are limited to about 100 places in coastal California and the mountains of Mexico.	None	There are two known occurrences within 5 miles of the PSA. This species may migrate through the PSA, but milkweed, suitable habitat for this species, was not observed within the PSA.
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT/~	This subspecies is restricted to serpentine outcrops with thin soils that support dry native grasslands with an abundance of both larval foodplants which are plantain (*Plantago erecta)* and owl's clover (*Orthocarpus densiflorus)*. General region is mainly chaparral but this subspecies does not occupy such habitats. Both permanent sites are over 800 acres and topographically diverse. Populations can build up in other nearby areas but often die out in drought years. Larval foodplant varies seasonally and both plantain and owl's clover are usually required to complete development. Restricted to serpentine outcrops near San Francisco Bay.	None	This species may migrate through the PSA, but plantain and owl's clover, suitable habitat for this species, was not observed within the PSA.
Leech's skyline diving beetle *Hydroporus leechi*	~/CSC	Previously considered limited to the San Francisco Bay Area. Now believed to be distributed widely throughout the western United States. Only four known occurrences from freshwater ponds.	None	Suitable habitat is not present within the PSA. Freshwater ponds are not present within the PSA.
San Bruno elfin butterfly *Incisalia mossii bayensis*	FE/~	The San Bruno Elfin Butterfly inhabits rocky outcrops and cliffs in coastal scrub on the San Francisco peninsula. Its patchy distribution reflects	None	This species may migrate through the PSA, but stonecrop, suitable habitat for this species, was not observed within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		that of its host plant, stonecrop (*Sedum spathulifolium*). San Bruno Mountain, in San Mateo County; also, Milagra Ridge, Montara Mountain, Whiting Ridge.		
Vernal pool tadpole shrimp *Lepidurus packardi*	FE/~	Inhabits vernal pools containing clear to highly turbid water, ranging in size from 54 square feet in the former Mather Air Force Base area of Sacramento County, to the 89-acre Olcott Lake at Jepson Prairie. Tadpole shrimp climb objects and plow along or within bottom sediments feeding on organic debris and living organisms, such as fairy shrimp and other invertebrates. Superficially resembles the ricefield tadpole shrimp (*Triops longicaudatus*).	None	No suitable habitat is present within the PSA. There are no vernal pools within the PSA.
California linderiella fairy shrimp *Linderiella occidentalis*	FSC/~	Inhabits large, fairly clear vernal pools and lakes. The California fairy shrimp is the most common fairy shrimp in the Central Valley. It has been documented on most land forms, geologic formations and soil types supporting vernal pools in California, at altitudes as high as 3,800 feet above sea level.	None	No suitable habitat is present within the PSA. There are no vernal pools within the PSA.
Lum's micro-blind harvestman *Microcina lumi*	~/~	Harvestmen don't produce silk or spin webs. They eat plant matter and carrion as well as living prey. They need microhabitats that provide high humidity, total darkness, and warmth; this usually means the underside of rocks. Blind harvestmen as a group are, except for one species, found only in California. And the genus *Microcina*, the microblinds, occur only in the Bay Area, with a scattered distribution. This species are only known to occur in Alameda County.	Low	This species requires complete darkness, although there may be small areas within the PSA that provide suitable habitat, it is unlikely that this species would occur within the PSA. Additionally, there are no known occurrences of this species within 5 miles of the PSA.
Mimic tryonia *Tryonia imitator*	~/~	Snail found in brackish salt marshes. Range includes the Southern California coast.	None	Suitable habitat is not present within the PSA.
Fish				

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
Tidewater goby *Eucyclogobius newberryi*	FE/~	Historically widespread in brackish coastal lagoons and coastal creeks in California from the mouth of the Smith River, Del Norte County, south to Agua Hedionda Lagoon, San Diego County. Naturally absent (due to lack of suitable habitat) between Humboldt Bay and Ten Mile River, between Point Arena and Salmon Creek, and between Monterey Bay and Arroyo del Oso.	None	Suitable habitat is not present within the PSA.
Delta smelt *Hypomesus transpacificus*	FT/CT	Located exclusively in the Sacramento-San Joaquin Delta. They have been found as far upstream as the mouth of the American River on the Sacramento River and Mossdale on the San Joaquin River. They extend downstream as far as San Pablo Bay. Delta smelt are found in brackish water. They usually inhabit salinity ranges of less than 2 parts per thousand (ppt) and are rarely found at salinities greater than 14ppt.	None	Suitable habitat is not present within the PSA.
Pacific lamprey *Lampetra tridentata*	~/~	In California, anadromous Pacific lampreys are still present in most of their native areas, but large runs that formerly characterized streams such as the Eel River seem to have disappeared. Runs have been eliminated from many highly altered or polluted streams, including those in the urbanized southern part of the range, but some populations have nevertheless persisted in spite of habitat disturbance.	None	Suitable habitat is not present within the PSA.
Coho salmon central California coast *Oncorhynchus kisutch*	FE/~	Anadromous fish. Naturally occurring in the Pacific Ocean and tributary drainages from the Anadyr River south to northern Japan and from Point Hope, Alaska, south to California (California: Klamath, Trinity, Mad, Noyo, and Eel rivers, with smaller populations south to the San Lorenzo River in Santa Cruz County) and infrequently as far south as Chamalu Bay, Baja California; most abundant between Oregon and southeastern	None	Suitable habitat is not present within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		Alaska, rare south of central California.		
Central California coastal ESU steelhead *Oncorhynchus mykiss*	FT/~	Sacramento and San Joaquin rivers and their tributaries. Spawns in the Sacramento and San Joaquin rivers and their tributaries; now extirpated from most of historical range; the majority of native, natural production occurs in upper Sacramento River tributaries below Red Bluff Diversion Dam, but these populations are nearly extirpated; This ESU does not include steelhead from San Francisco and San Pablo bays and their tributaries.	None	Suitable habitat is not present within the PSA.
Steelhead central California coast ESU *Oncorhynchus mykiss irideus*	FT/~	Both anadromous and non-anadromous forms exist. Anadromous forms migrate between freshwater breeding and marine non-breeding habitats; California breeders migrate to non-breeding habitats as far away as Alaska.	None	Suitable habitat is not present within the PSA.
Central Valley ESU steelhead *Oncorhynchus tshawytscha*	FT/~	Nonspawning habitat: mainly oceanic. Most spawning occurs in gravel riffles in main streams where the female forms a nest, in the gravel. Salinity of 8 ppt is the upper limit for the normal development of chinook eggs and alevins. Streams with temperatures near the upper tolerance level (25 C) during spawning migrations may be able to provide habitat for chinook salmon if a patchwork of thermal refugia is present.	None	Suitable habitat is not present within the PSA.
Central Valley fall/late fall-run ESU chinook salmon *Onchorhynchus tshawytscha*	FC/CSC	Spawn and juveniles rear for 2 to 6 months in the Sacramento and San Joaquin Rivers and their tributaries.	None	Suitable habitat is not present within the PSA.
Central Valley spring-run ESU chinook salmon *Oncorhynchus tshawytscha*	FT/CT	Spawns and juveniles rear for up to one year in the Sacramento and Yuba Rivers and their tributaries including Deer Creek.	None	Suitable habitat is not present within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
Sacramento River winter-run ESU chinook salmon *Oncorhynchus tshawytscha*	FE/CE	Spawns primarily in the mainstem of the Sacramento River with a small number in Battle Creek. Some juveniles rear non-natally for brief periods in lower reaches of tributaries.	None	Suitable habitat is not present within the PSA.
Amphibians				
California tiger salamander *Ambystoma californiense*	FT/CSC	Typically found in annual grasslands of lower hills and valleys; breeds in temporary and permanent ponds and in streams; uses rodent burrows and other subterranean retreats in surrounding uplands for shelter; appears to be absent in waters containing predatory game fish. The California tiger salamander spends most of its lifecycle estivating underground in adjacent valley oak woodland or grassland habitat, primarily in abandoned rodent burrows. Research has shown that dispersing juveniles can roam up to two miles from their breeding ponds and that a minimum of several hundred acres of uplands habitat is needed surrounding a breeding pond in order for the species to survive over the long term.	None	There are no known occurrences for this species within 5 miles of the PSA and suitable habitat is not present within the PSA.
California red-legged frog *Rana aurora draytonii*	FT/CSC	Usually found in or near quiet permanent water of streams, marshes, or (less often) ponds and other quiet bodies of water; also damp woods and meadows some distance from water. Occurs in sites with dense vegetation (e.g., willows) close to water and some shading; can occupy ephemeral pools if the water remains until late spring or early summer. Estivates in small mammal burrows, leaf litter, or other moist sites in or near (within a few hundred feet of) riparian areas. Disperses from water in wet weather. Seeks refuge in deep water. Breeds usually in permanent water; eggs are attached to emergent vegetation. Breeds late December to	None	Although there are three known occurrences within 5 miles of the PSA, suitable habitat is not present within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		early April.		
Reptiles				
Western pond turtle *Emys (=Clemmys) marmorata*	~/CSC	Permanent or nearly permanent water in various habitats (e.g. ponds, streams, perennial drainages). Requires basking sites particularly in areas vegetated with riparian habitats.	None	Suitable habitat is not present within the PSA.
Alameda whipsnake *Masticophis lateralis euryxanthus*	FT/CT	A slim-bodied snake. This species inhabits chaparral foothills, shrublands with scattered grassy patches, rocky canyons and watercourses, and adjacent habitats. Underground or under cover when inactive. Lays eggs probably most often in abandoned rodent burrows, perhaps also in other protected sites underground or under imbedded objects. Small range in hills in the eastern San Francisco Bay area, California.	Low	This species known range is in the hills in the eastern San Francisco Bay Area. It is unlikely that this species would occur within the PSA.
San Francisco garter snake *Thamnophis sirtalis tetrataenia*	FE/CE	Near freshwater marshes, ponds, and slow-moving streams; upland areas near pond/marsh habitat are important in fall and winter; has been found up to 180 meters away from water in rodent burrows on dry, grassy hillsides. Marshes provide important feeding and breeding habitat; often basks on floating algae or rush mats or on grassy hillsides near drainages and ponds; seeks cover in bankside vegetation such as cattails, bulrushes, and spikerushes, and in rodent burrows. This species range includes San Mateo County and extreme northern Santa Cruz County, California	None	Although historically this species was known from San Francisco down to Santa Cruz, today's known population is limited to a few known locations in coastal San Mateo County; therefore it would be unlikely that this species would occur within the PSA.
Birds				
Sharp-shinned hawk *Accipiter striatus*	~/CSC MBTA	A robin- to pigeon-sized woodland hawk. Forest and open woodland, coniferous, mixed, or deciduous, primarily in coniferous in more northern and mountainous portion of range. Young, dense, mixed or coniferous woodlands	None (nesting) Moderate	There is one known occurrence within 5 miles of the PSA. Although this species may forage within the PSA, it is unlikely that this species would nest in or near the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		are preferred for nesting. Migrates through various habitats, mainly along ridges, lakeshores, and coastlines. Nests usually in tree crotch or on branch next to trunk, most often 3-18 meters up, hidden by thick foliage, usually in conifer in north. May build new nest, reuse old one, or modify old bird or squirrel nest. Nests generally seem to be in a stand of dense conifers near a forest opening, though this may reflect observer bias.	(foraging)	
Tri-colored blackbird *Agelaius tricolor*	~/CSC	Breeds in freshwater wetlands, with tall dense vegetation including tule, cattail, blackberry and rose. Forages in grasslands and croplands. Resident year-round. Breeds April to July.	None	Although there is one known occurrence within 5 miles of the PSA, suitable habitat is not present within the PSA.
Golden eagle *Aquila chrysaetos*	~/CSC;CFP MBTA	A large raptor. Found generally in open country including prairies, arctic and alpine tundra, open wooded country, and barren areas, especially in hilly or mountainous regions. Nests on rock ledge of cliff or in large tree (e.g., oak or eucalyptus in California). Pair may have several alternate nests. Egg dates: peak late February-March, California to Texas (but earlier nesting may yield young ready to fly as early as March 1 in Texas);	None (nesting) Moderate (foraging)	There is one known occurrence within 5 miles of the PSA. Although this species may forage within the PSA, it is unlikely that this species would nest in or near the PSA.
Great egret *Ardea alba*	~/~ MBTA	(Rookery) Typically nest in large breeding colonies or rookeries. Breeding season typically February–August. Rookeries typically found in large trees in riparian habitat.	None (nesting)	This species was observed within the PSA. Although this species forages within the PSA, suitable nesting habitat is not present within the PSA.
Great blue heron *Ardea herodias*	~/~ MBTA	(Rookery) Colonial nester in tall trees, cliffsides and sequestered spots on marshes. Rookery site in close proximity to foraging areas, marshes, lake margins, tide-flats, rivers, streams, and wet meadows.	None (nesting)	Although this species may forage within the PSA, suitable nesting habitat is not present within the PSA.
Short-eared owl *Asio flammeus*	~/CSC MBTA	Broad expanses of open land with low vegetation for nesting and foraging are required. In general, suitable habitat types include any area that has	Low	Although there are no known occurrences within 5 miles of the PSA, suitable nesting and foraging habitat is present, therefore there is low potential

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		low vegetation with some dry upland for nesting, and that supports a suitable prey base may be considered potential breeding habitat. Nests on ground generally in a slight depression often beside or beneath a bush or clump of grass. Many nests are near water but are generally on dry sites.		that this species would occur within the PSA.
Western burrowing owl *Athene cunicularia hypugea*	~/CSC	Open grasslands and shrublands up to 5,300 ft with low perches and small mammal burrows. Resident year-round. Breeds March-August.	High	There are two known occurrences within 5 miles of the PSA. Burrowing owls have been observed within the PSA (City of Hayward 2005). Suitable habitat is present within the PSA.
Marbled murrelet *Brachyramphus marmoratus*	FT/~	A robin-sized seabird. Coastal areas, mainly in salt water within 2 kilometers (km) of shore, including bays and sounds; occasionally also on rivers and lakes usually within 20 km of ocean, especially during breeding season. Nests often are in mature/old growth coniferous forest near the coast: on large mossy horizontal branch, mistletoe infection, witches broom, or other structure providing a platform high in mature conifer (e.g., Douglas-fir, mountain hemlock). In California, most inland activity takes place in or to the west of old-growth stands of 250 hectares or more.	None	Suitable habitat is not present within the PSA.
Western snowy plover *Charadrius alexandrinus nivosus*	FT/CSC MBTA	A small shorebird. This species inhabits beaches, dry mud or salt flats, sandy shores of rivers, lakes, and ponds. Nests on the ground on broad open beaches or salt or dry mud flats, where vegetation is sparse or absent (small clumps of vegetation are used for cover by chicks).	None	Even though there are two known occurrences within 5 miles of the PSA, no suitable habitat is present within the PSA; therefore there is no potential that this species would occur within the PSA.
Northern harrier *Circus cyaneus*	~/CSC MBTA	Meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands. Nests on ground, usually at marsh edge. Mostly nests in emergent wetland or along rivers or lakes, but may nest in grasslands, grain fields, or on	None (nesting) Moderate (foraging)	There are three known occurrences within 5 miles of the PSA. Suitable foraging habitat is present within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		sagebrush flats several miles from water. Breeds April to September.		
Yellow warbler *Dendroica petechia brewsteri*	~/CSC MBTA	Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging. Also nests in montane shrubbery in open conifer forests. Breeds mid-April to early August,	None	Suitable habitat is not present within the PSA and there are no known occurrences within 5 miles of the PSA.
Snowy egret *Egretta thula*	~/~ MBTA	(Rookery) A small white wading bird that inhabits marshes, lakes, ponds, lagoons, mangroves, and shallow coastal habitats. Nests in trees or shrubs or, in some areas, on ground or in marsh vegetation. Often nests with other colonial water birds. Nests over water or ground. Usually occurs in loose groups. Roosts usually communally. Eggs are laid usually April to May or June in north.	Low	Although this species may forage within the PSA, there is a low potential that this species would nest in or near the PSA due to the disturbed nature of the site.
White-tailed kite *Elanus leucurus*	~/CFP	Nests in shrubs (in Delta) and trees adjacent to grasslands oak woodland, edges of riparian habitats. Roosts communally, resident year-round, and breeds February-October.	None (nesting) High (foraging)	There are three known occurrences within 5 miles of the PSA. This species was observed foraging within the PSA. Suitable nesting habitat is not present within the PSA.
California horned lark *Eremophila alpestris actia*	~/CSC	Small songbird. Open areas dominated by sparse low herbaceous vegetation or widely scattered low shrubs. Nests in hollow on ground often next to grass tuft or clod of earth or manure.	Moderate	Marginal habitat is present within the PSA; therefore there is moderate potential that this species would occur within the PSA.
Saltmarsh common yellow-throat *Geothlypis trichas sinuosa*	~/CSC	A small warbler. Salt marshes. Nests just above ground or over water, in thick herbaceous vegetation, often at base of shrub or sapling, sometimes higher in weeds or shrubs up to about 1 meter.	Low	There are six known occurrences within 5 miles of the PSA, one of which is located within one mile of the PSA. Although salt marsh is located on adjacent properties, this habitat does not occur within the PSA, therefore there is a low potential that this species would occur within the PSA.
Bald eagle *Haliaeetus leucocephalus*	FT/CE;CFP MBTA	Permanent resident, and uncommon winter migrant, now restricted to breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity cos. Ocean shore, lake margins, and rivers, both nesting and wintering.	None	The PSA is outside of this species range; therefore it would be highly unlikely that this species would occur within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		Build stick nests within large tall trees and typically within 1 mile of permanent water. Wintering populations along major rivers and reservoirs in Yuba County. Breeds February to July.		
Loggerhead shrike *Lanius ludovicianus*	~/CSC MBTA	A common resident and winter visitor in lowlands and foothills throughout California. Open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Egg-laying occurs from March to May.	None	Suitable habitat is not present within the PSA.
California black rail *Laterallus jamaicensis*	~/CT;CFP	Wetlands, marshes, thickets with recent sightings in near oak foothill woodlands in eastern Yuba County. Nests with eggs have been documented from March to June.	Low	Even thought there are two known occurrences within 5 miles of the PSA, marginal habitat is present within the PSA; therefore there is a low potential that this species would occur within the PSA.
Least bittern *Lxobrychus exilis hesperis*	~/CSC MBTA	Breeds locally in emergent vegetation in freshwater wetlands. Forages by ground gleaning fish, insects and aquatic invertebrates in shallow water. Breeds March to May with egg-laying in mid-April to early-July.	Low	Marginal habitat is present within the PSA. There are no known occurrences within 5 miles of the PSA.
Alameda song sparrow *Melospiza melodia pusillula*	~/CSC	This species is endemic to the San Francisco bay. This species inhabits moist plant communities where it is found in dense, highly territorial populations. They are non-migratory and breed in areas along the edge of bays and streams where tidal flow affects the vegetation.	None	Although there are six known occurrences within 5 miles of the PSA, suitable habitat is not present within the PSA, therefore there is no potential that this species would occur within the PSA.
Black-crowned night heron *Nycticorax nycticorax*	~/~ MBTA	A medium-sized wading bird. Marshes, swamps, wooded streams, mangroves, shores of lakes, ponds, lagoons; salt water, brackish, and freshwater situations. Roosts by day in mangroves or swampy woodland. Eggs are laid in a platform nest in groves of trees near coastal marshes or on	Moderate	There is one known occurrence within 5 miles of the PSA. Marginal habitat is present within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		marine islands, swamps, marsh vegetation, clumps of grass on dry ground, orchards, and in many other situations. Nests usually with other heron species. Arrives in northern breeding areas March-May, departs by September-November. Breeding season varies geographically, occurs in spring-early summer in north.		
California brown pelican *Pelecanus occidentalis californicus*	FE/~	A large heavy water bird with a massive bill and huge throat pouch. Mainly coastal, rarely seen inland or far out at sea. Feeds mostly in shallow estuarine waters, less often up to 40 miles from shore. Makes extensive use of sand spits, offshore sand bars, and islets for nocturnal roosting and daily loafing, especially by non-breeders and during the non-nesting season. Dry roosting sites are essential. Some roosting sites eventually may become nesting areas. Nests usually on coastal islands, on the ground or in small bushes and trees. Nests on middle or upper parts of steep rocky slopes of small islands in California and Baja California.	None	Since there are no known occurrences of this species within 5 miles of the PSA and suitable habitat is not present within the PSA, there is no potential that this species would occur within the PSA.
Double-crested cormorant *Phalacrocorax auritus*	~/CSC MBTA	Brackish and freshwater habitats on lakes, rivers, swamps, bays and coasts.	Low	There is one known occurrence within 5 miles of the PSA. Marginal habitat is present within the PSA.
California clapper rail *Rallus longirostris obsoletus*	FE/CE	A marsh bird. Nests in marshlands (cordgrass, pickleweed, gum-plant, salt grass) near tidal ponds, arranging plants or drift material over the nest as a canopy. Often constructs brood nest on higher ground to shelter young from storm tides. In South San Francisco Bay, prefers to nest in stands of cordgrass but builds nest mostly of pickleweed.	Low	Although there are six known occurrences within 5 miles of the PSA, marginal habitat is present within the PSA.
Bank swallow *Riparia riparia*	~/CT MBTA	Primarily riparian and other lowland habitats in California. In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks,	None	Although there is one known occurrence within 5 miles of the PSA, suitable habitat is not present

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		bluffs, and cliffs with fine-textured or sandy soils for nesting holes. Breeds early May to July.		within the PSA.
Black skimmer *Rynchops niger*	~/CSC	Primarily coastal waters, including bays, estuaries, lagoons and mudflats in migration and winter; also quiet waters of rivers and lakes. Rest on mudflats, sandbars, beaches. Nests primarily near coasts on sandy beaches, shell banks, coastal and estuary islands, on wrack and drift of salt marshes, along tropical rivers, salt pond levees (southern California), and locally, on gravelly rooftops; also on dredged material sites. Breeding range includes southern California (Salton Sea, around San Diego), along coast from Sonora to Nayarit, on Pacific coast of South America in Ecuador. Most of the U.S. breeding population occurs along Gulf Coast. Wintering habitat includes southern U.S. to southern South America.	Low	Although there is one known occurrence within 5 miles of the PSA, marginal habitat is present within the PSA; therefore there is low potential that this species would occur within the PSA.
California least tern *Sterna antillarum browni*	FE/CE	A small gray, white, and black waterbird. This species inhabits seacoasts, beaches, bays, estuaries, lagoons, lakes, and rivers. Rests on sandy beaches, mudflats, and salt-pond dikes. Nests usually on open, flat beaches along lagoon or estuary margins; sometimes on mud or sand flats a distance from the ocean or on artificial islands created from dredge spoils. Usually nests in same area in successive years; tends to return to natal site to nest.	Low	Although there are three known occurrences within 5 miles of the PSA, marginal habitat is present within the PSA; therefore there is low potential that this species would occur within the PSA.
Caspian tern *Sterna caspia*	~/~	A large stocky tern. This species inhabits seacoasts, bays, estuaries, lakes, marshes, and rivers. Nests on sandy or gravelly beaches and shell banks along coasts or large inland lakes; sometimes with other water birds. Pacific coast populations formerly nested mainly in inland marshes, now mainly on human-created habitats (e.g., salt pond dikes and levees) along coast; nests on dredge-spoil islands in North Carolina	Low	There are no known occurrences of this species within 5 miles of the PSA. Marginal habitat is present within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		and Florida. This species is a breeding resident in and around the San Francisco bay.		
Mammals				
Pallid bat *Antrozous pallidus*	~/CSC	Pallid bats roost in rock crevices, tree hollows, mines, caves, and a variety of anthropogenic structures, including vacant and occupied buildings and buildings, mines, and natural caves are utilized as roosts. Occurrence is primarily in arid habitats. Colonies are usually small and may contain 12-100 bats.	None	There are two known occurrences within 5 miles of the PSA, one of which is located within one miles of the PSA. This species may use the PSA as foraging habitat but there are no roosting sites within the PSA.
Santa Cruz kangaroo rat *Dipodomys venustus venustus*	~/~	A large dark kangaroo rat. Occurs in open sandy areas or dense chaparral or shrubland in the South Coast Ranges from the San Francisco Bay to Point Conception. A primary habitat is silverleaf manzanita mixed chaparral on inland marine sand deposits. This species eats the seeds of grasses, forbs, such as bur clover (*Medicago*), and shrubs.	None	Suitable habitat is not present within the PSA and there are no known occurrences within 5 miles of the PSA.
Western mastiff bat *Eumops perotis californicus*	~/CSC	A large bat. Found mostly in the southern half of California, but ranges north to Butte County. It prefers open, arid areas with high cliffs, but can also be found in bare rock, cliff, desert, herbaceous grassland, savanna, shrubland, chaparral, suburban, orchard, and conifer, hardwood and mixed woodlands. It roosts in small colonies and can also be found in caves and buildings. This bat catches strong flying insects such as dragonflies, moths, and beetles.	None	There is one known occurrence within 5 miles of the PSA. This species may use the PSA as foraging habitat, there are no roosting sites within the PSA.
Yuma myotis *Myotis yumanensis*	~/~	A small bat. Females form maternity colonies in April. Single young born late May-July. In California young born apparently from late May to mid-June. Colonies disperse by the end of September. More closely associated with water than most other North American bats. Found in a	None	This species may use the PSA as foraging habitat. There are no known occurrences within 5 miles of the PSA. There are no roosting sites within the PSA.

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		wide variety of upland and lowland habitats, including riparian, desert scrub, moist woodlands and forests, but usually found near open water. Flies low. Nursery colonies usually are in buildings, caves and mines, and under bridges.		
San Francisco dusty-footed woodrat *Neotoma fuscipes annectens*	~/CSC	Found in hardwood forests and brushlands. This species consumes many sorts of leaves, flowers, nuts, and berries. It prefers are the leaves and berries of coffeeberry (*Rhamnus californica*), poison oak (*Toxicodendron diversilobum*), blackberry, and roses.	None	Suitable habitat is not present within the PSA. There are no known occurrences of this species within 5 miles of the PSA.
Salt-marsh harvest mouse *Reithrodontomys raviventris*	FE/CE; CFP	A small, dark brown, terrestrial mouse with a long tail. Confined to the salt marshes around the San Francisco Bay and the Napa, Petaluma, Suisun marshes. It is commonly associated with dense growth of pickleweed (*Salicornia virginica*). The mouse needs access to refuge/cover on high ground, especially during highest tides in winter. This species presumably feeds on seeds of grasses and forbs as well as insects.	None	There are fifteen known occurrences within 5 miles of the PSA, two of which are located within one mile of the PSA. A salt-marsh harvest mouse was captured on an adjacent property in 1985, however suitable habitat is not present within the PSA therefore there is no potential for this species to occur within the PSA.
Alameda island mole *Scapanus latimanus parvus*	~/CSC	This species favors light, sandy soils but is absent from heavily cultivated areas. It is especially numerous on floodplains with high soil moisture and a strong growth of forbs and soil invertebrates. This mole feeds on soil invertebrates, especially earthworms and underground parts of plants.	Low	There are no known occurrences of this species within 5 miles of the PSA. Marginal habitat is present within the PSA.
Salt-marsh wandering shrew *Sorex vagrans halicoetes*	~/CSC	Usually occurs in grassy meadows and other moist open areas. Its known range includes Alameda, Contra Costa, San Mateo and Santa Clara counties. This shrew is an opportunistic feeder, taking small arthropods, earthworms and slugs.	Low	There are two known occurrences within 5 miles of the PSA. Marginal habitat is present within the PSA.
American badger *Taxidea taxus*	~/CSC	Stout-bodied, primarily solitary species that hunts for ground squirrels and other small mammal prey	Low	Marginal habitat is present within the PSA although the disturbed nature of the site and the

Common Name (*Scientific Name*)	Status FED/ST/ CNPS	General Habitat Description	Potential to Occur	Rationale
		in open grassland, cropland, deserts, savanna, and shrubland communities. Badgers have large home ranges and spend inactive periods in underground burrows. Badgers typically mate in mid- to late summer and give birth between March and April.		surrounding urban landscape would make it unlikely for this species to occur within the PSA.
San Joaquin kit fox *Vulpes macrotis mutica*	FE/CT	Alkali sink, valley grassland, foothill woodland. Hunts in areas with low sparse vegetation that allows good visibility and mobility. Multiple underground dens are used throughout the year. Den usually has multiple entrances. Sometimes uses pipes or culverts as den sites. Mates in winter; 4-7 young are born in February or March.	None	No suitable habitat is present. The PSA is outside the known range for this species.

CODE DESIGNATIONS

Federal	State	CNPS	Other
FE = Listed as endangered under the Endangered Species Act	**CE** = Listed as endangered under the California Endangered Species Act	**1B** = Rare or Endangered in California and Elsewhere	**SLC** = Species of Local or Regional Concern or conservation significance
FT = Listed as threatened under the Endangered Species Act	**CT** = Listed as threatened under the California Endangered Species Act	**1A** = Plants presumed extinct in California	**MBTA** = Migratory Bird Treaty Act
FC = Candidate for listing (threatened or endangered) under Endangered Species Act	**CSC** = Species of Concern as identified by the CDFG	**List 2** = Rare, threatened, or endangered in California, but more common elsewhere.	**ESU** = Evolutionary Significant Unit is a distinctive population.
D = Delisted in accordance with the Endangered Species Act	**CFP** = Listed as fully protected under CDFG code		

APPENDIX B – PHASE I PRELIMINARY SITE ASSESSMENT AND PHASE II SOIL AND GROUNDWATER QUALITY INVESTIGATION

Phase I Preliminary Site Assessment and Phase II Soil and Groundwater Quality Investigation

Eden Shores Residential Development
Hayward, California

July 8, 2004

Prepared For:

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Prepared By:

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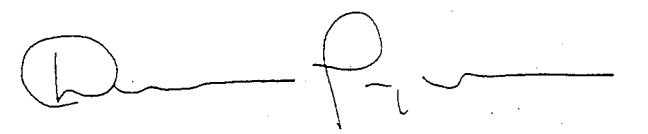

Dennis Laduzinsky, C.E.G., R.E.A.
Associate

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1.0 INTRODUCTION AND SCOPE OF SERVICES

This report presents the results of Phase I preliminary site assessment (PSA) and Phase II soil and groundwater quality investigation performed at the Eden Shores Residential Development project site in Hayward, California (the "site"). The site consists of approximately 26 acres of land located west of Marina Drive, at the intersection of Eden Shores Boulevard. The site comprises a portion of a formerly larger parcel known as the Oliver Property. A Site Location Map is shown on Figure 1 and a Site Plan is shown on Figure 2.

The purpose of the PSA has been to acquire and review information regarding the history of activities on the site and adjacent areas to evaluate the potential for on-site soil or groundwater contamination. Northgate Environmental Management, Inc. has endeavored to perform the PSA in conformance with the scope and limitations of ASTM E-1527-00, Standard Practice for Environmental Site Assessments. The purpose of the soil and groundwater quality investigation has been to evaluate potential soil and groundwater contamination concerns identified during the PSA. It is understood that Duc Housing Partners intends to construct a residential development at the site.

This investigation was performed by Dennis Laduzinsky, C.E.G./R.E.A. and Josh Otis, Senior Staff Scientist of Northgate Environmental Management, Inc. (Northgate). Mr. Laduzinsky is registered by the State of California as an Environmental Assessor. The scope of work for the investigation included the following services:

- A reconnaissance of the site and near vicinity performed on March 16, 2004;
- Discussions with regulatory officials and review of regulatory agency publications and files, as applicable;
- A review of historic aerial photographs and maps of the site;
- Interviews with individuals familiar with the history of the site;
- Collection and analysis of soil and groundwater samples to evaluate the potential presence of soil or groundwater contamination at the site; and
- Preparation of this report.

2.0 SITE SETTING

2.1 Site Location

The site is located west of Marina Drive, at the intersection of Eden Shores Drive in Hayward, California (Figures 1 and 2). The site consists of 26-acres of land that have been previously graded for development as part of the Eden Shores commercial business park. The site is divided into a northern portion and a southern portion by Eden Shores Boulevard. The northern portion of the site consists of about 14.8 acres of land, and the southern portion of the site consists of about 11.4 acres of land. Both portions of the site consist of vacant, graded lots. Sidewalks and underground utilities for the site have been installed along Marina Drive.

The site is bordered on the north by a vacant, graded parcel designated for commercial development. The site is bordered on the east by Marina Drive, beyond which lies vacant, graded parcels that form the main part of the Eden Shores commercial business park. The site is bordered on the south by Eden Park Avenue and a city park and sports complex consisting of baseball diamonds and soccer fields. The site is bordered on the west by a Union Pacific Railroad Easement and a flood control channel, beyond which lies a new residential development.

2.2 Geologic Setting

Surficial soils at the site consist of approximately 2 to 10 feet of fill, placed during grading and development of the site in 2000 and 2001. The fill material was reportedly derived from the LaVista Quarry in Hayward. The surficial fill is generally underlain by alluvial deposits of silt and clay, which are in-turn, underlain by old bay margin mud deposits (Bay Mud), and older alluvial deposits of sand, silt, and clay.

Groundwater was encountered at depths of approximately 12 to 17 feet below ground surface (bgs) in borings advanced during the present investigation. Based on topography and information from unpublished engineering reports for nearby sites, groundwater flow direction is expected to be in a general westerly direction, but may vary locally from northwest to south. Groundwater flow direction at the site may be influenced by tidal action in San Francisco Bay.

According to the U.S. Geological Survey topographic map of the Hayward Quadrangle, the site is relatively flat, with an original elevation of approximately five to seven feet above mean sea level. On a regional basis, topography slopes gently to the southeast.

3.0 SITE HISTORY

Historical information for the site and adjacent areas was evaluated by reviewing historic aerial photographs, and maps, reviewing information available in local agency files, and interviewing individuals familiar with the site.

3.1 Aerial Photography Review

Northgate reviewed historic aerial photographs of the site at Pacific Aerial Photography in Oakland, California. A list of the aerial photographs reviewed is presented at the end of this report.

3.1.1 Subject Site

The subject site consists entirely of vacant agricultural land in the photographs from 1947 through 1999. A Union Pacific Railroad easement and a flood control drainage channel border the site on the west. Drainage ditches are present along the south and east sides of the southern portion of the property; another drainage ditch is present near the existing location of Eden Shores Boulevard. No changes are visible on the subject site in any of the remaining photographs through 1999.

3.1.2 Surrounding Area

The land to the north, south, east, and west of the subject site remains agricultural land in all of the photographs from 1947 through 1999. A small ranch complex is located across the railroad tracks to the west of the site in the photographs from 1947 through 1999, and a small ranch complex with a barn is present to the east of the southeastern corner of the subject site beginning in the photographs from 1969. Grading and filling are evident on the land bordering Industrial Boulevard, approximately 500 feet north of the subject in site, in photographs from 1973 through 1999. The outlying areas mark a general progression from agricultural to commercial and residential development over time.

3.2 Historic Topographic Maps

Northgate reviewed historic topographic maps of the area from 1942, 1959, 1968, 1973, 1980, and 1993. All of the maps show the site as undeveloped land.

3.3 Sanborn Map Review

According to Environmental Data Resources, Inc. (EDR), no Sanborn Map coverage is available for the site.

3.4 Previous Investigations

A number of environmental investigations were performed at the site and adjacent areas in 1998 and 1999. Brief summaries of each of the previous investigations are presented in the following paragraphs. Copies of figures and tables from pertinent sections of the previous reports are presented in Appendix A.

Preliminary Site Assessment, Oliver Property, Hayward, California, Henshaw Associates, Inc., May 17, 1998

In May 1998, Henshaw Associates, Inc. (Henshaw) of Dublin, California performed a Phase I PSA to assess conditions and activities at and within the immediate vicinity of the site that could indicate the potential presence of hazardous constituents in shallow soil and groundwater. The PSA indicated that the Oliver Property had historically been used to grow row crops and cut flowers. An underground fuel storage tank had recently been removed from inside a maintenance shed in the central portion of the site (an area now located to the east of the southern portion of the subject site). However, no files were available for review at the local regulatory agencies related to the tank at that time. The report also indicated that fill material, consisting primarily of construction debris such as concrete and asphalt, along with street-sweeper debris and other materials, had been historically placed on an adjacent parcel located along Industrial Road, known as the "City of Hayward Parcel". (The City of Hayward Parcel is located approximately 500 feet north of the northern portion of the subject site.) The PSA concluded that these activities represented potential sources of soil and groundwater contamination and specific testing was recommended.

Soil and Groundwater Quality Investigation, Oliver Property, 28905 Hesperian Boulevard, Hayward, California, Henshaw Associates, Inc., July 31, 1998

Henshaw performed an investigation of soil and groundwater quality on the Oliver Property in May and June 1998 to evaluate the environmental concerns outlined in the PSA. The investigation included the analysis of 15 composite soil samples (formed from 60 individual samples) collected within 1-foot of the ground surface for pesticide compounds. All samples were analyzed for organochlorine pesticides, with five of the composites analyzed for organophosphorous pesticides. In addition, 10 soil samples and 5 groundwater samples collected from five exploratory borings drilled around the former ranch maintenance area and the former underground storage tank (UST) were analyzed for petroleum hydrocarbon compounds. The groundwater samples were additionally analyzed for halogenated volatile organic compounds (VOCs).

DDT, DDD, and DDE were detected in all of the composite samples, at concentrations ranging from 0.15 to 0.87 parts per million (ppm) total DDT (the combined total of DDT, DDD, and DDE in a sample). Other detected compounds included dieldrin (to 0.01 ppm) and endrin aldehyde (to 0.01 ppm). Organophosphorous pesticides were not detected above the laboratory method reporting limits (MRLs). The DDT results were all below the Total Threshold Limit Concentration (TTLC) of 1.0 ppm for DDT compounds, and below the Preliminary Remediation Goals (PRGs) for residential and commercial land use established by the U.S. Environmental Protection Agency (USEPA), Region 9. The report concluded that the low levels of residual organochlorine pesticides in shallow soil at the site did not represent a significant environmental concern. Figures and tables from this report are presented in Appendix A.

Two of the 10 soil samples collected from the former ranch maintenance area and UST contained low levels of toluene (0.006 ppm), and two samples contained low levels of methyl tert-butyl ether (MTBE) (0.17 and 0.34 ppm). Total petroleum hydrocarbons as diesel (TPH-d) was detected at concentrations of 110 and 1,400 parts per billion (ppb) in two of the five groundwater samples collected at the site. TPH as oil (TPH-o) was measured at 280 ppb and TPH as gasoline (TPH-g) was measured at 53 ppb in one other groundwater sample. MTBE was measured at 7, 31, and 9,700 ppb in three of the groundwater samples. VOCs were not measured above the laboratory MRLs in groundwater. The report concluded that, with the possible exception of the 9,700 ppb of MTBE measured in one of the groundwater samples, the presence of low levels of petroleum hydrocarbons measured in soil and groundwater at the site did not represent a significant environmental concern.

Soil and Groundwater Quality Investigation, Former UST Area, Oliver Property, 28905 Hesperian Boulevard, Hayward, California, Henshaw Associates, Inc.. August 10, 1998

This report re-states, as a stand-alone document, the chemical test results from the July 31, 1998 *Soil and Groundwater Quality Investigation, Oliver Property, 28905 Hesperian Boulevard* report. It should also be noted that in January 2001, Henshaw conducted an additional review of information in regulatory agency files regarding the regulatory status of the tank. This review included obtaining archived files from the Regional Water Quality Control Board (RWQCB), Alameda County Health Department (ACHD), and the City of Hayward. Information obtained during the file review indicated the RWQCB (the lead agency for leaking underground storage tank [LUST] sites), issued a formal closure letter for the site on February 10, 1999. The formal closure summary indicates that the RWQCB was aware of the presence of 6,500 ppb of MTBE in groundwater at the site when the closure was approved.

According to the closure summary, no remediation was required at the site as the hydrocarbons in soil and groundwater did not appear to represent a significant risk to human health or the environment.

3.5 Agency File Reviews

Parcels comprising the subject site are not listed on any government agency list of regulated sites reviewed during this investigation. It should be noted that the Oliver Trust Farms located at 28905 Hesperian Boulevard, of which the parcels comprising the subject site were formerly a part, is listed on the state LUST, Cortese, and the Haznet hazardous materials permit lists related to the old UST discussed in the previous section. However, our review indicates that the portion of the Oliver Trust Farms where the UST and other chemical storage were formerly situated is not located on what is now the subject site.

Northgate contacted the ACHD, the Hayward Fire Department, Hayward Public Works Department (PWD), and the Hayward Planning and Zoning Department for information regarding the use or storage of hazardous materials on the site. The results of our review are summarized below.

3.5.1 Alameda County Health Department

The ACHD did not maintain any files for parcels currently comprising the subject site.

3.5.2 Hayward Fire Department

The Hayward Fire Department maintains a file for Oliver Properties at 28905 Hesperian Boulevard, with a report titled *Underground Storage Tank Closure Report Located at 28905 Hesperian Boulevard, Hayward, CA, 94545* (May 18, 1998) prepared by Decon Environmental Services Inc.. The report indicates that a 500-gallon UST was removed from a farm equipment maintenance building at the site on April 30, 1998. (Based on our aerial photograph review, this equipment maintenance building was located several hundred feet east of the southeast corner of the southern portion of the subject site). A soil sample collected from the bottom of the tank excavation contained TPH as gasoline (TPH-g) at a concentration of 1 ppm.

The file also includes a February 10, 1999 letter from the California RWQCB to Mr. Ed Phillips of Hayward indicating that no further action is required related to the former UST at the site. Finally, the fire department file contains a Business Activities Form from December 2000 indicating the storage of 690 gallons of unleaded gasoline, 660 gallons of diesel fuel, and 110 gallons of motor oil at the Oliver Property.

3.5.3 Hayward Public Works Department

The Hayward PWD does not maintain any files indicating the use or storage of hazardous materials at the subject site.

3.5.4 Hayward Planning and Zoning Department

The Hayward Planning and Zoning Department does not maintain any files indicating the use or storage of hazardous materials at the site.

4.0 REGIONAL ENVIRONMENTAL CONDITIONS

Information on regional environmental conditions is derived from a variety of government agency sources. To assess whether sites with documented environmental concerns exist within a 1-mile radius of the subject site, we reviewed several regulatory agency lists provided by Environmental Data Resources, Inc. (EDR). The EDR report, including a summary of the agency databases reviewed and a map showing the location of any identified sites, is provided in Appendix B. The results of the database search and the follow-up agency file review are summarized below:

- National Priority List (NPL): No sites are listed within a 1-mile radius of the subject site.
- National Priority List Deletions (Delisted NPL): No sites are listed within a 1-mile radius of the subject site.
- National Priority List Proposed: No sites are listed within a 1-mile radius of the subject site.
- CERCLIS: No sites are listed within a 0.5-mile radius of the subject site.
- CERCLA NFRAP List (CERC-NFRAP): No sites are listed within a 0.25-mile radius of the subject site.
- RCRA Corrective Action Report (CORRACTS): No sites are listed within a 1-mile radius of the subject site.
- RCRA-permitted Treatment, Storage, and Disposal Facilities (RCRIS-TSD): No sites are listed within a 0.5-mile radius of the subject site.
- RCRA Large Quantity Generators of Hazardous Waste (RCRIS-LQG): No sites are listed within a 0.25-mile radius of the subject site.
- RCRA Small Quantity Generators of Hazardous Waste (RCRIS-SQG): Two sites are listed within 1/8 mile of the site; six additional sites are listed within a ¼-mile radius. Based on our review, none of these sites are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the site.

- Emergency Response Notification System (ERNS): No sites are listed within a 0.125-mile radius of the subject site.

- State Equivalent Priority List (Annual Workplan Sites [AWP]): No sites are listed within a 1-mile radius of the subject site.

- State Equivalent CERCLIS List (Cal-Sites): No sites are listed within a 1-mile radius of the subject site.

- California Hazardous Materials Incident Report System (CHMIRS): No sites are listed within a 0.25-mile radius; 10 sites are listed within a ½- to 1-mile radius, and 3 sites are listed at more than 1 mile. Based on our review, none of the listed sites are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site.

- CORTESE: One site is listed within a ¼-mile radius; 37 additional sites are listed within a 1-mile radius. Based on our review, none of the listed sites are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site.

- Proposition 65 (Notify 65): Two sites are listed within a 1-mile radius. Based on our review, none of the listed sites are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site.

- Toxic Pits Cleanup Facilities: No sites are listed within a 1-mile radius of the subject site.

- State Landfill List: No sites are listed within a 0.5-mile radius of the subject site.

- Waste Management Unit Database (WMUDS/SWAT): No sites are listed within a 0.25-mile radius of the subject site.

- State Leaking Underground Storage Tanks (LUST): Two sites are listed within a ¼-mile radius; nine additional sites are listed within a 1-mile radius. Based on our review, none of the listed sites are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site.

- California Bond Expenditure Plan: No sites are listed within a 1-mile radius of the subject site.

- State Hazardous Substance Storage Containers (UST): Two sites are listed within a 0.5-mile radius. Based on our review, none of the listed sites are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site.

- State Facility Inventory Database (CA FID): One site is listed within a 0.125-mile radius; four additional sites are listed within a ½-mile radius. Based on our review, none of the listed sites are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site.

- Hazardous Substance Storage Container Database (HIST UST): Two sites are listed within a 0.25-mile radius. Based on our review, neither of the listed sites is likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site.

- Superfund Consent Decrees (CONSENT): There are no sites listed within a 1-mile radius of the subject site.

- Records of Decision (ROD): No sites are listed within a 1-mile radius of the subject site.

- USEPA Facility Index System (FINDS): The subject site is not listed.

- U.S. Department of Transportation Hazardous Materials Information Reporting System (HMIRS): The subject site is not listed.

- Nuclear Regulatory Commission Material Licensing Tracking System (MLTS): The subject site is not listed.

- Mines Master Index File (MINES): No sites are listed within a 0.25-mile radius of the subject site.

- Federal Superfund Liens (NPL Liens): The subject site is not listed.

- PCB Activity Database System (PADS): The subject site is not listed.

- RCRA Administrative Action Tracking System (RAATS): The subject site is not listed.
- Toxic Release Inventory System(TRIS): The subject site is not listed.
- Toxic Substances Control Act (TSCA): The subject site is not listed.
- Section 7 Tracking Systems (SSTS): The subject site is not listed.
- FIFRA/TSCA Tracking System (FTTS): The subject site is not listed.
- Aboveground Petroleum Storage Tank Facilities (AST): The subject site is not listed.
- Cleaner Facilities (CLEANERS): No sites are listed within a 0.25-mile radius of the subject site.
- Waste Discharge System (CAWDS): The subject site is not listed.
- List of Deed Restrictions (DEED): The subject site is not listed.
- CA SLIC: No sites are listed within a 0.25-mile radius of the subject site.
- Hazardous Waste Information System (HAZNET): A total of 15 sites are listed within a ¼-mile radius of the subject site. Based on our review, none of the listed sites are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site.
- Coal Gas: No sites are listed within a 1-mile radius.

Although not listed on any regulatory agency list reviewed during this investigation, it should be noted that previous investigation reports prepared for the Oliver Property indicate that elevated levels of petroleum hydrocarbons and metals are present in shallow soil and groundwater on a portion of the Eden Shores Business Park. This area is located along Industrial Parkway, and formerly referred to as "the City of Hayward Parcel". Although not a part of the subject site, the former City of Hayward Parcel was partially graded during the overall site grading for the Eden Shores Business Park. It is our understanding that some of the soil from the City of Hayward Parcel may have been placed as fill on portions of the subject site.

5.0 CURRENT CONDITIONS

Current site conditions were observed during a reconnaissance of the site and near vicinity performed by Northgate on March 16, 2004. Photographs from the reconnaissance are attached at the end of this report.

5.1 Project Site Reconnaissance

The site comprises the western portion of an area originally graded and developed as part of the Eden Shores commercial business park. At the time of our investigation, the site consisted of relatively flat, graded building pads covered with a sparse to locally dense growth of grass and weeds (Photographs 1 and 2). The site is divided into a northern and southern section by the Eden Shores Boulevard overpass (Photographs 3 and 4). The eastern boundary of the site is marked by Marina Drive. Sidewalks and underground utilities are present along the eastern boundary of the parcels. A 4- to 12-foot high retaining wall forms the western boundary of the site (Photographs 5 and 6). Signposts marking the location of an underground natural gas transmission line are located on both the northern and southern portions of the site (Photograph 7). We did not observe obvious indications of the presence of fuel tanks or other use or storage of hazardous materials at the site during our reconnaissance.

5.2 Surrounding Vicinity

The site is bordered on the north by graded lots associated with the Eden Shores Business Park. Marina Drive and the remainder of the graded pads for the business park border the site on the east (Photograph 8). The site is bordered on the south by the cul-de-sac for Eden Park Place, beyond which is a city-owned sports complex consisting of baseball diamonds and soccer fields (Photograph 9). The site is bordered on the west by a Union Pacific Railroad easement and a county flood control channel. A new residential development is under construction to the west of the railroad easement. The site is divided into a northern and southern section by the Eden Shores Boulevard overpass.

6.0 SOIL AND GROUNDWATER QUALITY INVESTIGATION

Information collected during the PSA indicated the presence of several issues of potential environmental concern. A soil and groundwater quality investigation was performed to evaluate these areas of potential concern.

Available information indicates that a portion of the Eden Shores Business Park located along Industrial Boulevard, formerly known as the "City of Hayward Parcel", was historically used by the City of Hayward as a receiving yard for fill soil and other debris generated during City public works projects. Soil and groundwater testing previously preformed on that parcel indicated the presence of petroleum hydrocarbons and metals in the fill soils on the site. Groundwater on that parcel has been locally impacted by petroleum hydrocarbons. Some of the soil from this parcel may have been placed as fill on the subject site during previous grading activities for the Eden Shores Business Park. A soil quality investigation was performed on the northern and southern portions of the subject site to evaluate the potential presence of impacts related to fill soils that may have been derived from the old City of Hayward Parcel. Groundwater sampling was performed along the northern portion of the subject site to evaluate potential impacts to groundwater quality related to the presence of petroleum hydrocarbons or other constituents in groundwater on the old City of Hayward Parcel.

Information in previous reports for the Oliver Property indicate that petroleum hydrocarbons and MTBE have been detected in groundwater in an area to the east of the intersection of Marina Drive and Eden Park Place, related to an old UST formerly located at the old Oliver Property ranch complex. The UST site has been formally closed by the RWQCB. However, the old UST site is located in a general upgradient location relative to the subject site. Contamination at that site could potentially impact groundwater quality beneath the subject site. A groundwater quality investigation was performed on the southern portion of the subject site to evaluate potential impacts.

Information collected during our PSA indicates that some of the fill material used to construct the Eden Shores Boulevard overpass may have contained serpentine rock, which can contain natural asbestos minerals. To evaluate potential impacts related to the possible presence of asbestos, surficial soil samples were collected from the Eden Shores Boulevard overpass and analyzed for asbestos. As a general soil quality evaluation all of the near-surface soil samples collected at the site were also analyzed for asbestos.

Soil and groundwater sampling was performed at the site on April 28, 2004 to evaluate these potential concerns. All samples were analyzed at Torrent Laboratories of Milpitas, California.

6.1 Northern Portion of the Site

Soil samples were collected from eight borings located on the northern portion of the site to evaluate the general quality of fill the materials previously placed at the site. Approximate boring locations are shown on Figure 2. Borings were advanced to depths of 5 to 20 feet bgs using a truck-mounted GeoProbe sampling rig. Boring logs are presented in Appendix C. A continuous soil sample core was collected from each boring during drilling. The sample cores were examined in the field for hydrocarbon odors, discoloration, or other indications of the presence of contamination.

Soil samples were collected for chemical analysis at approximate depths of 1 and 4 feet bgs at each boring. Samples selected for chemical analysis were sealed with Teflon-lined end caps and placed on ice for transport to laboratory under appropriate chain-of-custody control. Individual samples were combined at the laboratory by adjacent groups of four to form four composite samples for analysis. Each composite soil sample was analyzed for: 17 metals using EPA Methods 6000/7000; TPH-g, TPH-d, and TPH-o using EPA Method 8015; and benzene, toluene, ethylbenzene and xylenes (BTEX) and MTBE using EPA Method 8021.

Soil sample analytical results are presented in Tables 1 and 2. The laboratory analytical reports are provided in Appendix D. As shown in Table 1, none of the composite soil samples contained BTEX, MTBE, or TPH-g above the laboratory MRLs. TPH-d was detected in one composite sample at a concentration of 15.6 ppm. TPH-o was detected in two of the composite samples at concentrations of 93.6 and 197 ppm.

Following receipt of the composite sample test results, each of the eight samples used to form the composites were analyzed for TPH-d and TPH-o as individual samples. TPH-d was detected in four of the eight individual samples, with concentrations ranging from 2.55 to 34 ppm. TPH-o was detected in all eight individual samples at concentrations ranging from 8.91 to 311 ppm. As shown in Table 1, the measured concentrations of TPH-d and TPH-o in all of the samples are below the Environmental Screening Levels (ESLs) for residential land use established by the California RWQCB and do not appear to represent a significant environmental concern.

Various metals were detected in the composite samples as shown in Table 2. All detected metals were measured at concentrations below the PRGs for residential land use established by the USEPA Region 9, and with the exception of cadmium, were below the RWQCB ESLs for residential land use. Cadmium was detected at concentrations ranging from 4.5 to 6.4 ppm, which exceeds the RWQCB ESL of 1.7 ppm, but is well below the USEPA PRG for cadmium

of 370 ppm. In our opinion, the concentration of cadmium measured in the soil samples at the subject site are within the range of background concentrations normally found in shallow soil throughout the Bay Area, and do not represent a significant environmental concern.

Groundwater was encountered at depths of 11 to 17 feet bgs in borings B-4, B-7, and B-8. Groundwater samples were collected from borings B-4 and B-8 by lowering a clean, disposable bailer through dedicated temporary PVC screens pushed into the borings. Boring B-7 did not yield a sufficient quantity of water to collect a sample. Groundwater samples were decanted into laboratory-supplied glassware and stored on ice for transport to the analytical laboratory under appropriate chain-of-custody control. Each groundwater sample was analyzed for TPH-g, TPH-d, and TPH-o using EPA Method 8015, and BTEX, MTBE, and VOCs using EPA Method 8260.

Groundwater sample analytical results are shown in Table 3. As shown, neither of the groundwater samples contained TPH-g, TPH-d or TPH-o, BTEX, MTBE, or other VOCs above the laboratory MRLs. The results indicate that groundwater quality at the site has not been impacted by petroleum hydrocarbons or other compounds.

6.2 Southern Portion of the Site

Six borings were advanced in the southern portion of the site. Borings B-9, B-10, and B-11 were advanced to depths up to 20 feet bgs in the southeast corner of the southern portion of the site (near Marina Drive and Eden Park Avenue) to evaluate potential impacts to groundwater-related to the old Oliver Property UST, formerly located east of Marina Drive. Borings B-12, B-13, and B-14 were advanced to depths of 5 feet bgs across the remainder of the southern development area to evaluate potential impacts to soil quality related to the possible presence of fill material from the former City of Hayward Parcel. Approximate boring locations are shown on Figure 2.

Soil samples were collected for chemical analysis at approximate depths of 1 and 4 feet bgs from borings B-10, B-12, B-13, and B-14. Individual soil samples were combined at the laboratory by adjacent groups of four to form two composite samples for analysis. Each composite soil sample was analyzed for: 17 metals using EPA Methods 6000/7000; TPH-g, TPH-d, and TPH-o using EPA Method 8015; and BTEX and MTBE using EPA Method 8021.

Soil sample analytical results are presented in Tables 1 and 2. The laboratory reports are provided in Appendix D. As shown in Table 1, neither of the composite soil samples collected on the southern portion of the site contained BTEX, MTBE, TPH-g, or TPH-d above laboratory MRLs. TPH-o was detected in one composite sample at a concentration of 21 ppm.

Following receipt of the composite sample test results, each of the four samples used to form the composites were analyzed for TPH-d and TPH-o as individual samples. None of the four individual samples contained TPH-d above the laboratory MRL. TPH-o was detected in three of the discrete samples at concentrations ranging from 5.56 to 91.7 ppm. As shown in Table 1, the measured concentrations of TPH-o are below the ESLs for residential land use established by the California RWQCB, and do not appear to represent a significant environmental concern.

Various metals were detected in the composite samples as shown in Table 2. All detected metals were measured at concentrations below the PRGs for residential land use established by the USEPA, Region 9, and with the exception of cadmium in all samples and chromium in one sample, were below the RWQCB ESLs for residential land use,. Cadmium was detected at concentrations of 5.2 and 5.5 ppm, which exceeds the RWQCB ESL for cadmium of 1.7 ppm, but are well below the USEPA PRG of 370 ppm. Chromium was measured at 70 ppm in one composite sample, which exceeds the RWQCB ESL of 58 ppm, but is below the USEPA PRG of 210 ppm. In our opinion, the concentration of cadmium and chromium measured in the soil samples at the subject site are within the range of background concentrations normally found in shallow soil throughout the Bay Area, and do not represent a significant environmental concern.

Groundwater samples were collected from borings B-10 and B-11. An obstruction encountered in boring B-9 prevented collection of a groundwater sample at that location. The groundwater sample from boring B-10 was analyzed for TPH-g using EPA Method 8015 and BTEX and MTBE using EPA Method 8021. The groundwater sample from B-11 was analyzed for TPH-g using EPA Method 8015 and VOCs using EPA Method 8260. Due to the low yield of the uppermost water-bearing zone, a sufficient volume of water could not be collected from either boring to analyze the samples for TPH-d or TPH-o.

As shown in Table 3, neither of the groundwater samples contained TPH-g, BTEX, or MTBE above the laboratory MRLs. The groundwater sample from boring B-11 did not contain other VOCs above the laboratory MRLs. Based on these results, groundwater quality at the southern portion of the subject site does not appear to have been impacted by fuel hydrocarbons or other constituents related to the UST formerly located on the adjacent portion of the Oliver Property.

6.3 Shallow Soil Asbestos Evaluation

Surface soil samples were collected from four locations along the Eden Shores Boulevard overpass to evaluate the possible presence of naturally-occurring asbestos in the fill material used to construct the overpass. Samples were collected using hand tools, and stored in

laboratory-supplied glassware for transport to the laboratory under appropriate chain-of-custody control. Approximate soil sample locations are shown on Figure 2.

Each of the four samples collected from the Eden Shores Boulevard overpass, and the six composite soil samples collected from the northern and southern portions of the site, were initially analyzed for asbestos using polarized light microscopy (PLM). Following receipt of the test results, each of the 28 discrete soil samples collected at the site were re-analyzed using California Air Resource Board (ARB) Method 435.

Analytical results are presented in Table 4, and laboratory results are provided in Appendix D. As shown in Table 4, each of the individual samples collected from the Eden Shores Boulevard overpass, and two of the six shallow composite soil samples collected from the northern and southern portions of the site, contained less than (<) 1% chrysotile asbestos, a naturally-occurring form of asbestos associated with serpentinite and other ultramafic rocks. The 28 discrete soil samples were then analyzed using California ARB Method 435 with the following results:

- 22 samples did not contain detectable quantities of chrysotile
- 6 samples contained <0.25% chrysotile.

In California, the regulatory thresholds for asbestos have been defined by three agencies, as described below.

Department of Toxic Substances Control (DTSC). The DTSC classifies waste containing asbestos as hazardous if it contains greater than 1% asbestos and is in a form that is friable. Friable materials are generally defined as material that can be crushed under hand pressure, or materials that are finely divided (e.g., soil).

California ARB. The California ARB has adopted regulations governing construction and grading operations that disturb areas greater than 1.0 acre in size that contain naturally-occurring asbestos. The asbestos threshold is defined as material containing at least 0.25% asbestos, or a mixture of materials to be excavated or graded that contains greater than 10% ultramafic rock with at least 0.25% asbestos. Sites that trigger the above threshold must prepare an Asbestos Dust Mitigation Plan prior to grading work, comply with record-keeping and reporting requirements, and conform to ARB restrictions on the reuse of the material for surface applications (e.g., roadways and other surfacing).

California Occupational Safety and Health Administration (Cal-OSHA). Cal-OSHA has established regulations to protect workers handling materials that contain greater than 1% asbestos.

Asbestos concentrations in soil samples collected at the site are all below the threshold limits for regulation by the DTSC, Cal-OSHA, or the California ARB, and do not appear to represent a significant environmental concern.

7.0 CONCLUSIONS

This Phase I PSA and Phase II soil and groundwater quality investigation was conducted to identify and evaluate areas of potential environmental concern within the site and near-vicinity that may affect on-site soil and groundwater quality. The site consists of 26 acres of land that were previously part of a larger property known as the Oliver Property. Parcels comprising the subject site were previously graded in 2000 and 2001 for development as part of the Eden Shores commercial business park. These parcels are now scheduled for residential development. The site is divided into a northern and southern portion by the Eden Shores Boulevard overpass. The northern portion of the site is consists of about 14.8 acres of land, and the southern portion of the site consists of approximately 11.4 acres of land. Both portions of the site consist of vacant, graded lots. Sidewalks and underground utilities for the site have been installed along Marina Drive.

Northgate's review indicates that the site has been historically used as agricultural land for row crops and cut flowers. Chemical testing performed by others prior to the recent grading and redevelopment of the site indicated the presence of organochlorine pesticides in the original surficial soil at the site. However, the measured concentrations of pesticides were all below the PRGs for residential land use established by the USEPA. These soils have now been covered by 2 to 10 feet of fill material reportedly derived from the LaVista quarry in Hayward. In our opinion, the measured concentrations of pesticides measured in the original soil prior to site development do not represent a significant environmental concern.

Information collected during our investigation indicated that petroleum hydrocarbons and MTBE were present on a potion of the old Oliver Property located to the east of the southern potion of the subject site. Petroleum hydrocarbons were also reported present in groundwater on a parcel located along Industrial Parkway, approximately 500 feet north of the northern portion of the subject site. Elevated levels of hydrocarbons and metals were also reported present on that parcel. Soil and groundwater samples were collected from the northern and southern portions of the subject site to evaluate potential impacts related to the nearby off-site sources. Soil samples collected within about 4 feet of the ground surface on the northern and southern potions of the site were found to contain low levels of TPH-o and lesser amounts of TPH-d. The source of the hydrocarbons measured in the samples is unknown. However, all measured hydrocarbon concentrations are below the ESLs for residential land use established by the California RWQCB and do not represent a significant environmental concern. Shallow soil samples collected at the site did not contain TPH-g, BTEX, or MTBE. Metals were detected in the shallow soil samples at concentrations generally representative of naturally-occurring background levels.

Groundwater samples collected on the northern and southern portions of the site did not contain TPH, BTEX, MTBE, or other VOCs.

Six of 28 soil samples collected from the site and the adjacent Eden Shores Boulevard overpass contained <0.25% chrysotile asbestos, a naturally-occurring form of asbestos associated with serpentine (the California State Rock) and other ultramafic rock types. The measured concentration of asbestos is below established regulatory thresholds, and does not appear to represent a significant environmental concern.

Based on these test results and the information collected during the Phase I PSA, our investigation did not identify the presence of conditions that would preclude residential development of the subject site.

8.0 LIMITATIONS

This investigation has been performed for the exclusive use of our client. The information presented in this report may not be used by any others without the express written consent of Northgate. The purpose of the environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an assessment (which may include professional opinions) is conducted.

No investigation is thorough enough to absolutely rule out the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

Environmental conditions may exist at the site that cannot be identified by visual observation. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally-occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

Where the scope of services is limited to interview and/or review of readily available reports and literature, any conclusions, and/or recommendations are necessarily based largely on information supplied by others, the accuracy or sufficiency of which may not be independently reviewed by us.

Any opinions and/or recommendations presented apply to site conditions existing at the time of performance of services. Northgate is unable to report on, or accurately predict, generally unforeseeable events that may impact the site following performance of services, whether occurring naturally or caused by external forces. Therefore, we cannot assume responsibility of such events or their impact. We also cannot assume responsibility for changes in environmental standards, practices, or regulations.

9.0 REFERENCES

Aerial Photographs

Environmental Data Resources:

Photograph	Date	Scale
AV6100-218-28/291998	4/21/99	1:12,000
AV8202-17-43/44	6/26/02	1:12,000
AV5200-18-45	10/8/96	1:12,000
AV4230-18-44	6/17/92	1:12,000
AV3268-6-49	3/30/88	1:12,000
AV2640-05-42	5/15/85	1:12,000
AV2040-06-47	6/22/81	1:12,000
AV1377-05-53	7/19/77	1:12,000
AV1100-05-42	4/23/73	1:12,000
AV902-05-41	5/2/69	1:12,000
AV572-05-06	12/11/63	1:36,000
AV337-06-59	7/3/59	1:9,600
AV253-16-52	5/3/57	1:12,000
AV119-20-25	3/2/54	1:10,000
AV11-07-25	3/24/47	1:20,000

Contacts

Alameda County Department of Environmental Health
Contact: Roseana Garcia

Hayward Engineering and Transportation Department
Contact: Counter Staff

Hayward Fire Department
Contact: Hugh Murphy

Hayward Planning and Zoning Department
Contact: Counter Staff

Hayward Public Works Department
Contact: Pat Garakian

Publications and Reports

U.S. Geological Survey, 15 Minute Series Topographic Map, Hayward Quadrangle, California, 1942, 1899

U.S. Geological Survey, 7.5 Minute Series Topographic Map, Newark Quadrangle, California, 1993, 1980, 1973, 1968, 1959

Attachment VII

TABLES

Table 1
Soil Sample Analytical Results - Petroleum Hydrocarbons
(results reported in mg/kg)

Sample ID: Location and Depth	Composite Sample Results				Discrete Sample Results	
	TPH Gasoline	TPH Diesel	TPH Oil	BTEX, MTBE	TPH Diesel	TPH Oil
Northern Portion of Site						
B-1-0.5	ND	15.6	197	ND	ND	168
B-2-1.0					ND	34.9
B-3-1.5					ND	311
B-4-1.0					8.3	11.6
B-1-4.0	ND	ND	ND	ND	na	na
B-2-3.0						
B-3-4.5						
B-4-3.0						
B-5-2.0	ND	ND	93.6	ND	34	135
B-6-1.5					4.49	10.1
B-7-1.0					2.55	8.91
B-8-0.5					ND	50.5
B-5-4.5	ND	ND	ND	ND	na	na
B-6-4.5						
B-7-3.5						
B-8-3.0						
Southern Portion of Site						
B-10-1.0	ND	ND	21	ND	ND	5.56
B-12-0.5					ND	91.7
B-13-1.0					ND	7.95
B-14-2.0					ND	ND
B-10-3.5	ND	ND	ND	ND	na	na
B-12-3.0						
B-13-3.5						
B-14-4.5						
Standards						
PRG	NA	NA	NA	***	N/A	N/A
ESL- Tier 2 Direct	500	500	500	***	500	500

Notes:

mg/kg: Milligrams per kilogram (parts per million)
TPH: Total petroleum hydrocarbons
BTEX: Benzene, toluene, ethylebenze, and xylenes
MTBE: Methyl tert butyl ether
ND: Not detected above the laboratory method reporting limits
na: Not analyzed
PRG: Preliminary Remediation Goals for residential land use (USEPA Region 9)
ESL: Tier 2 Environmental Screening Level for human health/direct exposure (RWQCB Region 2)
N/A: Not applicable
***: Varies with specific compounds

Table 2
Soil Sample Analytical Results - Metals
(results reported in mg/kg)

Sample ID Location and Depth	Analytes																
	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
COMP (B-1 - B-4; 0.5' - 2')	ND	ND	130	ND	6.4	39	15	51	12	0.26	ND	47	ND	ND	ND	79	76
COMP (B-1 - B-4; 3' - 5')	ND	ND	150	ND	5.4	54	12	30	11	0.12	ND	57	ND	ND	ND	51	63
COMP(B-5 - B-8; 0.5' - 2.5')	ND	ND	150	ND	5.9	53	14	48	8.7	0.15	ND	66	ND	ND	ND	68	73
COMP(B-5 - B-8; 3' - 5')	ND	ND	160	ND	4.5	45	11	31	12	ND	ND	48	ND	ND	ND	45	59
COMP(B-10, B-12 - B-14; 0.5' - 2.5')	ND	ND	200	ND	5.2	70	14	53	16	ND	ND	65	ND	ND	ND	61	74
COMP(B-10, B-12 - B-14; 3' - 5')	ND	ND	340	ND	5.5	55	14	41	5.8	ND	ND	74	ND	ND	ND	54	64
Standards																	
PRG	31	22	5,400	150	370	210	900	3,100	150	23	390	1600	390	390	5	550	23,000
ESL Tier 2 Direct Exposure	6.3	5.5	1,100	31	1.7	58	94	630	255	2.5	78	310	78	78	1	110	4,700

Notes:

mg/kg: Milligrams per kilogram (parts per million)

ND: Not detected above the laboratory method reporting limits

PRG: Preliminary Remediation Goals for residential land use (USEPA Region 9)

ESL: Tier 2 Environmental Screening Level for human health/direct exposure (RWQCB Region 2)

Table 3
Groundwater Analytical Results
(results reported in µg/L)

Sample ID	TPH as Gasoline	TPH as Oil	TPH as Diesel	BTEX, MTBE	VOCs
B-4	ND	ND	ND	ND	ND
B-8	ND	ND	ND	ND	ND
B-10	ND	na	na	ND	na
B-11	ND	na	na	ND	ND
Standards					
MCL	NA	NA	NA	***	***
ESL	100	100	100	***	***

Notes:
µg/L: Micrograms per liter (parts per billion)
TPH: Total petroleum hydrocarbons
BTEX: Benzene, toluene, ethylbenzene, total xylenes
MTBE: Methyl tert butyl ether
VOCs: Volatile organic compounds
ND: Not detected above laboratory method reporting limits
NA: Not applicable
MCL: Maximum Contaminant Level (primary drinking water standard)
ESL: Tier 1 Environmental Screening Levels for residential land use (RWQCB Region 2)
***: Varies with specific compound

Table 4
Soil Sample Analytical Results - Asbestos
(concentrations expressed in percent)

Sample Location and Depth (ft)	Composite Sample Analysis (PLM)	Individual Sample Analysis (ARB 435)
ESB-1	<1	ND
ESB-2	<1	<0.25
ESB-3	<1	<0.25
ESB-4	<1	ND
B-1-0.5	ND	<0.25
B-2-1.0		ND
B-3-1.5		ND
B-4-1.0		ND
B-1-4.0	ND	ND
B-2-3.0		ND
B-3-4.5		ND
B-4-3.0		ND
B-5-2.0	<1	ND
B-6-1.5		ND
B-7-1.0		ND
B-8-0.5		ND
B-5-4.5	ND	ND
B-6-4.5		ND
B-7-3.5		ND
B-8-3.0		ND
B-10-1.0	ND	<0.25
B-12-0.5		ND
B-13-1.0		<0.25
B-14-2.0		ND
B-10-3.5	<1	ND
B-12-3.0		ND
B-13-3.5		ND
B-14-4.5		<0.25

Notes:
ARB: California Air Resources Board
PLM: Polarized light microscopy
ND: Not detected

Attachment VII

FIGURES

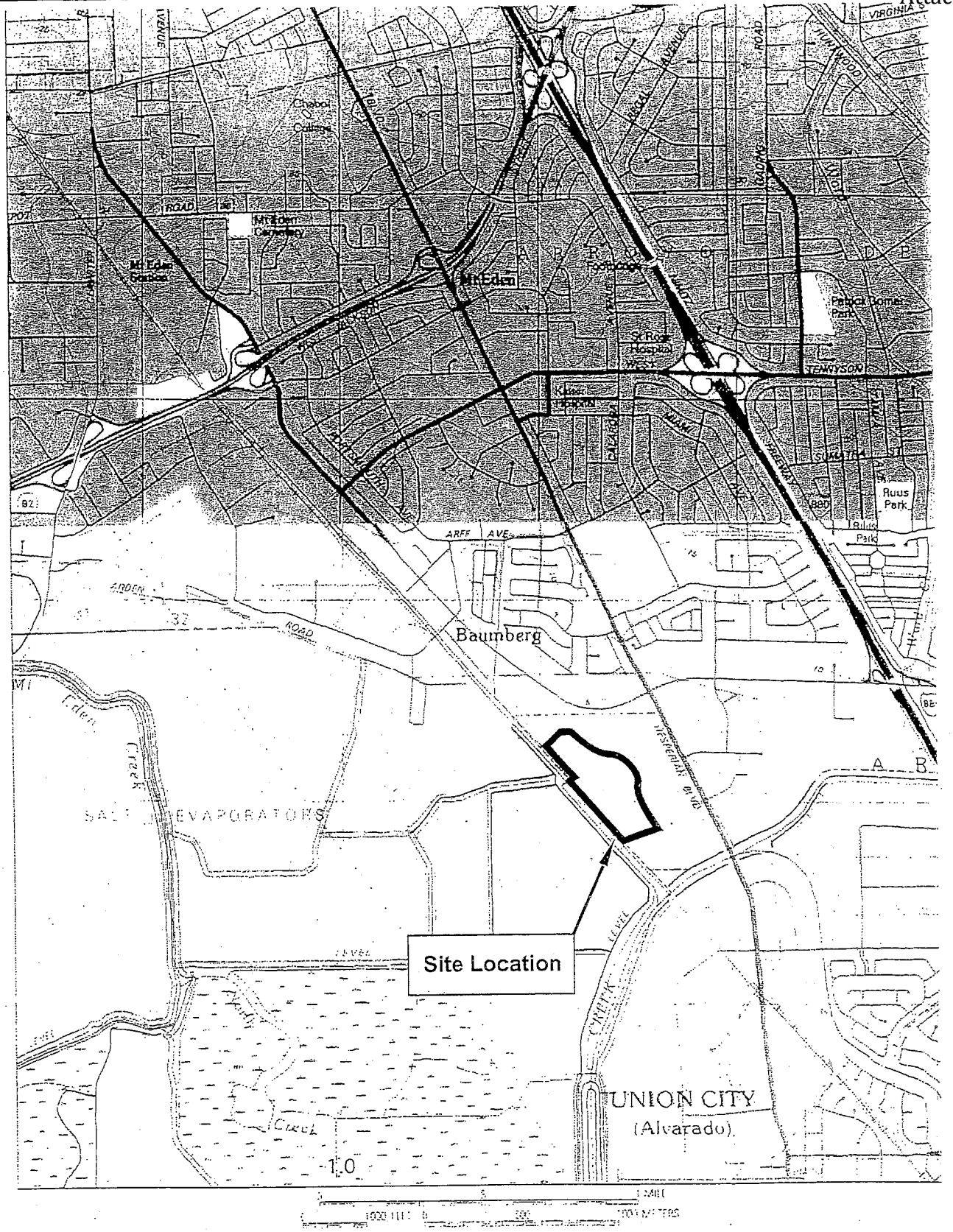


FIGURE 1
SITE LOCATION MAP

Base map from USGS: Hayward, California, 2001

northgate environmental management, inc

Eden Shores Residential Development Project
Marina Drive and Eden Shores Blvd.
Hayward, California
July 2004

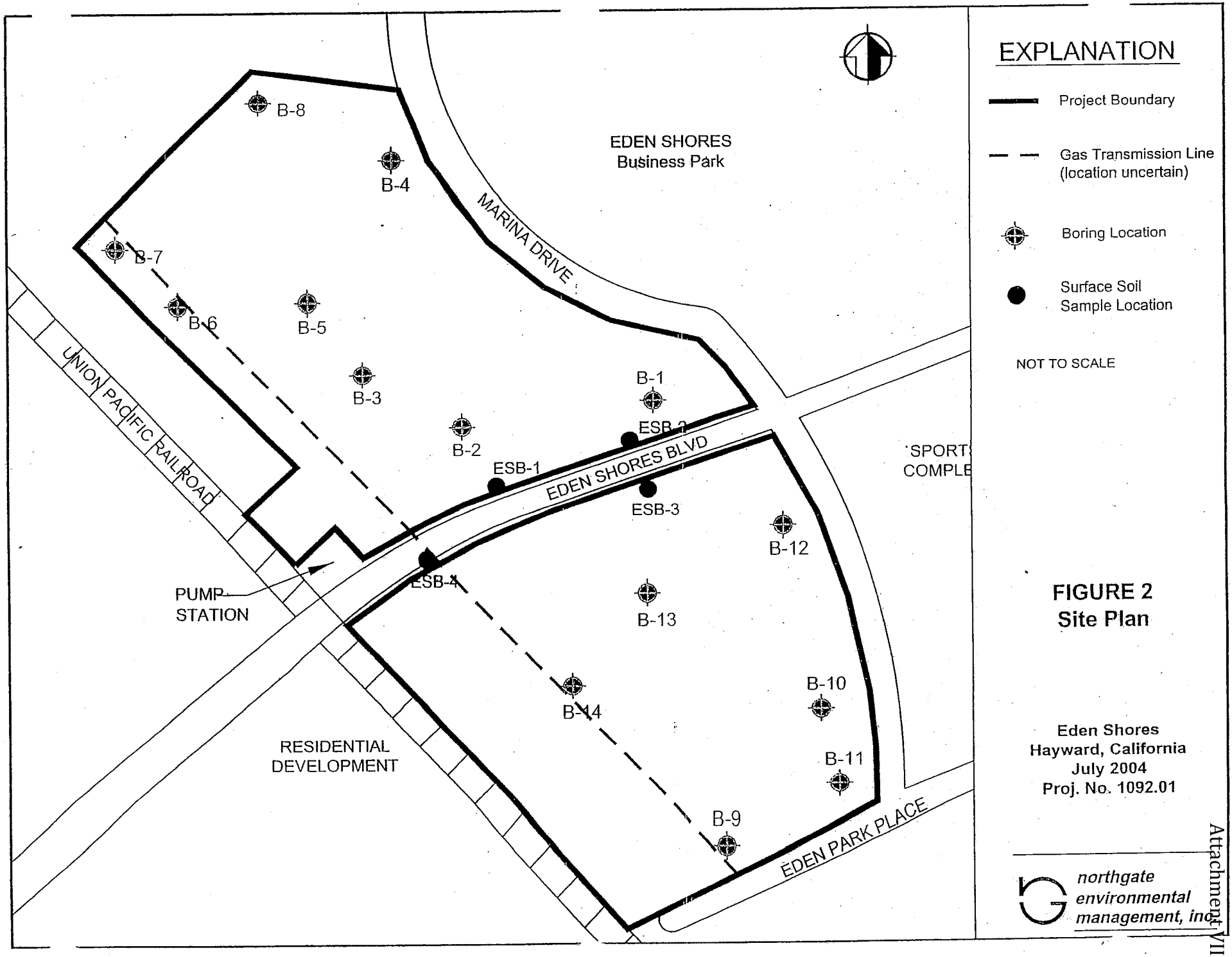


FIGURE 2
Site Plan

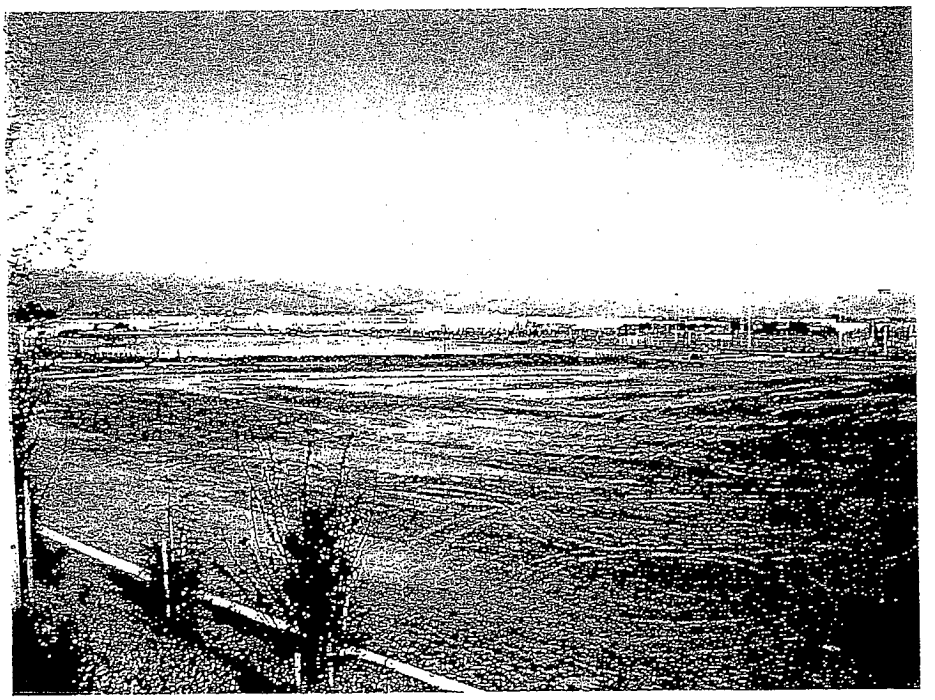
Eden Shores
Hayward, California
July 2004
Proj. No. 1092.01

northgate environmental management, inc.

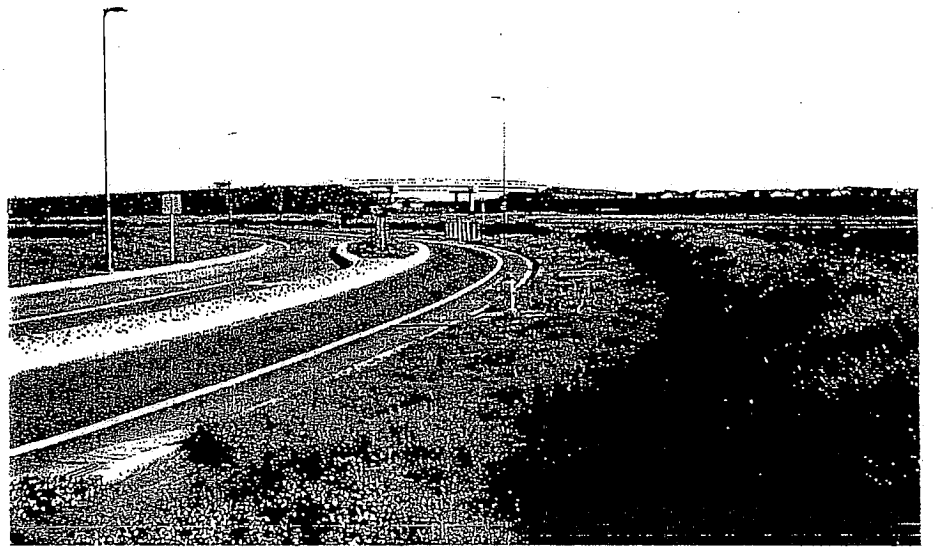
Attachment VII

SITE PHOTOGRAPHS

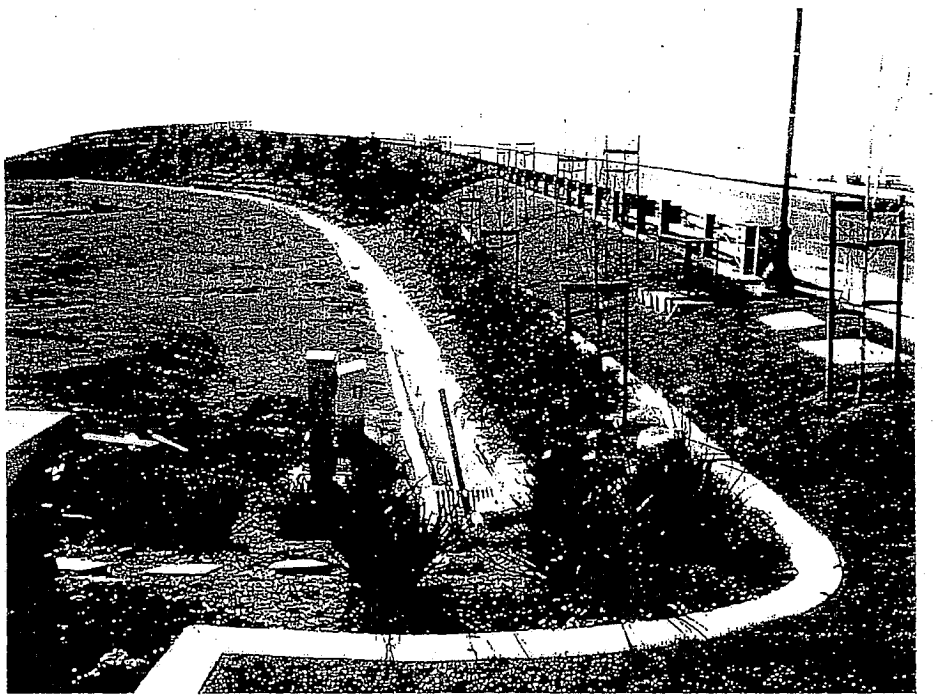
Photograph 1: Northern portion of site viewed from Eden Shores Boulevard overpass. Retaining wall separates flood control channel and railroad easement on left from subject site on right. Pump station for sewer at lower left. View to north.



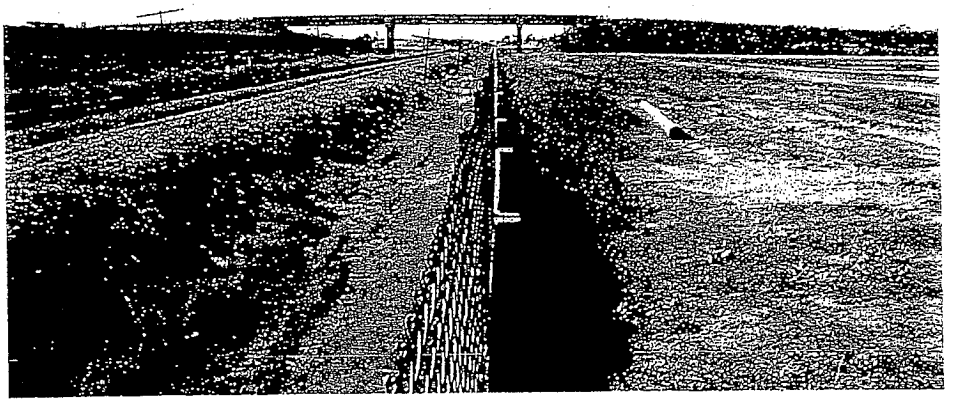
Photograph 2: Southern portion of site viewed from Eden Shores Boulevard overpass. View to southeast. Marina Drive visible on left. Adjacent city sports complex visible in background.



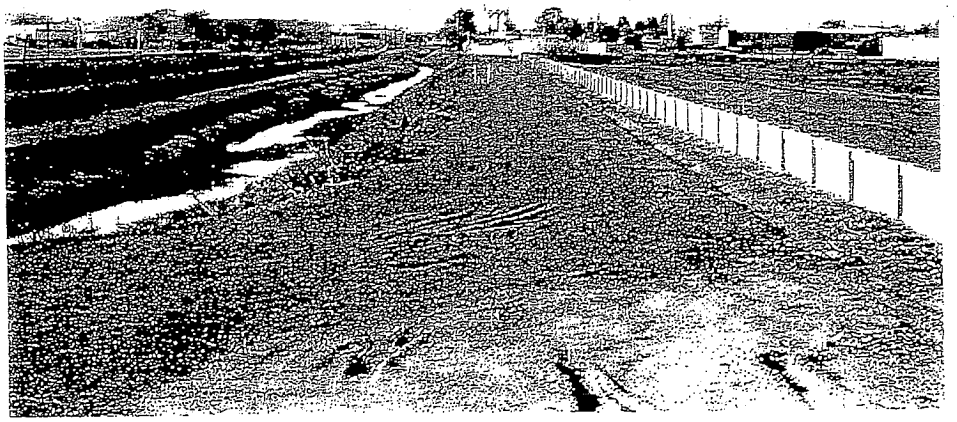
Photograph 3: View to south along Marina Drive. Northern portion of site on right. Eden Shores Business Park on left. Eden Shores Boulevard overpass in background.



Photograph 4: View to west along Eden Shores Boulevard overpass from southern portion of site. Note drains and utilities in place.

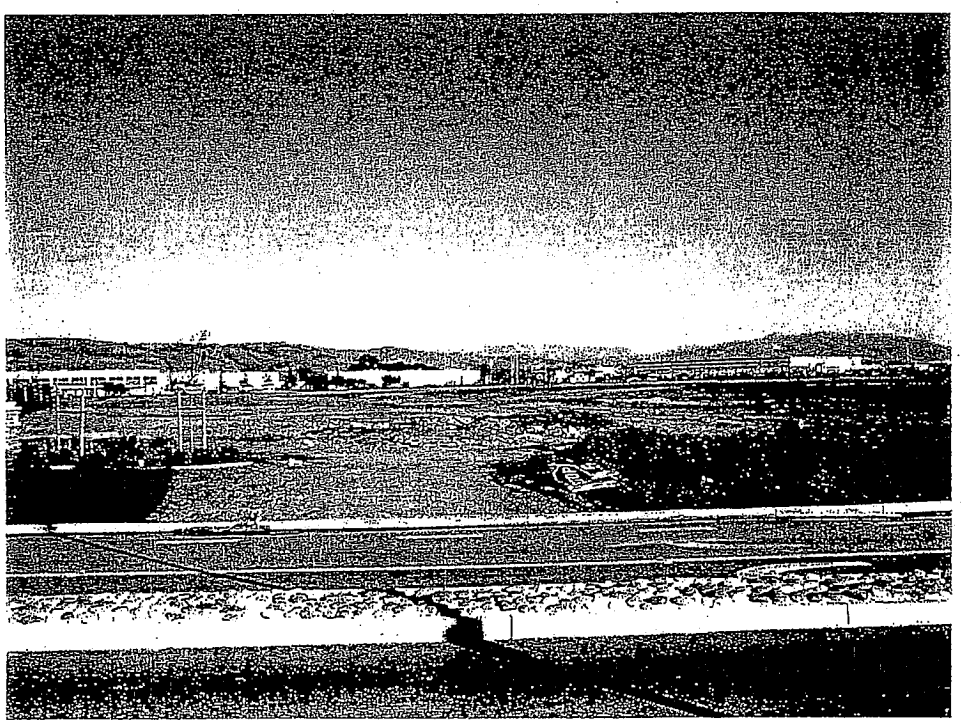


Photograph 5: View to north along western boundary of the southern portion of the site. Retaining wall marks boundary of site.

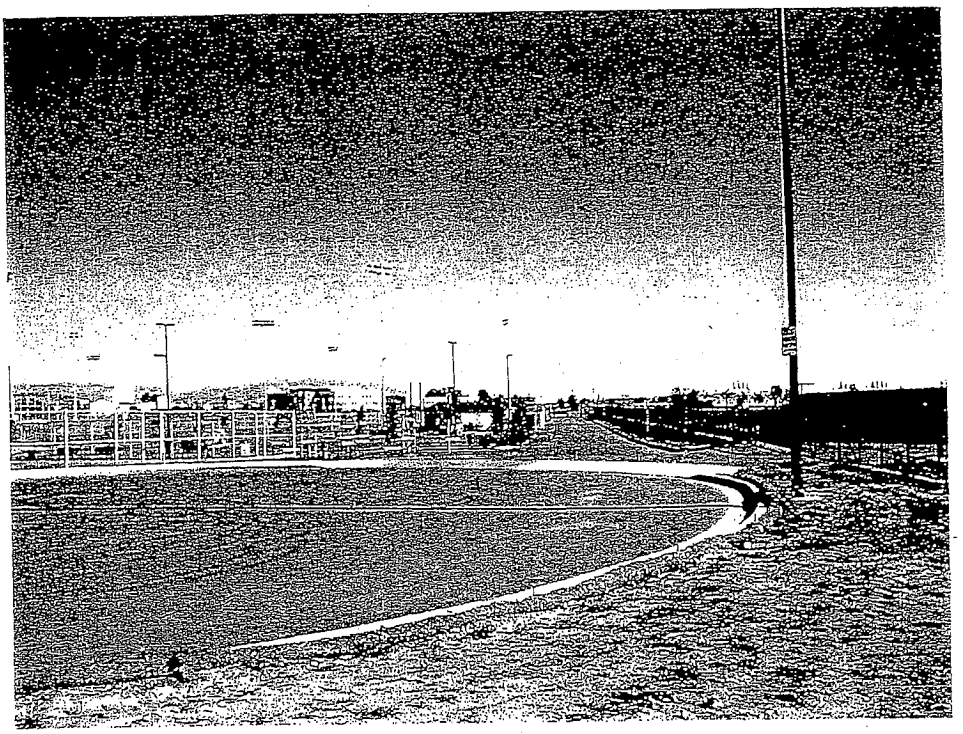


Photograph 6: View to north along western boundary of the northern portion of the site. Retaining wall marks boundary of site.

Photograph 7: Signposts for natural gas transmission line. Northern portion of site, view to north.



Photograph 8: Graded pads for Eden Shores Business Park east of Marina Drive from northern portion of site.



Photograph 9: Eden Park Place cul-de-sac and sports complex bordering site on the south.

APPENDIX C – FEMA

Federal Emergency Management Agency
Washington, D.C. 20472

APR 11 2005

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Roberta Cooper
Mayor, City of Hayward
777 B Street
Hayward, CA 94541-5007

IN REPLY REFER TO:
Case No.: 04-09-0592P
Follows Conditional Case No.: 98-09-988R
Community Name: City of Hayward, CA
Community No.: 065033
Effective Date of This Revision: APR 11 2005

Dear Mayor Cooper:

The Flood Insurance Rate Map for your community has been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panel(s) revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed which provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer for your community. If you have any technical questions regarding this LOMR, please contact the Director, Federal Insurance and Mitigation Division of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) in Oakland, California, at (510) 627-7103, or the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at http://www.fema.gov/nfip.

Sincerely,

Michael B. Godesky, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness and Response Directorate

For: Doug Bellomo, P.E., Chief
Hazard Identification Section
Mitigation Division
Emergency Preparedness and Response Directorate

List of Enclosures:
Letter of Map Revision Determination Document
Annotated Flood Insurance Rate Map

cc: Mr. Donald Labelle
Director
Public Works Agency
Alameda County

Mr. Robert Bauman
Acting Public Works Director
City of Hayward

Mr. Pete Ruggeri
Ruggeri-Jensen-Azar & Associates

Page 1 of 4	Issue Date: APR 11 2005	Effective Date: APR 11 2005	Case No.: 04-09-0592P	LOMR-APP

Follows Conditional Case No.: 96-09-988R

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	City of Hayward Alameda County California	FILL LEVEE IMPROVEMENT FLOODWALL	NEW TOPOGRAPHIC DATA LEVEE CERTIFICATION
	COMMUNITY NO.: 065033		
IDENTIFIER	Oliver Trust/Eden Shores LOMR	APPROXIMATE LATITUDE & LONGITUDE: 37.659, -122.086 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE(S) & REVISED REACH(ES)	Lines A and A-2 (Zone 3A) and San Francisco Bay – an area bounded by Industrial Boulevard on the north, the Union Pacific Railroad on the west, Alameda Creek Line A Zone 3A) on the south, and Hesperian Boulevard on the east		

SUMMARY OF REVISIONS

Effective Flooding:	Zone AH	Zone A1	BFEs*	Zone B	Zone AH
Revised Flooding:	Zone C	Zone B	No BFEs	Zone C	Zone B
Increases:	NONE	NONE	NONE	NONE	NONE
Decreases:	YES	YES	YES	YES	YES

* BFEs – Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES			ANNOTATED STUDY ENCLOSURES
TYPE: FIRM*	NO.: 065033 0024 E	Date: February 9, 2000	NO REVISION TO THE FLOOD INSURANCE STUDY REPORT
TYPE: FIRM	NO.: 065033 0019 E	Date: February 9, 2000	

* FIRM – Flood Insurance Rate Map; ** FBFM – Flood Boundary and Floodway Map; *** FHBM – Flood Hazard Boundary Map

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2077 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional information about the NFIP is available on our website at http://www.fema.gov/nfip.

Michael B. Godesky, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness and Response Directorate 101827 DA040090692E 102DA

Attachment VII

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance flood discharges computed in the FIS for your community without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS report for your community and could, therefore, establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This revision has met our criteria for removing an area from the 1-percent-annual-chance floodplain to reflect the placement of fill. However, we encourage you to require that the lowest adjacent grade and lowest floor (including basement) of any structure placed within the subject area be elevated to or above the Base (1-percent-annual-chance) Flood Elevation.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional information about the NFIP is available on our website at http://www.fema.gov/nfip.

Michael S. Godesky, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness and Response Directorate 101827 DA04090592E 102DA

Attachment VII

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Ms. Sally M. Ziolkowski
Director, Federal Insurance and Mitigation Division
Federal Emergency Management Agency, Region IX
1111 Broadway Street, Suite 1200
Oakland, CA 94607-4052
(510) 627-7103

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panels warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

Although part of the revised area is shown on the effective FIRM for the unincorporated areas of Alameda County, this area has been annexed by the City of Hayward. The revised corporate limits are reflected on the annotated FIRM.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2677 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional information about the NFIP is available on our website at http://www.fema.gov/nfip.

Michael B. Godesky, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness and Response Directorate 101827 DAD4090592E 102DA

Attachment VII

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. This revision is effective as of the date of this letter. However, until the 90-day period has elapsed, the revised BFEs presented in this LOMR may be changed.

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below.

LOCAL NEWSPAPER Name: *The Daily Review*
Dates: 04/23/2005 04/30/2005

PUBLIC NOTIFICATION

FLOODING SOURCE	LOCATION OF REFERENCED ELEVATION	BFE (FEET NGVD)		MAP PANEL NUMBER(S)
		EFFECTIVE	REVISED	
Lines A and A-2 (Zone 3A) and San Francisco Bay	Area surrounded by levee west of Union Pacific Railroad	7	None	0018 E and 0024 E
	Area west of Hesperian Boulevard, south of Industrial Boulevard, and west of Union Pacific Railroad	9	None	0018 E

EAST

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2677 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional information about the NFIP is available on our website at http://www.fema.gov/nfip.

Michael S. Godesky, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness and Response Directorate 101827 DA040305S2E 102DA

CHANGES ARE MADE IN DETERMINATIONS OF BASE FLOOD ELEVATIONS FOR THE CITY OF HAYWARD, ALAMEDA COUNTY, CALIFORNIA, UNDER THE NATIONAL FLOOD INSURANCE PROGRAM

On February 9, 2000, the Department of Homeland Security's Federal Emergency Management Agency identified Special Flood Hazard Areas (SFHAs) in the City of Hayward, Alameda County, California, through issuance of a Flood Insurance Rate Map (FIRM). The Mitigation Division has determined that modification of the elevations of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) for certain locations in this community is appropriate. The modified Base Flood Elevations (BFEs) revise the FIRM for the community.

The changes are being made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65.

A hydraulic analysis was performed to incorporate updated topographic information and the effects of placement of fill, levee improvements, a storm drain pump station, and a floodwall and has resulted in a decrease in SFHA width and decreased BFEs for the revised areas of Lines A and A-2 (Zone 3A) and the San Francisco Bay. The table below indicates existing and modified BFEs for selected locations along the affected lengths of the flooding source(s) cited above.

Location	Existing BFE (feet)*	Modified BFE (feet)*
Area surrounded by levee west of Union Pacific Railroad	7	None
Area west of Hesperian Boulevard, south of Industrial Boulevard, and west of Union Pacific Railroad EAST	9	None

*National Geodetic Vertical Datum, rounded to nearest whole foot

Under the above-mentioned Acts of 1968 and 1973, the Mitigation Division must develop criteria for floodplain management. To participate in the National Flood Insurance Program (NFIP), the community must use the modified BFEs to administer the floodplain management measures of the NFIP. These modified BFEs will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and contents.

Upon the second publication of notice of these changes in this newspaper, any person has 90 days in which he or she can request, through the Chief Executive Officer of the community, that the Mitigation Division reconsider the determination. Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical data. All interested parties are on notice that until the 90-day period elapses, the Mitigation Division's determination to modify the BFEs may itself be changed.

Any person having knowledge or wishing to comment on these changes should immediately notify:

The Honorable Roberta Cooper
Mayor, City of Hayward
777 B Street
Hayward, CA 94541-5007

APPENDIX D – NOISE

NOISE & VIBRATION IMPACT ASSESSMENT

FOR

SOUTH OF ROUTE 92 SPECIFIC PLAN AMENDMENT PROJECT

HAYWARD, CA

PREPARED FOR:

PMC
1440 BROADWAY, SUITE 1008
OAKLAND, CA 94612

PREPARED BY:

AMBIENT
AIR QUALITY & NOISE CONSULTING

5314 SHELATO WAY
CARMICHAEL, CA 95608
CONTACT: KURT LEGLEITER
TEL/FAX: 916.359.2700

APRIL 22, 2007

ENVIRONMENTAL SETTING

ACOUSTIC FUNDAMENTALS

Sound is mechanical energy transmitted through a medium (air) in the form of a wave from a disturbance or vibration. Noise, however, is generally defined as sound that is loud, unpleasant, unexpected, or disagreeable.

Amplitude

Amplitude is the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels (dB) on a logarithmic scale. For example, a 10 dB sound is 10 times the pressure difference of a 0 dB sound; a 20 dB sound is 100 times the pressure difference of a 0 dB sound. Another feature of the decibel scale is the way in which sound amplitudes from multiple sources add together. A 65 dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3 dB change in amplitude as the minimum audible difference perceptible to the average person (FHWA 1980).

Frequency

Frequency is the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz (Hz). One Hz equals one cycle per second. The human ear is not equally sensitive to sound of different frequencies. Sound waves below 16 Hz or above 20,000 Hz cannot be heard at all, and the ear is more sensitive to sound in the higher portion of this range than in the lower. To approximate this sensitivity, environmental sound is usually measured in A-weighted decibels (dBA). On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA.

SOUND AND THE HUMAN EAR

Because of the ability of the human ear to detect a wide range of sound pressure fluctuations, sound pressure levels are expressed in logarithmic units called decibels. The sound pressure level in decibels is calculated by taking the log of the ratio between the actual sound pressure and the reference sound pressure squared. The reference sound pressure is considered the absolute hearing threshold.

In addition, because the human ear is not equally sensitive to all sound frequencies, a specific frequency-dependent rating scale was devised to relate noise to human sensitivity. A dBA scale performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. The basis for compensation is the faintest sound audible to the average ear at the frequency of maximum sensitivity. This dBA scale has been chosen by most authorities for purposes of environmental noise regulation. Typical indoor and outdoor noise levels are presented in **Exhibit 1**.

INDOORS	A-Weighted Decibels		Perceived Loudness Relative to 60 dBA	OUTDOORS
	140	Threshold of Pain	x256	
				Military Jet Takeoff with Afterburner (at 50 feet)
	130	Deafening	x128	
	120		x64	Jet Takeoff at 200 Feet
Rock Band	110	Uncomfortably Loud	x32	
				747-100 Takeoff (4 Miles From Start of Roll)
Inside Subway Train, New York	100		x16	Power Lawnmower (at 50 Feet) Ambulance Siren (at 100 Feet)
Noisy Cocktail Bar	90	Very Loud	x8	727-200 Takeoff (4 Miles From Start of Roll)
				Diesel Truck, 40 mph (at 50 Feet)
Jet Aircraft Cabin, at Cruise	80		x4	Automobile, 65 mph (at 50 Feet)
Shouting (at 3 Feet)				Busy Street (at 50 Feet)
Noisy Restaurant	70	Moderately Loud	x2	757-200 Takeoff (4 Miles From Start of Roll)
Vacuum Cleaner at 3 Feet				Automobile, 30 mph (at 50 Feet)
Large Business Office	60		x1	Cessna 172 Landing (3,300 Feet From Rwy End)
Normal Conversation (at 3 Feet)				
Quiet Office	50	Moderately Quite	x1/2	
				Quiet Urban Area, Nighttime
	40		x1/4	Quiet Suburban Area, Nighttime
Quiet Library				Quiet Rural Area, Nighttime
	30	Very Quiet	x1/8	
Concert Hall, Background				
	20		x1/16	Leaves Rustling
Recording Studio				
	10	Barely Audible	x1/32	
	0	Threshold of Hearing	x1/64	

Sources: California Department of Transportation, January 2002, *California Airport Land Use Planning Handbook*; M. David Egan, McGraw Hill, 1972, *Concepts in Architectural Acoustics*; and U.S. Department of Housing and Urban Development, Office of Community Planning and Development, *The Noise Guidebook*.

EXHIBIT 1

TYPICAL NOISE LEVELS

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance, and habituation to noise over differing individual experiences with noise.

Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment, referred to as the "ambient" environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by the hearers. With regard to increases in A-weighted noise level, knowledge of the following relationships will be helpful in understanding this report (U.S. EPA 1971):

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans.
- Outside of the laboratory, a 3 dB change is considered a just-perceivable difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected.
- A 10 dB change is subjectively heard as approximately a doubling in loudness.

When evaluating noise impacts, based on the above relationships, it is generally recognized that an increase of greater than 3 dBA is considered potentially significant. However, increases in ambient noise levels need to also take into account the existing noise environment. Consequently, increases in cumulative noise exposure (in CNEL/Ldn) of 5 dBA are generally considered significant in areas where the ambient noise environment is less than 60 dBA. In areas where the ambient noise environment is between 60 and 65 dBA, increases of 3.0 dBA, or greater, would be considered significant. In areas where the ambient noise environment exceeds 65 dBA, a predicted increase of 1.5 dBA, or greater, would be considered significant. These thresholds were initially recommended by the Federal Interagency Committee on Noise (FICON) in 1972, based on noise levels at which people typically become increasingly annoyed. These recommendations have since been recognized by various local, state and federal agencies and are the criteria typically used for the analysis of increases in ambient noise levels (FAA, 2000).

NEGATIVE EFFECTS OF NOISE ON HUMANS

Negative effects of noise exposure include physical damage to the human auditory system, interference, and disease. Exposure to noise may result in physical damage to the auditory system, which may lead to gradual or traumatic hearing loss. Gradual hearing loss is caused by sustained exposure to moderately high noise levels over a period of time, while traumatic hearing loss is caused by sudden exposure to extremely high noise levels over a short period of time. However, gradual and traumatic hearing loss both may result in permanent hearing damage. In addition, noise may interfere with or interrupt sleep, relaxation, recreation, and communication. Although most interference may be classified as annoying, the inability to hear a warning signal may be considered dangerous. Noise may also be a contributor to diseases associated with stress, such as hypertension, anxiety, and heart disease. The degree to which noise contributes to such diseases is dependent upon the noise frequency, bandwidth, level, and exposure time (Caltrans 1998).

CHARACTERISTICS OF SOUND PROPAGATION & ATTENUATION

Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3.0 and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6.0 and about 7.5 dBA per doubling of distance.

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

NOISE DESCRIPTORS

The selection of a proper noise descriptor for a specific source is dependent upon the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise are defined below (Caltrans 1998, Lipscomb and Taylor 1978).

- L_{max} (Maximum Noise Level): The maximum instantaneous noise level during a specific period of time.
- L_{min} (Minimum Noise Level): The minimum instantaneous noise level during a specific period of time.
- L_{eq} (Equivalent Noise Level): The energy mean noise level. The instantaneous noise levels during a specific period of time in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value is calculated, which is then converted back to dBA to determine the L_{eq}.
- L_{dn} (Day-Night Noise Level): The 24-hour L_{eq} with a 10 dBA "penalty" for the noise-sensitive hours between 10 p.m. and 6 a.m. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.
- CNEL (Community Noise Equivalent Level): The CNEL is similar to the L_{dn} described above, but with an additional 5 dBA "penalty" for the noise-sensitive hours between 7 p.m. to 10 p.m., which are typically reserved for relaxation, conversation, reading, and television. If using the same 24-hour noise data, the CNEL is typically approximately 0.5 dBA higher than the L_{dn}.

EXISTING NOISE ENVIRONMENT

Noise-Sensitive Land Uses

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of their intended purpose.

Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other noise-sensitive land uses include hospitals, convalescent facilities, parks, hotels, churches, libraries, and other uses where low interior noise levels are essential.

Noise-sensitive land uses located near the project site consist of residential land uses, the nearest of which are located adjacent to and to the south and west of the project site.

Ambient Noise Levels

The existing noise environment in the vicinity of the proposed project site is influenced primarily by vehicle traffic area roadways, occasional aircraft overflights, as well as trains traveling along the Union Pacific Railroad (UPRR), which extends along the western boundary of the project site.

To document the existing noise environment, ambient noise surveys were conducted by AMBIENT Air Quality & Noise Consulting at various locations in the project area. Noise measurements were conducted using a Larson Davis model 820 sound-level meter placed at a height of approximately 4.5 feet above the ground surface. Based on the measurements conducted, average daytime noise levels (in dBA L_{eq}) in the project area generally range from the upper 50's to the upper 60's, dependent primarily on distance from nearby roadways. Aircraft Overflights resulted in intermittent noise levels of approximately 65 to 70 dBA L_{max}. One train pass-by was observed during the noise survey, consisting of a single engine and 25 cars traveling southbound at a speed of approximately 30 mph. The train pass-by resulted in intermittent noise levels of approximately 103.4 dBA L_{max} (107.8 SEL) at approximately 55 feet from the track centerline. Measurement locations, observed noise sources, and corresponding measured noise levels are summarized in **Table 1.**

Table 1
Ambient Noise Levels

Monitoring Location		Noise Sources Noted During Measurement	Noise Level		
			Leq	Lmax	Lmin
Eden Park Place, Western Boundary (55 feet from UPRR)	12:00-12:15 pm	Vehicle traffic and construction activities at ~125 yards, occasional aircraft over-flights.	58.5	70.2	47.2
Mt. Eden Park, Western Boundary (55 feet from UPRR)	12:17 pm	Train pass-by along UPRR with horn sounding	NM	103.4	NM
Eden Park Place, Eastern Boundary (25 feet from Hesperian Boulevard)	13:00-13:15 pm	Vehicle traffic on Hesperian Boulevard	68.6	75.2	60.7
Marina Drive, Northern Boundary (25 feet from Industrial Boulevard)	13:45-14:00 pm	Vehicle traffic on Industrial Boulevard	67.1	73.8	58.2
Measurements conducted on April 18, 2007 using a Larson Davis model 820 sound level meter positioned at a height of 4.5 feet.					

REGULATORY FRAMEWORK

Local Plans, Policies, Regulations, and Ordinances

City of Hayward General Plan

The Noise Element of the City of Hayward General Plan contains policies designed to protect the community from the harmful and annoying effects of exposure to excessive noise. The City's General Plan also includes noise compatibility guidelines and standards for proposed development projects. The City's noise compatibility standards are summarized in **Tables 2**.

In addition to the noise criteria identified in **Table 2**, the City's General Plan also includes specific criteria for the evaluation of noise impacts associated with proposed development projects. These criteria include an interior noise standard of 45 dB L_{dn} for new housing units. Residential dwellings exposed to exterior aircraft or railroad noise levels of 60 dB Ldn or greater shall also achieve an interior noise standard of 55 dBA L_{max} within bedrooms during the daytime hours and 50 dBA L_{max} during the nighttime hours (City of Hayward 2002). The City's *General Plan Guidelines for the Review of New Development* are summarized in **Table 3**.

City of Hayward Noise Ordinance

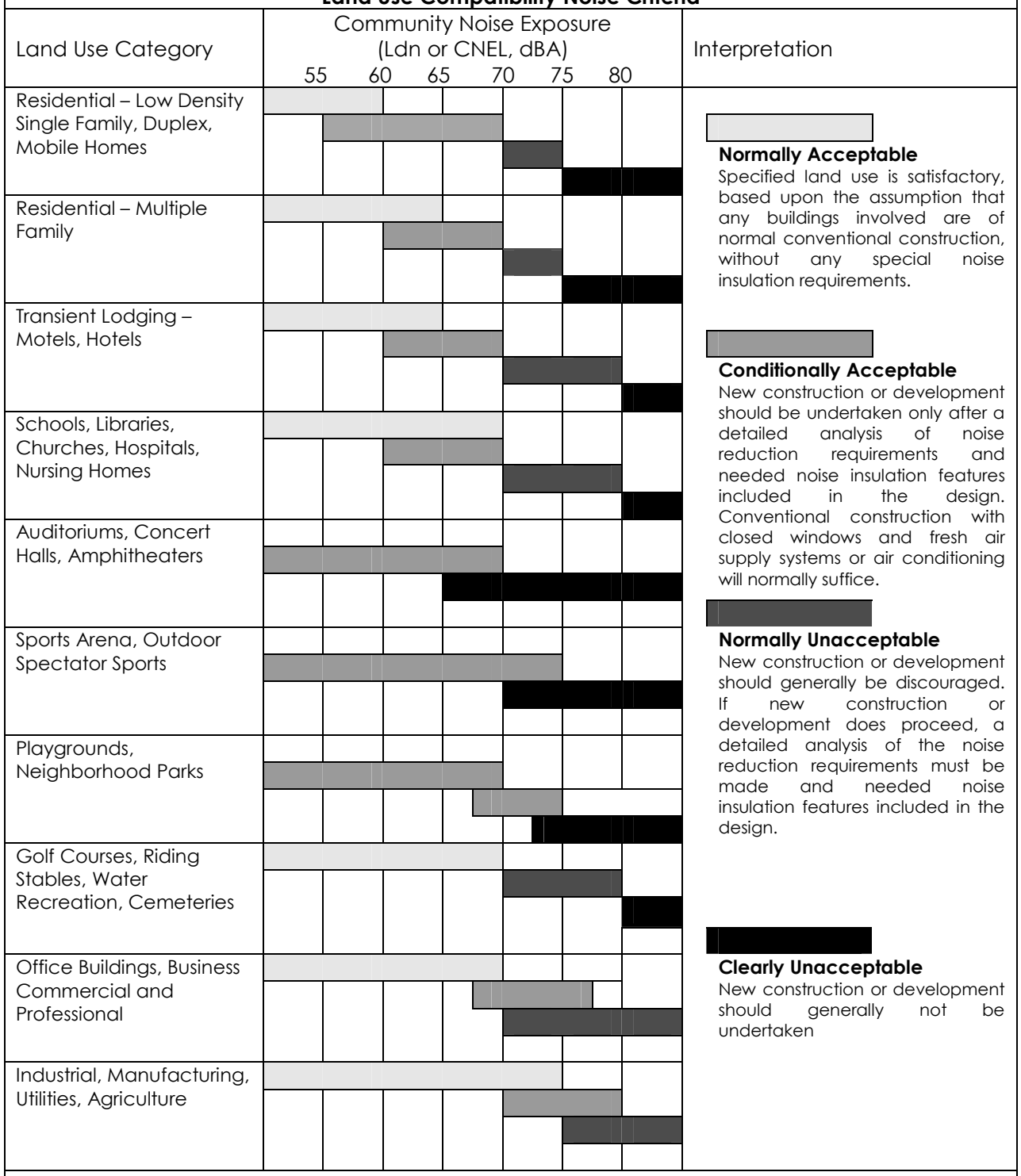
The City of Hayward's noise ordinance includes provisions for the protection of public peace, but does not identify specific noise standards. In accordance with the City's noise ordinance, noise-generating construction activities shall not exceed the local ambient level by more than 6 dB at any point outside the property line between the hours of 7:00 p.m. and 7 a.m., Monday through Saturday. Construction activities are limited to between the hours of 10:00 a.m. and 6 p.m. on Sundays and holidays.

THRESHOLDS OF SIGNIFICANCE

Noise impacts associated with the proposed project would be considered significant if implementation of the proposed land uses would:

- Result in a substantial increase (i.e., 6 dBA or greater) in ambient noise levels at nearby residential land uses during the more noise-sensitive nighttime hours of 7 p.m. to 7 a.m., Monday thru Saturday, or between 6 p.m. and 10 a.m. on Sundays or holidays;
- Result in a substantial permanent long-term increase in ambient noise levels. For purposes of this analysis, "substantial increase" is defined as an increase of 5 dBA where the ambient noise environment is less than 60 dBA. In areas where the ambient noise environment is between 60 and 65 dBA, increases of 3.0 dBA, or greater, would be considered significant. In areas where the ambient noise environment exceeds 65 dBA, a predicted increase of 1.5 dBA, or greater, would be considered significant.
- Result in increased exposure of land uses to excessive groundborne vibration levels. There are currently no adopted federal, state, or local standards for vibration. For most structures, a peak particle velocity (ppv) threshold of 0.2 inch per second (in/sec) is recommended by Caltrans to avoid structural damage, with the exception of fragile historic structures or ruins (Caltrans 2002). The recommended threshold for human annoyance recommended by the Federal Transit Administration is 80 VdB (FHWA 1995).

Table 2
City of Hayward
Land Use Compatibility Noise Criteria



Source: City of Hayward 2002

Table 3
City of Hayward
Guidelines for the Review of New Development

A. New development projects shall meet acceptable noise level standards. The "acceptable" noise standards for new land uses as established in Land Use Compatibility for Community Exterior Noise Environments (see Figure 1) shall be used with further consideration of the following:
   1. The maximum acceptable exterior noise level in residential areas is an Ldn of 55 dB for single-family development and an Ldn of 60 dB for multi-family development. These levels shall guide the design and location of future development, and are the goals for the reduction of noise in existing development. These goals will be applied where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). The outdoor standard will normally be applied to any area considered to be "useable open space", including decks and balconies associated with apartments and condominiums.
   2. Indoor noise level shall not exceed an Ldn of 45 dB in new housing units.
   3. If the primary noise source is aircraft or a railroad, noise levels in new residential development exposed to an exterior Ldn of 60 dB or greater should be limited to a maximum instantaneous noise level in bedrooms at night of 50 dB(A). Maximum instantaneous noise levels in bedrooms during the daytime and in other rooms should not exceed 55 dB(A).
   4. If the primary noise source is a commercial or industrial land use, new residential development shall not be allowed where the ambient noise level due to commercial or industrial noise sources will exceed the noise level standards as set forth in Table 1. Each of the noise level standards specified in Table 1, "Noise and Land Use Compatibility Standards for Industrial and Commercial Noise", shall be reduced by 5 dB(A) for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.
   5. Appropriate interior noise levels in commercial, industrial and office buildings are a function of the use of space and shall be evaluated on a case-by-case basis. Interior noise levels in offices generally should be maintained at 52 Leq (hourly average) or less. The noise guidelines and contours will be used to determine if additional noise studies are needed for proposed new development. Noise studies shall follow a standard format and guidelines.

B. Protect the noise environment in existing residential areas. The guidelines are not intended to be applied reciprocally. In other words, if an area currently is below the desired noise standards, an increase in noise up to the maximum should not necessarily be allowed. The impact of a proposed project on an existing land use should be evaluated in terms of the potential for adverse community response based on a significant increase in existing noise levels, regardless of the compatibility guidelines. Specific examples of these situations are described below:
   1. The project has the potential to generate significant adverse community response due to the increased character of the noise it would generate.
   2. Noise created by commercial or industrial sources associated with new project or developments shall be controlled so as not to exceed the noise level standards set forth in Table 1 as measured at any affected residential land use. The allowable noise level shall be adjusted up to the ambient noise level.

   In general, the City will require the evaluation of mitigation measures for projects that would cause the Ldn to increase by 3 dB(A) or more at an existing residential area.

C. Locate noise sensitive uses away from noise sources unless mitigation measures are included in development plans. Protect schools, hospitals, libraries, churches, convalescent homes, and other noise sensitive uses from noise levels exceeding those allowed in residential areas.

D. Design city streets to reduce noise levels in adjacent areas. Continue to require soundwalls, earth berms, and other noise reduction techniques (e.g., "open grade" or "rubberized" asphalt) as conditions of development approval.

IMPACTS AND MITIGATION MEASURES

Project Impacts

Table 4
Summary of Project Impacts

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. 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?	☐	■	☐	☐
B. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
C. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	■	☐	☐
D. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	■	☐	☐
E. 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?	☐	☐	■	☐
F. 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?	☐	☐	■	☐

Impact Discussion

A. *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?*

Less Than Significant with Mitigation Incorporated. Noise generated by the proposed project would occur during short-term construction and long-term operation. Noise-related impacts associated with short-term construction and long-term operation of proposed residential land uses are discussed separately, as follows:

Short-term Increases in Ambient Noise Levels

Construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., demolition/land clearing, grading and excavation, erection) of construction. Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Although noise ranges were found to be similar for all construction phases, the grading phase tends to involve the most equipment resulting in slightly higher average-hourly noise levels. Typical noise levels for individual pieces of construction equipment are summarized in **Table 5**. As depicted, individual equipment noise levels typically range from approximately 75 to 91 dBA at 50 feet, without noise control. With noise control, individual equipment noise levels typically range from approximately 75 to 80 dBA at 50 feet. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower settings. Depending on the activities performed and equipment usage requirements, combined average-hourly noise levels at construction sites typically range from approximately 65 to 89 dBA L_{eq} at 50 feet (EPA 1971).

Table 5
Typical Construction Equipment Noise Levels

Type of Equipment	Noise Level in dBA at 50 feet	
	Without Feasible Noise Control	With Feasible Noise Control [1]
Dozer or Tractor	80	75
Excavator	88	80
Compactor	82	75
Front-end Loader	79	75
Backhoe	85	75
Grader	85	75
Crane	83	75
Generator	78	75
Truck	91	75

1. Feasible noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds.

Sources: U.S. Environmental Protection Agency 1971; Federal Transit Administration 2006

Assuming a maximum construction noise level of 89 dBA L_{eq} and an average attenuation rate of 6 dBA per doubling of distance from the source, construction activities located within approximately 1,500 feet of noise-sensitive receptors could reach levels of approximately 60 dBA. Activities occurring during the more noise-sensitive evening and nighttime hours may result in increased levels of annoyance and potential sleep disruption to occupants of nearby residential dwellings. Construction-generated noise would, therefore, be considered to result in a potentially ***significant*** short-term noise impact to nearby noise-sensitive land uses.

Mitigation Measure A-1: Short-term Increases in Ambient Noise Levels

The following mitigation measures shall be implemented:

- Noise-generating construction operations shall be limited to between the hours of 7 a.m. to 7 p.m., Monday through Saturday, and between the hours of 10:00 a.m. to 6 p.m. on Sundays and holidays.
- Construction equipment and equipment staging areas shall be located at the furthest distance possible from adjacent land uses.
- Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- When not in use, motorized construction equipment shall not be left idling.

Timing/Implementation*: Implemented prior to approval of Tentative Map.*

Enforcement/Monitoring*: City of Hayward.*

Significance After Mitigation

Implementation of the above mitigation measures would prohibit noise-generating activities from occurring during the more noise-sensitive periods of the day and would reduce short-term noise impacts to nearby residential land uses. With mitigation, this impact would be considered ***less-than-significant***.

Long-term Increases in Ambient Noise Levels – Stationary Sources

The proposed project includes a mix of various land uses, including residential and retail uses. Noise levels typically associated with these land uses and associated noise impacts are discussed separately below.

Residential Land Uses

Noise from proposed residential dwellings would expose other nearby residences (both existing and project related) to minor increases in ambient noise levels. Noise typically associated with such development includes lawn and garden equipment and amplified music. Activities associated with these land uses would result in only minor increases in ambient noise levels, primarily during the day and evening hours and less frequently at night, as perceived at the

closest residential receptors. Residential-use air conditioning units would also be a source of noise. Depending on size and type, noise levels generated by central air conditioning units can reach levels of approximately 60 to 70 dBA L_{eq} at 3 feet from the source (EPA 1971, AMBIENT 2007). Depending on operational characteristics and distance between proposed residential dwellings, noise levels associated with air conditioning units located in side-yard areas could potentially exceed the City's interior noise standard of 45 dBA L_{dn} at neighboring residences. As a result, stationary-source noise levels associated with proposed residential land uses would be considered ***potentially significant***.

Commercial Uses

The proposed project includes development of commercial retail land uses; however, the specific types of retail uses to be developed have not yet been determined. Noise sources commonly associated with retail land uses include occasional parking lot activities (e.g., opening and closing of vehicle doors, people talking), loading dock operations (e.g., use of forklifts, hydraulic lifts), trash compactors, and air compressors. Noise commonly associated with commercial land uses, such as idling trucks, vehicle backup alarms, decompression of trailer truck brakes, forklifts, and other material loading and unloading activities, can generate intermittent noise levels of approximately 90 dBA L_{max} at 10 feet. Average-hourly noise levels associated with commercial sources typically range from approximately 60-70 dBA L_{eq} at 50 feet.

Depending on the specific activities conducted, hours of operation, and distance to the nearest residential land use, predicted noise levels could potentially exceed the City's exterior and interior noise standards of 60 dBA and 45 dBA L_{dn}, respectively. As a result, stationary-source noise generated by the proposed commercial land uses would be considered ***potentially significant***.

Mitigation Measure A-2: Long-term Increases in Ambient Noise Levels – Stationary Sources

Proposed Residential Land Uses

- Residential dwellings shall be equipped with central heating and air conditioning systems to allow closure of windows during inclement weather conditions.
- Exterior air-conditioning units located within 10 feet of adjacent residential dwellings shall be low-noise rated.
- Exterior air-conditioning units located within 10 feet of adjacent residential dwellings shall be shielded from direct line-of-sight to adjacent residential dwellings. Shielding may include (but is not limited to) the use of wood fencing, provided no visible air gaps are detectable between individual panels. Use of tongue-and-grove or over-lapping panels is recommended.
- Residential dwellings shall be insulated to exceed Title 24 standards.

Proposed Commercial Land Uses

- Material deliveries, landscape maintenance, waste-collection activities, and the operation of noise-generating stationary equipment, such as solid-waste compactors and compressors (excluding HVAC units), shall be limited to between the hours of 7:00 a.m. and 10:00 p.m.

- The City shall require an acoustical assessment to be performed prior to construction of proposed commercial land uses. Where acoustical analysis determines that stationary source noise levels would exceed applicable City noise standards, the City shall require the implementation of noise attenuation measures sufficient to achieve compliance with City noise standards at nearby noise-sensitive land uses. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, or equipment enclosures.

  ***Timing/Implementation**: Implemented prior to approval of Tentative Map.*

  ***Enforcement/Monitoring**: City of Hayward.*

Significance After Mitigation

Implementation of the above mitigation measures would substantially reduce predicted noise levels at nearby sensitive receptors. Major noise-generating activities associated with proposed land uses, including operation of the proposed commercial land uses would be limited to the less noise-sensitive daytime hours. As a result, increased levels of annoyance and potential sleep disruption to occupant of nearby existing or proposed residential dwellings would be substantially reduced. With mitigation, this impact would be considered ***less than significant***.

Long-term Increases in Ambient Noise Levels – Traffic

Implementation of the proposed land uses would result in increased traffic volumes on some area roadways. The increase in traffic volumes resulting from implementation of the proposed project would, therefore, contribute to predicted increases in traffic noise levels. The FHWA roadway noise prediction model was used to predict traffic noise levels along affected roadways for existing traffic conditions, with and without implementation of the proposed project. Modeling was conducted for roadways anticipated to be primarily affected by the proposed project, based on predicted traffic volumes obtained from the traffic analysis prepared for this project. The project's contribution to traffic noise levels along area roadways was determined by comparing the predicted noise levels with and without project-generated traffic. Predicted traffic noise levels are summarized in **Table 6**. For comparison purposes, predicted traffic noise levels associated with the proposed project were also compared to the existing approved land use designations (Alternative 1), based on trip-generation data obtained from the traffic analysis prepared for this project. A comparison of traffic noise levels associated with currently approved (Alternative 1) and proposed land use designations are summarized in **Table 7**.

In comparison to existing conditions (**Table 6**), implementation of the proposed project would result in predicted increases of approximately 1 dBA, or less, along Industrial and Hesperian boulevards. Predicted increases in traffic noise levels would primarily occur along Eden Shores Boulevard and Marina Drive, which would range from approximately 7 to 9 dBA, respectively. However, assuming a minimum setback of 60 feet from the centerline of the near travel lane, increases in predicted traffic noise levels would not be predicted to exceed the City's "normally acceptable" noise level of 60 dBA L_{dn} at adjacent residential land uses. In addition, in comparison to existing approved land use designations (**Table 7**), implementation of the proposed project would result in a slight reduction in traffic noise level along area roadways, with the exception of Eden Shores Boulevard, which would be projected to increase by

approximately 0.13 dBA. Because implementation of the proposed project would not result in a substantial increase in traffic noise levels that would be anticipated to exceed the City's noise standards, this impact would be considered ***less than significant***.

TABLE 6
PREDICTED TRAFFIC NOISE LEVELS
EXISTING CONDITIONS

Roadway Segment	CNEL (dBA) at 60 feet from Near-Travel-Lane Centerline		
	Existing	Existing Plus Project	Predicted Increase
Industrial Boulevard, West of Hesperian Boulevard	66.07	67.43	1.36
Hesperian Boulevard, North of Tripaldi Way	68.03	69.09	1.06
Hesperian Boulevard, South of Tripaldi Way	68.35	69.02	0.67
Eden Shores Boulevard, West of Hesperian Boulevard	52.48	59.20	6.72
Marina Drive, South of Industrial Boulevard	49.68	58.76	9.08

Traffic noise levels were predicted using the FHWA Traffic Noise Model based on data obtained from the traffic analysis prepared for this project. Predicted noise levels do not take into account shielding provided by intervening structures or existing noise barriers.

TABLE 7
PREDICTED TRAFFIC NOISE LEVELS
CURRENTLY APPROVED VS. PROPOSED LAND USE DESIGNATIONS

Roadway Segment	CNEL (dBA) at 60 feet from Near-Travel-Lane Centerline		
	Currently Approved	Proposed	Difference
Industrial Boulevard, West of Hesperian Boulevard	68.12	67.43	-0.69
Hesperian Boulevard, North of Tripaldi Way	69.26	69.09	-0.17
Hesperian Boulevard, South of Tripaldi Way	69.22	69.02	-0.20
Eden Shores, West of Hesperian Boulevard	59.07	59.20	0.13
Marina Drive, South of Industrial Boulevard	59.49	58.76	-0.73

Traffic noise levels were predicted using the FHWA Traffic Noise Model based on data obtained from the traffic analysis prepared for this project. Predicted noise levels do not take into account shielding provided by intervening structures or existing noise barriers.

Compatibility of Proposed Land Uses with Predicted Noise Environment

As noted earlier in this report, the City's "normally acceptable" noise compatibility criteria is 60 dBA L_{dn}/CNEL for residential land uses and 70 dBA L_{dn}/CNEL for commercial land uses. Noise levels are considered "conditionally acceptable" at levels up to 70 dBA L_{dn}/CNEL for residential land uses and 77.5 dBA L_{dn}/CNEL for commercial land uses, provided exterior noise reduction measures have been incorporated and interior noise levels have been reduced to within acceptable levels (**Table 2**).

Commercial Land Uses

Based on the conceptual site plan for the proposed project, commercial land uses would be generally located within the eastern and northern-most portions of the project site, along Industrial and Hesperian boulevards. Ambient noise levels at these locations are primarily influenced by vehicle traffic on Industrial and Hesperian boulevards. Based on the traffic noise modeling conducted, traffic noise levels at proposed commercial land uses would not exceed the City's "normally acceptable" exterior noise compatibility criteria of 70 dBA L_{dn}/CNEL. Assuming an average exterior-to-interior noise reduction of 25 dBA, which is typical for newer commercial development, predicted interior noise levels would be approximately 45 dBA, or less. Predicted traffic noise levels at proposed commercial development would not be anticipated to exceed the City's noise criteria for land use compatibility.

Residential Land Uses

As currently proposed, residential land uses would be located within the western-most portion of the project site. Ambient noise levels at the proposed residential land uses would be primarily affected by vehicles traveling along area roadways, as well as trains traveling along the existing UPRR.

Based on the traffic noise modeling conducted, predicted noise levels along Marina Drive and Eden Shores Boulevard would be approximately 59 dBA Ldn/CNEL, or less, at 60 feet from the nearest travel lane. Predicted traffic noise levels at proposed residential land uses would not be anticipated to exceed the City's "normally acceptable" noise standard of 60 dBA L_{dn}/CNEL.

The existing UPRR is currently used for freight transport. The number of trains traveling along the UPRR varies from day to day, but typically averages fewer than 5 trains per day. An analysis of trains noise levels was recently completed for the adjacent *Eden Shores* development project in February 2005. Based on the analysis conducted, the predicted train noise levels measured approximately 74 dBA L_{dn} at 50 feet from the track. Based on this noise level, the predicted traffic noise levels would decrease to approximately 65 dBA L_{dn} at 240 feet from the track and to approximately 60 dBA L_{dn} at approximately 650 feet. Maximum intermittent noise levels associated with the sounding of train horns ranged from 86 to 89 dB at a distance of 160 feet (City of Hayward 2005). Based on these noise levels, predicted train noise levels at proposed residential dwellings located within approximately 650 feet of the UPRR track could exceed the City's "normally acceptable" exterior noise standard of 60 dBA L_{dn}/CNEL, as well as the City's interior noise standard of 50 dBA L_{max}. As a result, exposure to exterior noise levels would be considered ***potentially significant***, subject to mitigation.

Mitigation Measure A-3: Compatibility of Proposed Land Uses with Predicted Noise Environment

Mitigation measures to be implemented will be dependent on site design and structural features/characteristics incorporated in the building design and construction. The City shall require an acoustical assessment to be performed prior to construction of proposed residential land uses to evaluate exposure to train noise. Where acoustical analysis determines that train noise levels would exceed applicable City noise standards, the City shall require the implementation of noise attenuation measures sufficient to achieve compliance with City noise standards at affected residential land uses. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, or equipment enclosures. As an alternative to the preparation of an acoustical assessment to analyze train noise impacts, the following mitigation measures, derived from the recently prepared acoustical assessment prepared for the adjacent *Eden Shores* development project (City of Hayward 2005), shall be implemented:

- All residential dwellings shall be constructed of a 3-coat stucco system.
- All potential homebuyer shall be provided a written disclosure statement describing the current train activity and expected noise levels.
- A sound barrier shall be constructed along the southwest boundary of the project site to a minimum height of 18 feet above the elevation of the train track.
- Residential dwellings located within approximately 160 feet of the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Both the staggered-stud and resilient channel exterior wall assembly should consist of two layers of gypsum board on the interior side. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-42 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-42 rating or use STC-31 storm doors over standard gasketed entry doors. Exterior doors on non-exposed facades shall achieve a minimum STC-37 rating.
- Residential dwellings located between 160 to 240 feet from the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-40 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-42 rating or use STC-31 storm doors over standard gasketed entry doors. Exterior doors on non-exposed facades shall achieve a minimum STC-34 rating.
- Residential dwellings located between 240 to 480 feet from the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-37 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-40 rating. Exterior doors on non-exposed facades shall achieve a minimum STC-32 rating.

- Residential dwellings located in excess of 480 feet from the UPRR track shall be constructed with windows that achieve a minimum STC-38 rating along facades located within line-of-sight of the UPRR and a minimum STC-29 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-29 rating.

***Timing/Implementation**: Implemented prior to approval of Tentative Map.*

***Enforcement/Monitoring**: City of Hayward.*

Significance After Mitigation

Implementation of the above mitigation measure would require incorporation of building design and construction techniques and materials sufficient to achieve the City's noise standards. Measures derived from the Eden Shores development project were determined to be sufficient to achieve the City's average-daily exterior and maximum intermittent interior noise standards at the adjacent *Eden Shores* development project (City of Hayward 2005). Given that operational conditions for the UPRR have not changed since preparation of the 2005 environmental study, mitigation measures identified in the prior study would be considered appropriate for mitigation of development associated with the proposed project. With mitigation, this impact would be considered ***less than significant***.

B. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant. Ground vibration spreads through the ground and diminishes in strength with distance. The effects of ground vibration can vary from no perceptible effects at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and slight damage to nearby structures at the highest levels. At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely result in structural damage. For most structures, a peak particle velocity (ppv) threshold of 0.5 inches per second (in/sec) is sufficient to avoid structure damage, with the exception of fragile historic structures or ruins. At the request of the U.S. Environmental Protection Agency the Committee of Hearing, Bio-Acoustics, and Bio-Mechanics (CHABA) have developed guidelines for safe vibration limits for ruins and ancient and/or historic buildings. For fragile structures, the CHABA recommends a maximum limit of 0.25 inches per second ppv. For the protection of fragile, historic, and residential structures, the California Department of Transportation recommends a more conservative threshold of 0.2 inches per second ppv. This same threshold would represent the level at which vibrations would be potentially annoying to people in buildings (FTA 2006, Caltrans 2002).

Increases in groundborne vibration levels attributable to the proposed project would be primarily associated with short-term construction-related activities. Groundborne vibration levels associated with construction equipment are summarized in **Table 6**. Construction activities associated with the proposed improvements would likely require the use of various tractors, trucks, and jackhammers. The use of pile drivers is not anticipated to be required for this project. Based on the vibration levels presented in **Table 6**, ground vibration generated by construction

equipment would be less than 0.09 inches per second ppv at 25 feet. Predicted vibration levels at the nearest onsite and offsite structures would, therefore, not be anticipated to exceed even the most conservative threshold of 0.2 inches per second ppv. Short-term groundborne vibration impacts would be considered ***less than significant***. No mitigation is required.

Table 6
Representative Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity at 25 Feet (in/sec ppv)
Large Tractors	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Tractors	0.003
Source: Caltrans 1996, FTA 2006	

Long-term operational activities associated with the proposed project would not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration. However, as previously discussed, the proposed project site is located adjacent to the UPRR. Trains can generate relatively high levels of ground vibration levels, depending on various factors, including train speed and weight, condition of track, and amount of ballast used to support the track. Based on measurements conducted by the California Department of Transportation (Caltrans) the highest ground vibration measurement obtained for a freight train measured 9.1 mm/s (0.36 in/sec) at 3 m (10 ft). This measurement, screening criteria have been developed to estimate maximum anticipated ground vibration levels at varying distances from a railroad track. Based on the Caltrans screening criteria, architectural damage due to train-generated ground vibration may occur for structures located within approximately 25 feet of the track centerline. Ground vibration levels may be perceptible and may begin to annoy occupants of buildings located within approximately 66 feet of the tract centerline (Caltrans 2002). The proposed project site is not located within 66 feet of the existing UPRR track. As a result, this impact is considered **less than significant**.

C. *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Less Than Significant with Mitigation Incorporated. Implementation of the proposed project may result in potentially significant increases in ambient noise levels at nearby existing and/or proposed noise-sensitive land uses associated with long-term operational activities. Refer to "Impact A" of this report for additional discussion of long-term noise levels attributable to the proposed project and recommended mitigation measures. As discussed in "Impact A" this impact would be considered ***potentially significant***, subject to mitigation. With implementation

of proposed mitigation measures, as noted in "Impact A", this impact would be considered ***less than significant***.

D. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant with Mitigation Incorporated. Implementation of the proposed project may result in potentially significant increases in ambient noise levels at nearby existing and/or proposed noise-sensitive land uses associated with short-term construction activities. Refer to "Impact A" of this report for additional discussion and recommended mitigation measures. As discussed in "Impact A" this impact would be considered ***potentially significant***, subject to mitigation. With implementation of proposed mitigation measures, as noted in "Impact A", this impact would be considered ***less than significant***.

E. 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?, and

F. 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?

The nearest airport/airstrip is the Hayward Air Terminal located on Hesperian Boulevard north of Winton Avenue. The Airport is approximately 3.0 miles north of the project site. Flyovers by commercial and private aircraft are very frequent (i.e., one every few minutes) at mid-day, but their noise impact is moderated by their relatively high altitude. Average noise levels are in the low to mid-40s dBA on portions of the site distant from the north and east boundaries. Away from the rail line, aircraft are responsible; however, for most of the site's short-duration peak noise events, some as high as the mid-70s dBA during a plane's closest approach. The mitigations described above for train noise impact would reduce any impact from the airplane noise (**Mitigation Measure A-3**). Therefore, the proposed project would not be adversely affected by excessive noise from airplanes and no impact would occur.

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APPENDIX A

Traffic Noise Prediction Modeling

TRAFFIC NOISE MODELING

INDUSTRIAL WEST OF HESPERIAN

RUN: EXISTING
ADT: 17510 SPEED: 45 ACTIVE HALF WIDTH (FT): 33
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 66.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
59.9 112.6 234.3 500.7

RUN: ALT1-APPROVED
ADT: 28110 SPEED: 45 ACTIVE HALF WIDTH (FT): 33
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.12
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
76.1 151.3 319.7 685.7

RUN: ALT2-PROPOSED
ADT: 23950 SPEED: 45 ACTIVE HALF WIDTH (FT): 33
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 67.43
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
69.9 136.7 287.7 616.5

HESPERIAN, NORTH OF TRIPALDI

RUN: EXISTING
ADT: 28600 SPEED: 45 ACTIVE HALF WIDTH (FT): 36
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.03
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
78.1 153.6 323.6 693.6

RUN: ALT1-APPROVED
ADT: 37920 SPEED: 45 ACTIVE HALF WIDTH (FT): 36
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.26
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
91.1 183.7 389.8 836.8

RUN: ALT2-PROPOSED
ADT: 36510 SPEED: 45 ACTIVE HALF WIDTH (FT): 36
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.09
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
89.2 179.3 380.1 815.9

HESPERIAN, SOUTH OF TRIPALDI

RUN: EXISTING
ADT: 30770 SPEED: 45 ACTIVE HALF WIDTH (FT): 36
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5

CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 68.35
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
81.2 160.8 339.6 728.2

RUN: ALT1-APPROVED
ADT: 37620 SPEED: 45 ACTIVE HALF WIDTH (FT): 36
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.22
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
90.7 182.8 387.7 832.4

RUN: ALT2-PROPOSED
ADT: 35900 SPEED: 45 ACTIVE HALF WIDTH (FT): 36
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 69.02
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
88.3 177.4 375.9 806.9

EDEN SHORES, WEST OF HESPERIAN

RUN: EXISTING
ADT: 1900 SPEED: 30 ACTIVE HALF WIDTH (FT): 27
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 52.48
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 0.0 64.7

RUN: ALT1-APPROVED
ADT: 8650 SPEED: 30 ACTIVE HALF WIDTH (FT): 27
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 59.07
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 79.7 163.7

RUN: ALT2-PROPOSED
ADT: 8920 SPEED: 30 ACTIVE HALF WIDTH (FT): 27
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 59.20
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 81.1 167.0

MARINA DR, SOUTH OF INDUSTRIAL

RUN: EXISTING
ADT: 770 SPEED: 30 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 49.68
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL
------- ------- ------- -------
0.0 0.0 0.0 0.0

RUN: ALT1-APPROVED
ADT: 7370 SPEED: 30 ACTIVE HALF WIDTH (FT): 12
SITE CHARACTERISTICS: SOFT GRADE (PERCENT): .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE = 59.49
* * DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL 65 CNEL 60 CNEL 55 CNEL

```
------- -------  -------  -------
   0.0      0.0      68.5     145.8

RUN: ALT2-PROPOSED
ADT:  6230     SPEED:  30     ACTIVE HALF WIDTH (FT):  12
SITE CHARACTERISTICS: SOFT     GRADE (PERCENT):  .5
CNEL AT 60 FT FROM NEAR TRAVEL LANE CENTERLINE =  58.76
* *  DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL * *
70 CNEL  65 CNEL   60 CNEL   55 CNEL
------- -------  -------  -------
   0.0      0.0      61.5     130.5
```

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25 July 2005

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Subject: **Eden Shores East Single-Family – Acoustical Consulting**
CSA Project No: 03-0447

Dear Joe:

This letter presents our environmental noise analysis for the subject planned residential development (Tract 7489) in Hayward. According to the site plan prepared this month, the part of the project north of Eden Shores Boulevard would still consist of 139 single-family homes. For the residential lots to be located along the Union Pacific (UPRC) train line, we compared train noise levels to the relevant indoor noise goals, and present noise mitigation alternatives in the form of sound walls and sound-rated exterior assemblies.

In summary, the City of Hayward's single-event noise goals can be achieved in all homes located along the train line with the proposed noise mitigation measures. With a sound wall, sound-rated doors, windows, and exterior wall assemblies, and a substantial setback from the train line, the A-weighted maximum noise level in second floor bedrooms is calculated to be 50 decibels (dB), thus meeting the City of Hayward's single-event noise goal. Additionally for the homes on Lots 75 to 78, we recommend that bedroom windows in the one facade that directly faces the train line be removed. At the same time, the City and State's Day-Night Average Sound Level (DNL)[1] goal of 45 dB can be met by more than 10 dB in all homes.

Acoustical Goals

Appendix N of the Hayward Conservation and Environmental Protection Element, entitled "Noise Guidelines for the Review of New Development" and adopted in 2002, requires that a detailed noise analysis be prepared to identify the noise control treatments necessary to achieve a Day-Night Average Sound Level (DNL) of 45 decibels (dB) or less inside the homes. This 24-hour average level is the same noise standard required by the State (Section 1208A of the California Building Code) for new multi-family residential developments.

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[1] Day-Night Average Sound Level (DNL or L_{dn})--The A-weighted noise level which corresponds to average human sensitivity to sound. The DNL sound level corresponds to an energy average during a 24-hour period. A 10-decibel penalty is applied during the hours of 10 pm to 7 am due to increased human sensitivity during the night. An A-weighting is applied to the microphone signal to approximate human sensitivity to different frequencies, i.e., pitch.

Additionally, the single-event noise levels from individual train passbys are expected to be mitigated to an A-weighted maximum noise level (L_{max}) of 50 dB in bedrooms and 55 dB in other noise-sensitive rooms. These single-event noise goals were originally applied to the analysis of the Eden Shores property in the Noise Section of the South of Route 92 Program Draft EIR[2], dated October 1997. These goals were also recently adopted in the Hayward Conservation and Environmental Protection Element. For your information, these single-event noise goals are far more stringent than the DNL 45 dB standard that is concurrently required by the City of Hayward.

Noise Measurements

On 13 to 14 November 2003, we conducted a continuous 24-hour noise measurement to document the current noise environment. The monitor was located near the southwest property line of the Eden Shores East site at the end of Eden Park Place, and near the grade-crossing of the UPRC train line. At a distance of 50 feet from the train tracks, the approximate setback of the proposed sound wall near Lot 77, we measured DNL 74 dB. The proposed homes at Lots 76 and 77 would be located as near as 160 feet from the train tracks. At this setback, the DNL would be 67 dB. The homes on Lots 75 and 78, located approximatley 200 feet from the train tracks, would be exposed to a DNL of 66 dB. The next row of homes (Lots 74, 79, 102 to 119, 132, and 133) are located at least 240 feet from the trian line, and would be exposed to a DNL of 65 dB.

As you know, we had also conducted several days of acoustical measurements during the last three years at the other side of the train tracks for Eden Shores[3]. At a setback of 160 feet, we measured DNLs ranging from 62 to 72 dB. Therefore, the DNL 67 dB that we measured in 2003 falls right in the middle of this measurement range. The range of DNLs was dictated by the daily variation in train activity, the primary noise source heard on-site. Increased nighttime train activity contributes to the higher DNLs, as nighttime noise levels are penalized 10 dB.

During the measurement programs, many noise events, which were assumed to be train passbys, exceeded an L_{max} of 80 dB. The L_{max} from the three loudest train horn blasts measured at a distance of 160 feet were 104, 98 and 97 dB. The horns are not utilized on a consistent basis near the grade-crossing.

For Eden Shores, additional measurements were also conducted to determine the L_{max} and the noise spectrum data from the train engines only. At the northern part of the project sites and away from the grade-crossing, the contribution from train horns becomes less significant. The L_{max} from eight train engine passbys ranged from 86 to 89 dB at a distance of 160 feet. The

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[2] Prepared by EIP Associates for the City of Hayward/Department of Community and Economic Development and dated October 1997. The South of Route 92 General Plan Amendment and Specific Plan Program Final EIR was certified by the City in 1998.

[3] Reports prepared by Charles M. Salter Associates for Standard Pacific Homes of Northern California.

purpose of documenting the noise spectrum data was to determine the low frequency noise contribution of the train engines for our exterior window/wall calculations.

Impact Analysis

L_{max} 50 dB Goal (for Bedrooms): The loudest noise source affecting the project is the train passbys. The maximum instantaneous noise level is controlled by the type of train and where the horn is sounded. Trains typically sound their horn near the grade-crossing only. Based on an L_{max} of 104 dB from a train horn blast and an L_{max} of 89 dB from train engines, we estimated the following indoor L_{max}s at the proposed second floor bedrooms of the homes at Lots 76 and 77. These homes would be located 160 feet from the train line. For this analysis, an 18- to 20-foot-tall sound wall (18 feet above the elevation of the train tracks) is assumed at the western property line. The exterior wall assembly would consist of a 3-coat stucco finish. The second floor windows of homes on Lots 75 to 78 would be only perpendicular to, and would not directly face, the train line. "RC" in the following table represents either a staggered stud or resilient channel exterior wall assembly.

Table 1: Indoor L_{max}s (dB) for Various Exterior Window/Wall Assemblies at Second Floor of Lots 76 and 77 (Homes with "Worst-case" Noise Exposure)

Train Noise Source	Window Sound Rating			
	STC 41	STC 41 with RC	STC 45	STC 45 with RC
Engine Only (Outdoor L_{max} of 89 dB)	55	53	53	50
Horn Only (Outdoor L_{max} of 104 dB)	60	58	58	55
Horn Only (Outdoor L_{max} of 99 dB)	55	53	53	50

Table 1 indicates that the loudest measured train horn blast would be approximately 3 dB louder than train engine noise indoors, and that both noise sources would exceed the indoor L_{max} goal for bedrooms. As there was only one horn blast over a week of measurements that was above 99 dB at a distance of 160 feet, we found it reasonable to consider this an atypical event. The next loudest events were no more than 98 dB. Additionally, the loudest noise event reported in the South of Route 92 Program Final EIR from the measurements of 12 to 16 December 1997 was 102 dB at a distance of 100 feet from the train tracks (or 98 dB at a distance of 160 feet). For all train horn blasts that are no more than 99 dB, the L_{max} goal for bedrooms would be met.

Our measurement data also indicated that train engine noise ranged from less than 80 dB up to 89 dB at a distance of 160 feet from the train tracks. The L_{max}s presented in the South of Route 92 Program Final EIR are consistent with these levels. Even with resilient channel construction and STC 45 windows, we would expect that only train engines that are 87 dB or less to generate an L_{max} of no more than 50 dB inside the homes of Lots 76 and 77. However, typical homes located north of Eden Shores Boulevard are 240 feet from the train line. At this setback, the expected indoor L_{max} would be 50 dB with resilient channel construction and STC 45 windows.

Recommendations/Alternatives

We understand that a sound wall would be constructed along the southwest property line of the project. Since the future project site elevation would be approximately 1 to 4 feet below the elevation of the train tracks, one foot plus the train height needs to be considered in determining the height for the wall to break line-of-sight. The height of typical trains are estimated to be 17 feet above the train tracks with the horn mounted on top. A person standing at the second story of homes is estimated to be at a height of 16 feet above the pad elevation. Based on a line-of-sight analysis for the homes closest to the train tracks, an 18- to 20-foot-tall sound wall would acoustically shield train horn and engine noise to the second story of these homes. This sound wall height is measured from the train track elevations. (A 15-foot sound wall would only acoustically shield railcar wheel noise and some locomotive noise to the second floors, while a 12-foot sound wall would only acoustically shield some locomotive and wheel noise to the ground floors.)

Typically, sound walls tend to acoustically shield higher frequency noises, such as from train horns, better than low-frequency sources, such as the rumbling of a locomotive engine. Assuming that an 18- to 20-foot-tall sound wall would be constructed along the southwest property line, we calculate that approximately 10 dB of acoustical shielding would be provided for all ground floors of homes. North of Lots 133 and 134, a 120-foot-long return sound wall should be provided perpendicular to the primary sound wall. The height of this return wall should start out at 18-feet tall for the first 35 feet, step down to 15-feet tall for the next 35 feet, and end up at 12-feet tall for the last 50 feet near Lot 134. These wall heights are measured from the train track elevations.

The exterior window/wall components that we assumed in the aforementioned Impact Analysis calculations provide excellent sound transmission loss values, approaching the technological limitations of standard building construction. The drawings prepared by Bassenian Lagoni Architects indicate that a stucco exterior wall would be used for all residential buildings. For our calculations, we are assuming that a 3-coat stucco system would be used. With the measured DNLs ranging from 62 to 72 dB during all our measurements along the train line, we used a "worst-case" DNL of 72 dB for our indoor calculations. In summary, the City of Hayward's indoor average noise standard of DNL 45 dB can be easily achieved with less than STC 45 windows and sound-rated exterior wall assemblies. The recommended sound-rated exterior window/wall assemblies are proposed to address the L_{max} goal of 50 dB in bedrooms, which is the more stringent noise goal. For the "worst-case" noise exposures, the exterior wall assembly should consist of two layers of gypsum board attached to either a staggered-stud or resilient channel assembly. With these sound-rated components, the resultant noise from all but one measured train passbys would meet the L_{max} goal of 50 dB at second floor bedrooms of homes located at least 240 feet from the train tracks. We also recommend that a written disclosure statement describing the current train activity and expected noise levels be provided to every potential homebuyer.

The architectural drawings currently indicate that the bedrooms are located at the second floors of each floor plan. The following exterior window/wall recommendations for the various homes assume the construction of an 18- to 20-foot-tall sound wall.

1. For the four homes located on Lots 75 to 78: Each home would have three facades with a line-of-sight to the train line, and the fourth facade that faces away. L_{max} 50 dB could be achieved by eliminating the second floor windows of bedrooms in the one facade that directly faces the train line. If a staggered-stud or resilient-channel wall assembly along with a minimum of STC 45 windows (such as Milgard 7220's consisting of two rows of sliders) were to be provided for the other two facades of the second floors having a line-of-sight to the sound wall, then an indoor L_{max} of up to approximately 50 dB due primarily to train engines would be expected. This noise level would meet the City's L_{max} goal discussed in the Conservation and Environmental Protection Element for bedrooms. Both the staggered-stud and resilient channel exterior wall assembly should consist of two layers of gypsum board on the interior side. We have attached our "Resilient-Channel Wall Installation Guidelines" for your review. For the facade facing away from the sound wall, provide a minimum of STC 42 windows without the staggered-stud or resilient channel wall assembly to achieve the L_{max} 50 dB goal indoors.

   To meet an L_{max} of 55 dB in ground floor rooms, provide a minimum STC 45 windows and STC 42 exterior doors in the facades that have a line-of-sight to the train line. Eggers and Jamison both manufacture minimum STC 42 exterior doors. Another option would be to use STC 31 storm doors over standard gasketed entry doors. The required exterior door ratings may be lessened at some facades that have some acoustical shielding provided by adjacent homes. Provide STC 37 exterior doors and windows for other ground floor rooms with facades facing away.

2. For the 22 homes located on Lots 74, 79, 102 to 119, 132, and 133: If a staggered-stud or resilient-channel wall assembly along with a minimum of STC 45 windows (such as Milgaard 7220's consisting of two rows of sliders) were to be provided for the facades of the second floors having a line-of-sight to the train line, then an indoor L_{max} of up to 50 dB due primarily to train engines would be expected. This noise level would meet the City's L_{max} goal for bedrooms. Provide STC 40 windows for second floor bedrooms facing away from the train line.

   To meet an L_{max} of 55 dB in ground floor rooms facing the sound wall, provide STC 42 exterior doors and windows in the facades that have a line-of-sight to the train line. Provide STC 34 exterior doors and windows for other ground floor rooms with facades facing away.

3. For the 12 homes on Lots 69, 70, 72, 73, 80, 81, 120, 121, 130, 131, 134, and 135: To meet an L_{max} of 50 dB in second floor bedrooms facing the train line, a minimum of STC 45 windows would be required. Provide STC 37 windows for second floor bedrooms facing away from the train line.

   To meet an L_{max} of 55 dB in ground floor rooms, provide STC 40 exterior doors and windows in the facades that have a line-of-sight to the train line. Provide STC 32 exterior doors and windows for other ground floor rooms with facades facing away.

4. For the next group of homes at Lots 63, 68, 71, 83 to 101, 122, 123, 128, 129, 136, and 137: To meet an L_{max} of 50 dB in second floor bedrooms facing the train line, a minimum of STC 38 windows would be required. Provide STC 29 windows for second floor bedrooms with facades facing away from the sound wall.

   To meet an L_{max} of 55 dB in ground floor rooms, provide STC 29 exterior doors and windows in the facades that have a line-of-sight to the train line.

All other homes at the project site would not require sound-rated windows to achieve the indoor L_{max} goals. However, in addition to all windows and exterior doors at the aforementioned homes, all windows at second floors of homes located within 500 feet of the UPRC train line would need to be in the closed position to achieve the indoor noise goals. Therefore, an alternate source of ventilation (i.e., mechanical) may need to be provided. A mechanical engineer should verify that ventilation requirements can be met.

The STC 45 windows and RC on the second floors would reduce the indoor DNL to less than 35 dB. This noise level would be substantially below the State of California's and Hayward's indoor average noise standard of DNL 45 dB for all homes located along the train tracks. Overall, DNL 35 dB would be considered about half as loud as DNL 45 dB. As shown in Table 1, the resultant indoor L_{max} would approximately meet the City's L_{max} goal of 50 dB.

* * *

This concludes our environmental noise analysis for the subject project. Once again, we recommend that a written disclosure statement of the current train activity and expected noise levels be provided to every potential homebuyer. Please call with any questions.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.

Michael D. Toy, P.E.
Principal Consultant

Enclosure as noted

cc: Michael Cady
Duc Housing Partners
E-mail: mcady@duchousing.com

Bo Crane
Standard Pacific Homes
E-mail: b.crane@stanpac.com

MDT/dg 05July25_MDT_Eden Shores East Single-Family – A. C.

Attachment VII

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25 April 2005

Joseph Fanelli
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Subject: **Eden Shores East – Acoustical Consulting**
CSA Project No. 03-0447

Dear Joe:

The purpose of this letter is to amend the subject noise analyses dated 4 February 2005. Standard Pacific Homes informed us of the current proposal to increase the project elevation height by approximately 2 feet (2 feet of fill). Based on our noise barrier calculations, this fill would result in slightly higher noise levels at the site. However, as long as the resultant pad elevations for the row of dwelling units located nearest the sound wall are at least 1 foot below the elevation of the train tracks, then the City's noise goals can still be achieved. In other words, since the train track elevation is at 10 feet and the top of the sound wall would be at 28 feet, then the pad elevations should be at no more than 9 feet. The second row of dwelling structures could be at higher elevation, such as 10 or 11 feet.

Please call if you have any questions.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.

Michael D. Toy, P.E.
Principal Consultant

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Bo Crane
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MDT/ch

P: 03-0447_05April25mdt_Eden Shores East_Revised

C h a r l e s M S a l t e r A s s o c i a t e s I n c

4 February 2005

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Randy Waldeck
Jeff Clukey
Andrew Stanley
Peter Holst
Ethan Salter
Elaine Y Hsieh
Timothy G Brown
Claudia Kraehe
Kandice Lee
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Subject: **Eden Shores East Single-Family -- Acoustical Consulting**
CSA Project No: 03-0447

Dear Joe:

This letter presents our environmental noise analysis for the subject planned residential development (Tract 7489) in Hayward. According to the site plan dated 29 September 2004, the part of the project north of Eden Shores Boulevard would consist of 139 single-family homes. For the residential lots to be located along the Union Pacific (UPRC) train line, we compared train noise levels to the relevant indoor noise goals, and present noise mitigation alternatives in the form of sound walls and sound-rated exterior assemblies.

In summary, the City of Hayward's single-event noise goals can be achieved in all homes located along the train line with the proposed noise mitigation measures. With a sound wall, sound-rated doors, windows, and exterior wall assemblies, and a substantial setback from the train line, the A-weighted maximum noise level in second floor bedrooms is calculated to be 50 decibels (dB), thus meeting the City of Hayward's single-event noise goal. Additionally for the homes on Lots 108, 109, and 123, we recommend that bedroom windows in the one facade that directly faces the train line be removed. At the same time, the City and State's Day-Night Average Sound Level (DNL)[1] goal of 45 dB can be met by more than 10 dB in all homes.

Acoustical Goals

Appendix N of the Hayward Conservation and Environmental Protection Element, entitled "Noise Guidelines for the Review of New Development" and adopted in 2002, requires that a detailed noise analysis be prepared to identify the noise control treatments necessary to achieve a Day-Night Average Sound Level (DNL) of 45 decibels (dB) or less inside the homes. This 24-hour average level is the same noise standard required by the State (Section 1208A of the California Building Code) for new multi-family residential developments.

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[1] Day-Night Average Sound Level (DNL or L_{dn})--The A-weighted noise level which corresponds to average human sensitivity to sound. The DNL sound level corresponds to an energy average during a 24-hour period. A 10-decibel penalty is applied during the hours of 10 pm to 7 am due to increased human sensitivity during the night. An A-weighting is applied to the microphone signal to approximate human sensitivity to different frequencies, i.e., pitch.

Additionally, the single-event noise levels from individual train passbys are expected to be mitigated to an A-weighted maximum noise level (L_{max}) of 50 dB in bedrooms and 55 dB in other noise-sensitive rooms. These single-event noise goals were originally applied to the analysis of the Eden Shores property in the Noise Section of the South of Route 92 Program Draft EIR[2], dated October 1997. These goals were also recently adopted in the Hayward Conservation and Environmental Protection Element. For your information, these single-event noise goals are far more stringent than the DNL 45 dB standard that is concurrently required by the City of Hayward.

Noise Measurements

On 13 to 14 November 2003, we conducted a continuous 24-hour noise measurement to document the current noise environment. The monitor was located near the southwest property line of the Eden Shores East site at the end of Eden Park Place, and near the grade-crossing of the UPRC train line. At a distance of 50 feet from the train tracks, the approximate setback of the proposed sound wall near Lot 108, we measured DNL 74 dB. The proposed home at Lot 108 would be located as near as 160 feet from the train tracks. At this setback, the DNL would be 67 dB. The homes on Lots 109 and 123, located approximately 195 feet from the train tracks, would be exposed to a DNL of 66 dB. The next row of homes (Lots 18 to 24, 75, 93 to 107, 110, and 122) are located approximately 240 feet from the train line, and would be exposed to a DNL of 65 dB.

As you know, we had also conducted several days of acoustical measurements during the last three years at the other side of the train tracks for Eden Shores[3]. At a setback of 160 feet, we measured DNLs ranging from 62 to 72 dB. Therefore, the DNL 67 dB that we measured in 2003 falls right in the middle of this measurement range. The range of DNLs was dictated by the daily variation in train activity, the primary noise source heard on-site. Increased nighttime train activity contributes to the higher DNLs, as nighttime noise levels are penalized 10 dB.

During the measurement programs, many noise events, which were assumed to be train passbys, exceeded an L_{max} of 80 dB. The L_{max} from the three loudest train horn blasts measured at a distance of 160 feet were 104, 98 and 97 dB. The horns are not utilized on a consistent basis near the grade-crossing.

For Eden Shores, additional measurements were also conducted to determine the L_{max} and the noise spectrum data from the train engines only. At the northern part of the project sites and away from the grade-crossing, the contribution from train horns becomes less significant. The L_{max} from eight train engine passbys ranged from 86 to 89 dB at a distance of 160 feet. The purpose of documenting the noise spectrum data was to determine the low frequency noise contribution of the train engines for our exterior window/wall calculations.

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[2] Prepared by EIP Associates for the City of Hayward/Department of Community and Economic Development and dated October 1997. The South of Route 92 General Plan Amendment and Specific Plan Program Final EIR was certified by the City in 1998.

[3] Reports prepared by Charles M. Salter Associates for Standard Pacific Homes of Northern California.

Impact Analysis

L_{max} 50 dB Goal (for Bedrooms): The loudest noise source affecting the project is the train passbys. The maximum instantaneous noise level is controlled by the type of train and where the horn is sounded. Trains typically sound their horn near the grade-crossing only. Based on an L_{max} of 104 dB from a train horn blast and an L_{max} of 89 dB from train engines, we estimated the following indoor L_{max}s at the proposed second floor bedrooms of the home at Lot 108. This home would be located 160 feet from the train line. For this analysis, an 18- to 20-foot-tall sound wall (18 feet above the elevation of the train tracks) is assumed at the western property line. The exterior wall assembly would consist of a 3-coat stucco finish. The second floor windows of homes on Lots 108, 109, and 123 would be only perpendicular to, and would not directly face, the train line. "RC" in the following table represents either a staggered stud or resilient channel exterior wall assembly.

Table 1: Indoor L_{max}s (dB) for Various Exterior Window/Wall Assemblies at Second Floor of Lot 108 (Home with "Worst-case" Noise Exposure)

Train Noise Source	Window Sound Rating			
	STC 41	STC 41 with RC	STC 45	STC 45 with RC
Engine Only (Outdoor L_{max} of 89 dB)	55	53	53	50
Horn Only (Outdoor L_{max} of 104 dB)	60	58	58	55
Horn Only (Outdoor L_{max} of 99 dB)	55	53	53	50

Table 1 indicates that the loudest measured train horn blast would be approximately 3 dB louder than train engine noise indoors, and that both noise sources would exceed the indoor L_{max} goal for bedrooms. As there was only one horn blast over a week of measurements that was above 99 dB at a distance of 160 feet, we found it reasonable to consider this an atypical event. The next loudest events were no more than 98 dB. Additionally, the loudest noise event reported in the South of Route 92 Program Final EIR from the measurements of 12 to 16 December 1997 was 102 dB at a distance of 100 feet from the train tracks (or 98 dB at a distance of 160 feet). For all train horn blasts that are no more than 99 dB, the L_{max} goal for bedrooms would be met.

Our measurement data also indicated that train engine noise ranged from less than 80 dB up to 89 dB at a distance of 160 feet from the train tracks. The L_{max}s presented in the South of Route 92 Program Final EIR are consistent with these levels. Even with resilient channel construction and STC 45 windows, we would expect that only train engines that are 87 dB or less to generate an L_{max} of no more than 50 dB inside the home of Lot 108. However, typical homes located north of Eden Shores Boulevard are 240 feet from the train line. At this setback, the expected indoor L_{max} would be 50 dB with resilient channel construction and STC 45 windows.

Recommendations/Alternatives

We understand that a sound wall would be constructed along the southwest property line of the project. Since the future project site elevation would be approximately 1 to 4 feet below the elevation of the train tracks, one foot plus the train height needs to be considered in determining the height for the wall to break line-of-sight. The height of typical trains are estimated to be 17 feet above the train tracks with the horn mounted on top. A person standing at the second story of homes is estimated to be at a height of 16 feet above the pad elevation. Based on a line-of-sight analysis for the homes closest to the train tracks, an 18- to 20-foot-tall sound wall would acoustically shield train horn and engine noise to the second story of these homes. This sound wall height is measured from the train track elevations. (A 15-foot sound wall would only acoustically shield railcar wheel noise and some locomotive noise to the second floors, while a 12-foot sound wall would only acoustically shield some locomotive and wheel noise to the ground floors.)

Typically, sound walls tend to acoustically shield higher frequency noises, such as from train horns, better than low-frequency sources, such as the rumbling of a locomotive engine. Assuming that an 18- to 20-foot-tall sound wall would be constructed along the southwest property line, we calculate that approximately 10 dB of acoustical shielding would be provided for all ground floors of homes. North of Lot 18, a 120-foot-long return sound wall should be provided perpendicular to the primary sound wall. The height of this return wall should start out at 18-feet tall for the first 35 feet, step down to 15-feet tall for the next 35 feet, and end up at 12-feet tall for the last 50 feet near Lot 18. These wall heights are measured from the train track elevations.

The exterior window/wall components that we assumed in the aforementioned Impact Analysis calculations provide excellent sound transmission loss values, approaching the technological limitations of standard building construction. The drawings prepared by Bassenian Lagoni Architects indicate that a stucco exterior wall would be used for all residential buildings. For our calculations, we are assuming that a 3-coat stucco system would be used. With the measured DNLs ranging from 62 to 72 dB during all our measurements along the train line, we used a "worst-case" DNL of 72 dB for our indoor calculations. In summary, the City of Hayward's indoor average noise standard of DNL 45 dB can be easily achieved with less than STC 45 windows and sound-rated exterior wall assemblies. The recommended sound-rated exterior window/wall assemblies are proposed to address the L_{max} goal of 50 dB in bedrooms, which is the more stringent noise goal. For the "worst-case" noise exposures, the exterior wall assembly should consist of two layers of gypsum board attached to either a staggered-stud or resilient channel assembly. With these sound-rated components, the resultant noise from all but one measured train passbys would meet the L_{max} goal of 50 dB at second floor bedrooms of homes located at least 240 feet from the train tracks. We also recommend that a written disclosure statement describing the current train activity and expected noise levels be provided to every potential homebuyer.

The architectural drawings currently indicate that the bedrooms are located at the second floors of each floor plan. The following exterior window/wall recommendations for the various homes assume the construction of an 18- to 20-foot-tall sound wall.

1. For the 3 homes located on Lots 108, 109, and 123: Each home would have three facades with a line-of-sight to the train line, and the fourth facade that faces away. The L_{max} 50 dB goal could be achieved by eliminating the second floor windows of bedrooms in the one facade that directly faces the train line. Additionally, if a staggered-stud or resilient-channel wall assembly along with a minimum of STC 45 windows (such as Milgard 7220's consisting of two rows of sliders) were to be provided for the other two facades of the second floors having a line-of-sight to the train line, then an indoor L_{max} of up to approximately 50 dB due primarily to train engines would be expected. This noise level would meet the City's L_{max} goal discussed in the Conservation and Environmental Protection Element for bedrooms. Both the staggered-stud and resilient channel exterior wall assembly should consist of two layers of gypsum board on the interior side. We have attached our "Resilient-Channel Wall Installation Guidelines" for your review. For the facade facing away from the train line, provide a minimum of STC 42 windows without the staggered-stud or resilient channel wall assembly to achieve the L_{max} 50 dB goal indoors.

   To meet an L_{max} of 55 dB in ground floor rooms, provide a minimum STC 45 windows and STC 42 exterior doors in the facades that have a line-of-sight to the train line. Eggers and Jamison both manufacture minimum STC 42 exterior doors. Another option would be to use STC 31 storm doors over standard gasketed entry doors. The required exterior door ratings may be lessened at some facades that have some acoustical shielding provided by adjacent homes. Provide STC 37 exterior doors and windows at the facades of other ground floor rooms that face away from the train line.

2. For the 25 homes located on Lots 18 to 24, 75, 93 to 107, 110, and 122: If a staggered-stud or resilient-channel wall assembly along with a minimum of STC 45 windows (such as Milgaard 7220's consisting of two rows of sliders) were to be provided for the facades of the second floors having a line-of-sight to the train line, then an indoor L_{max} of up to 50 dB due primarily to train engines would be expected. This noise level would meet the City's L_{max} goal for bedrooms. Provide STC 40 windows at the facades of second floor bedrooms that face away from the train line.

   To meet an L_{max} of 50 dB in ground floor bedrooms, provide STC 45 windows in the facades that have a line-of-sight to the train line. To meet an L_{max} of 55 dB in other ground floor rooms, provide STC 42 exterior doors and windows in the facades that have a line-of-sight to the train line. Provide STC 34 exterior doors and windows at the facades of other ground floor rooms that face away from the train line.

3. For the eight homes on Lots 76, 77, 111, 112, 120, 121, 126, and 127: To meet an L_{max} of 50 dB in second floor bedrooms having a line-of-sight to the train line, a minimum of STC 45 windows would be required. Provide STC 37 windows at the facades of second floor bedrooms that face away from the train line.

To meet an L_{max} of 50 dB in ground floor bedrooms, provide STC 45 windows in the facades that have a line-of-sight to the train line, and STC 37 windows in the facades that face away from the train line. To meet an L_{max} of 55 dB in other ground floor rooms, provide STC 40 exterior doors and windows in the facades that have a line-of-sight to the train line. Provide STC 32 exterior doors and windows at the facades of other ground floor rooms that face away from the train line.

4. For the next group of homes at Lots 13 to 17, 78 to 92, 113 to 115, 117 to 119, 125, and 130: To meet an L_{max} of 50 dB in second floor bedrooms having a line-of-sight to the train line, a minimum of STC 38 windows would be required. Provide STC 29 windows at the facades of second floor bedrooms that face away from the train line.

   To meet an L_{max} of 55 dB in ground floor rooms, provide STC 29 exterior doors and windows in the facades that have a line-of-sight to the train line.

All other homes at the project site would not require sound-rated windows to achieve the indoor L_{max} goals. However, in addition to all windows and exterior doors at the aforementioned homes, all windows at second floors of homes located within 500 feet of the UPRC train line would need to be in the closed position to achieve the indoor noise goals. Therefore, an alternate source of ventilation (i.e., mechanical) may need to be provided. A mechanical engineer should verify that ventilation requirements can be met.

The STC 45 windows and RC on the second floors would reduce the indoor DNL to less than 35 dB. This noise level would be substantially below the State of California's and Hayward's indoor average noise standard of DNL 45 dB for all homes located along the train tracks. Overall, DNL 35 dB would be considered about half as loud as DNL 45 dB. As shown in Table 1, the resultant indoor L_{max} would approximately meet the City's L_{max} goal of 50 dB.

* * *

This concludes our environmental noise analysis for the subject project. Once again, we recommend that a written disclosure statement of the current train activity and expected noise levels be provided to every potential homebuyer. Please call with any questions.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.

Michael D. Toy, P.E.
Principal Consultant

MDT/dg
05Feb04_MDT_Eden Shores East Single-Family – A. C.

Enclosure as noted

cc: Michael Cady
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Resilient Channel Installation Guidelines for Walls

Attach channels directly to wall studs only. Do not install channels on gypsum board, shear plywood, or like material.

a. Attaching Channels

1. Attach single leg resilient channels at 24-inch center-to-center spacing perpendicular to studs. See Figure A attached.

   Use Dietrich Industries (800/873-2443) RC Deluxe 25-gauge resilient channels or single-leg channels that can be shown to have equivalent laboratory acoustical performance to USG RC-1 channels.

2. Use 1-inch type S Bugle Head dry wall (or similar) screws.

3. Attach channels with the gypsum board mounting flange facing up and prepunched holes facing down.

4. Drive screws through holes in channel mounting flange.

5. Hold back ends of channels 1/2 inch from intersecting surfaces.

6. Splice channels only at studs and overlap butt ends no more than 1-1/2 inches. Screw attach through both flanges.

7. Locate channels a maximum of 3 inches from framing at base and head of wall.

8. Channel shall not touch base or head plate or other horizontal framing member.

9. Add additional framing if necessary so that channels are cantilevered no more than 6 inches.

b. Attaching Gypsum Board

1. Apply gypsum board of maximum practical length, the long edge parallel with and centered on channels. Orienting the long edge vertically is acceptable on walls where a single sheet of gypsum board extends from floor to ceiling.

2. Mark location of all framing members, piping, and other material that could impair the resiliency of the channel. Locate screws at least 2 inches away from the marked areas.

3. Fasten gypsum board using type S Bugle Head dry wall screws (or equal) of appropriate length to prevent penetration into framing. Space screws 12 inches center-to-center in field of gypsum board and along all edges.

4. Hold back edges of resiliently hung gypsum board edges 1/4 inch at all intersecting surfaces.

c. Two-layer Option

1. When a construction with two layers of gypsum board on resilient channels is recommended, apply the face gypsum board layer in the same manner as the base layer, except offset the long edge joints by 24 inches and the short edge joints by 48 inches.

2. Fasten the face layer panel to channels using type S Bugle Head dry wall screws (or equal) spaced 12 inches on center in field of panels and along butting edges. Use screws of appropriate length to prevent rigid contact with framing.

3. Offset face layer screw pattern 6 inches from base layer screws along all channels. Face layer screws must not penetrate into framing.

4. Hold back edges of resiliently hung gypsum board 1/4 inch at all intersecting surfaces.

d. Caulking Gypsum Board/Resilient Channel Construction

1. For all constructions, caulk the perimeter void full and airtight with an acoustical sealant.

2. Recessed light fixtures, junction boxes, fire sprinkler pipes, and other penetrations must be sealed airtight with acoustical sealant.

e. Baseboard and Trim Attachment

1. Do not rigidly attach baseboard or other finishing trim to framing through resiliently suspended gypsum board.

2. Screw attach baseboard to channels. Gluing baseboard to gypsum board could also be considered.

Note: The fire-rating requirements for a construction may modify these instructions.

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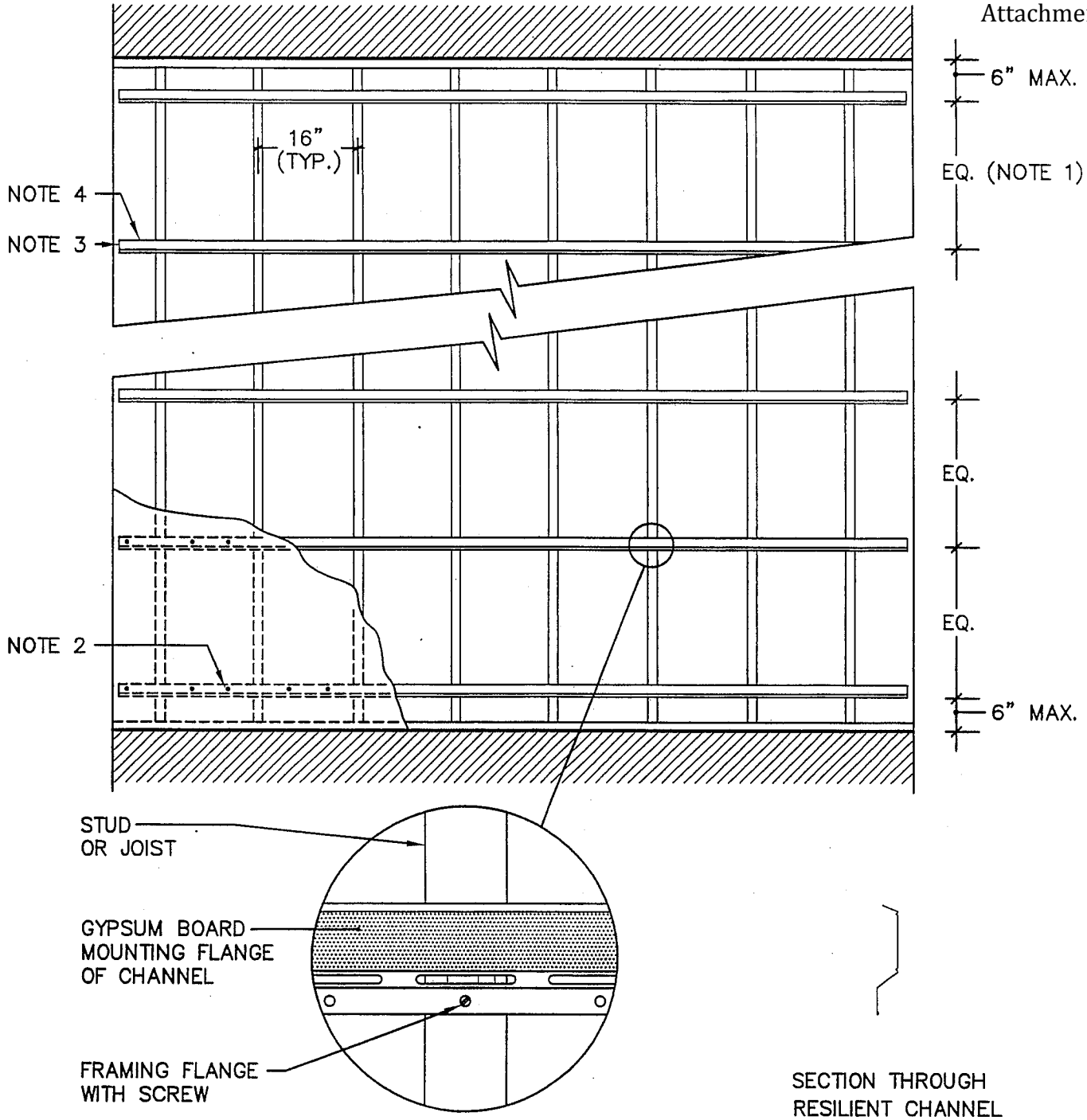

SECTION THROUGH
RESILIENT CHANNEL

NOTES:

1. INSTALL CHANNELS 24" ON CENTER UNLESS OTHERWISE SPECIFIED
2. AVOID STUD OR JOIST WHEN FASTENING GYPSUM BOARD TO CHANNEL— GYPSUM BOARD SCREWS MUST NOT CONTACT FRAMING
3. HOLD BACK 1/2" FROM INTERSECTING SURFACES
4. DO NOT CANTILEVER CHANNEL BY MORE THAN 6" FROM FRAMING

INSTALLATION GUIDE FOR RESILIENT CHANNEL

FIGURE

682
1.1.1.4 04.12.02

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4 February 2005

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Subject: **Eden Shores East Multi-Family -- Acoustical Consulting**
CSA Project No: 03-0447

Dear Joe:

This letter presents our environmental noise analysis for the subject planned residential development (Tract 7489) in Hayward. According to the site plan dated 29 September 2004, the part of the project south of Eden Shores Boulevard would consist of 122 dwelling units in 4, 6, and 8-plex townhome buildings. For the buildings to be located near the Union Pacific (UPRC) train line, we compared train noise levels to the relevant indoor noise goals, and present noise mitigation alternatives in the form of sound walls and sound-rated exterior assemblies.

In summary, the City of Hayward's single-event noise goals can be achieved in all townhomes located along the train line with the proposed noise mitigation measures. With a sound wall, sound-rated doors, windows, and exterior wall assemblies, and a substantial setback from the train line, the A-weighted maximum noise level in second floor bedrooms is calculated to be 50 decibels (dB), thus meeting the City of Hayward's single-event noise goal. At the same time, the City and State's Day-Night Average Sound Level (DNL)[1] goal of 45 dB can be met by more than 10 dB in all townhomes. These calculated indoor noise levels assume that the second floor bedroom windows would be perpendicular to, and would not face, the train line.

Acoustical Goals

Appendix N of the Hayward Conservation and Environmental Protection Element, entitled "Noise Guidelines for the Review of New Development" and adopted in 2002, requires that a detailed noise analysis be prepared to identify the noise control treatments necessary to achieve a Day-Night Average Sound Level (DNL) of 45 decibels (dB) or less inside the

[1] Day-Night Average Sound Level (DNL or L_{dn})--The A-weighted noise level which corresponds to average human sensitivity to sound. The DNL sound level corresponds to an energy average during a 24-hour period. A 10-decibel penalty is applied during the hours of 10 pm to 7 am due to increased human sensitivity during the night. An A-weighting is applied to the microphone signal to approximate human sensitivity to different frequencies, i.e., pitch.

dwelling units. This 24-hour average level is the same noise standard required by the State (Section 1208A of the California Building Code) for new multi-family residential developments.

Additionally, the single-event noise levels from individual train passbys are expected to be mitigated to an A-weighted maximum noise level (L_{max}) of 50 dB in bedrooms and 55 dB in other noise-sensitive rooms. These single-event noise goals were originally applied to the analysis of the Eden Shores property in the Noise Section of the South of Route 92 Program Draft EIR[2], dated October 1997. These goals were also recently adopted in the Hayward Conservation and Environmental Protection Element. For your information, these single-event noise goals are far more stringent than the DNL 45 dB standard that is concurrently required by the State of California.

Noise Measurements

On 13 to 14 November 2003, we conducted a continuous 24-hour noise measurement to document the existing noise environment. The monitor was located near the southwest property line of the project site at the end of Eden Park Place and near the grade-crossing of the UPRC train line. At a distance of 50 feet from the train tracks, the approximate setback of the proposed sound wall, we measured DNL 74 dB. Proposed Plan 3 townhomes at the end of seven 6-plexes (Buildings 8, and 14 to 19) would be located as near as 160 feet from the train tracks. At this setback, the DNL would be 67 dB.

As you know, we had also conducted several days of acoustical measurements during the last three years at the other side of the train tracks for Eden Shores[3]. At a setback of 160 feet, we measured DNLs ranging from 62 to 72 dB. Therefore, the DNL 67 dB that we measured in 2003 falls right in the middle of this measurement range. The range of DNLs was dictated by the daily variation in train activity, the primary noise source heard on-site. Increased nighttime train activity contributes to the higher DNLs, as nighttime noise levels are penalized 10 dB.

During the measurement programs, many noise events, which were assumed to be train passbys, exceeded an L_{max} of 80 dB. The L_{max} from the three loudest train horn blasts measured at a distance of 160 feet were 104, 98 and 97 dB. The horns are not utilized on a consistent basis near the grade-crossing.

For Eden Shores, additional measurements were also conducted to determine the L_{max} and the noise spectrum data from the train engines only. At the northern part of the project sites and away from the grade-crossing, the contribution from train horns becomes less significant. The L_{max} from eight train engine passbys ranged from 86 to 89 dB at a distance of 160 feet. The purpose of documenting the noise spectrum data was to determine the low frequency noise contribution of the train engines for our exterior window/wall calculations.

---

[2] Prepared by EIP Associates for the City of Hayward/Department of Community and Economic Development and dated October 1997. The South of Route 92 General Plan Amendment and Specific Plan Program Final EIR was certified by the City in 1998.

[3] Reports prepared by Charles M. Salter Associates for Standard Pacific Homes of Northern California.

Impact Analysis

L_{max} 50 dB Goal (for Bedrooms): The loudest noise source affecting the project is the train passbys. The maximum instantaneous noise level is controlled by the type of train and where the horn is sounded. Trains typically sound their horn near the grade-crossing only. Based on an L_{max} of 104 dB from a train horn blast and an L_{max} of 89 dB from train engines, we estimated the following indoor L_{max}s at the proposed second floor bedrooms located 160 feet from the train line. For this analysis, an 18- to 20-foot-tall sound wall (18 feet above the elevation of the train tracks) is assumed at the western property line. The exterior wall assembly would consist of a 3-coat stucco finish. The second floor windows at Buildings 8 and 14 to 19 would be only perpendicular to, and would not directly face, the train line. "RC" in the following table represents either a staggered stud or resilient channel exterior wall assembly.

Table 1: Indoor L_{max}s (dB) for Various Exterior Window/Wall Assemblies at Second Floors of Buildings 8 and 14 to 19 (Townhomes with "Worst-case" Noise Exposure)

Train Noise Source	Window Sound Rating			
	STC 41	STC 41 with RC	STC 45	STC 45 with RC
Engine Only (Outdoor L_{max} of 89 dB)	55	53	53	50
Horn Only (Outdoor L_{max} of 104 dB)	58	56	56	53
Horn Only (Outdoor L_{max} of 101 dB)	55	53	53	50

Table 1 indicates that the loudest measured train horn blast would be approximately 3 dB louder than train engine noise indoors, but that the engine noise source could meet the indoor L_{max} goal for bedrooms. As there was only one horn blast over a week of measurements that was above 99 dB at a distance of 160 feet, we found it reasonable to consider this an atypical event. The next loudest events were no more than 98 dB. Additionally, the loudest noise event reported in the South of Route 92 Program Final EIR from the measurements of 12 to 16 December 1997 was 102 dB at a distance of 100 feet from the train tracks (or 98 dB at a distance of 160 feet). For all train horn blasts that are no more than 101 dB, the L_{max} goal for bedrooms would be met.

Our measurement data also indicated that train engine noise ranged from less than 80 dB up to 89 dB at a distance of 160 feet from the train tracks. The L_{max}s presented in the South of Route 92 Program Final EIR are consistent with these levels. In conclusion, with resilient channel construction and STC 45 windows, the second floor bedrooms of townhomes located at the seven buildings nearest the train tracks would meet the L_{max} 50 dB single-event indoor noise goal. Once again, this assumes that these second floor bedroom windows would be perpendicular to the train line.

Recommendations/Alternatives

We understand that a sound wall would be constructed along the southwest property line of the project. Since the future project site elevation would be approximately 1 to 4 feet below the elevation of the train tracks, one foot plus the train height needs to be considered in determining the height for the wall to break line-of-sight. The height of typical trains are estimated to be 17 feet above the train tracks with the horn mounted on top. A person standing at the second story of homes is estimated to be at a height of 16 feet above the pad elevation. Based on a line-of-sight analysis for the homes closest to the train tracks, an 18- to 20-foot-tall sound wall would acoustically shield train horn and engine noise to the second story of these homes. This sound wall height is measured from the train track elevations. (A 15-foot sound wall would only acoustically shield railcar wheel noise and some locomotive noise to the second floors, while a 12-foot sound wall would only acoustically shield some locomotive and wheel noise to the ground floors.)

Typically, sound walls tend to acoustically shield higher frequency noises, such as from train horns, better than low-frequency sources, such as the rumbling of a locomotive engine. Assuming that an 18 to 20-foot-tall sound wall would be constructed along the southwest property line, we calculate that 5 to 6 dB of acoustical shielding would be provided for all second-floors of homes. Also, this wall would provide approximately 10 dB of shielding to the ground floors of homes. At the southern end of the primary sound wall, near the intersection of Eden Park Place and Street "Y", a 150-feet-long return sound wall should be provided extending from the primary sound wall. The height of this return wall should be 18-feet tall between the primary sound wall and Street "Y". At the other side of Street "Y" and along the north side of Eden Park Place, the wall could be stepped down to 15-feet tall for the next 35 feet, and end up at 12-feet-tall for last 50 feet near Building 13. These wall heights are measured from the train track elevations.

The exterior window/wall components that we assumed in the aforementioned Impact Analysis calculations provide excellent sound transmission loss values, approaching the technological limitations of standard building construction. The drawings prepared by William Hezmalhalch Architects indicate that a stucco exterior wall would be used for all residential buildings. For our calculations, we are assuming that a 3-coat stucco system would be used. With the measured DNLs ranging from 62 to 72 dB during all our measurements along the train line, we used a "worst-case" DNL of 72 dB for our indoor calculations. In summary, the State of California's and Hayward's indoor average noise standard of DNL 45 dB can be easily achieved with less than STC 45 windows and sound-rated exterior wall assemblies. The recommended sound-rated exterior window/wall assemblies are proposed to address the L_{max} goal of 50 dB in bedrooms, which is the more stringent noise goal. For the "worst-case" noise exposures, the exterior wall assembly should consist of two layers of gypsum board attached to either a staggered-stud or resilient channel assembly. With these sound-rated components, the resultant noise from all but one measured train passbys would meet the L_{max} goal of 50 dB at second floor bedrooms located in townhomes of Buildings 8, and 14 to 19 located nearest to the train tracks. We also recommend that a written disclosure statement describing the current train activity and expected noise levels be provided to every potential homebuyer.

The architectural drawings currently indicate that the bedrooms are located at the second floors of each floor plan. The following exterior window/wall recommendations for the various townhomes assume the construction of an 18- to 20-foot-tall sound wall.

1. For the 7 Plan 3 and 14 Plan 1 townhomes in 6-plex Buildings 8, and 14 to 19 nearest the UPRC train line: If a staggered-stud or resilient-channel wall assembly along with a minimum of STC 45 windows (such as Milgard 7220's consisting of two rows of sliders) and STC 42 exterior doors were to be provided for all facades of the second floor rooms, then an indoor L_{max} of up to approximately 50 dB due primarily to train engines would be expected. This noise level meets the City's L_{max} goal discussed in the Conservation and Environmental Protection Element. Both the staggered-stud and resilient channel exterior wall assembly should consist of two layers of gypsum board on the interior side. We have attached our "Resilient-Channel Wall Installation Guidelines" for your review. Eggers and Jamison both manufacture minimum STC 42 exterior doors. Another option would be to use STC 31 storm doors over standard gasketed entry doors. Each townhome would have two or three facades with a line-of-sight to the train line.

   French doors currently shown on the floor plans will not be acceptable acoustically as they are not available with adequate sound-ratings.

   To meet an L_{max} of 55 dB in ground floor rooms, provide a minimum of STC 42 exterior doors and windows.

2. For 4-plex Building 13 and the remaining townhomes in Buildings 8, and 14 to 19: To meet an L_{max} of 50 dB in second-floor bedrooms having a line-of-sight to the train line, a minimum of STC 45 windows and STC 42 exterior doors would be required. To meet an L_{max} of 55 dB in ground floor rooms, provide a minimum of STC 42 exterior doors and windows.

3. For Buildings 4, 7, 11, and 12, and townhomes at the western half of Building 9: To meet an L_{max} of 50 dB in second floor bedrooms having a line-of-sight to the train line, a minimum of STC 40 exterior doors and windows would be required. Provide STC 28 exterior doors and windows for second floor bedrooms facing away from the train line in Buildings 4, 11, and 12. To meet an L_{max} of 55 dB in ground floor rooms having a line-of-sight to the train line, provide STC 33 exterior doors and windows.

4. For Buildings 3, 6, and 10, and townhomes at the eastern half of Building 9: To meet an L_{max} of 50 dB in second floor bedrooms having a line-of-sight to the train line, a minimum of STC 34 exterior doors and windows would be required.

All other townhomes at the project site would not require sound-rated windows to achieve the indoor L_{max} goals. However, in addition to all windows and exterior doors at the aforementioned townhomes, all windows at second floors of homes located within 500 feet of the UPRC train line would need to be in the closed position to achieve the indoor noise goals. Therefore, an alternate source of ventilation (i.e., mechanical) may need to be provided. A mechanical engineer should verify that ventilation requirements can be met.

The STC 45 windows and RC on the second floors would reduce the indoor DNL to less than 35 dB. This noise level would be substantially below the State of California's and Hayward's indoor average noise standard of DNL 45 dB for all townhomes located along the train tracks. Overall, DNL 35 dB would be considered about half as loud as DNL 45 dB. As shown in Table 1, the resultant indoor L_{max} would meet the City's L_{max} goal of 50 dB.

* * *

This concludes our environmental noise analysis for the subject project. Once again, we recommend that a written disclosure statement of the current train activity and expected noise levels be provided to every potential homebuyer. Please call with any questions.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.

Michael D. Toy, P.E.
Principal Consultant

Enclosure as noted

cc: Michael Cady
Duc Housing Partners
E-mail: mcady@duchousing.com

MDT/dg
05Feb04_MDT_Eden Shores East Multi-Family – A. C.

Resilient Channel Installation Guidelines for Walls

Attach channels directly to wall studs only. Do not install channels on gypsum board, shear plywood, or like material.

a. Attaching Channels

1. Attach single leg resilient channels at 24-inch center-to-center spacing perpendicular to studs. See Figure A attached.

   Use Dietrich Industries (800/873-2443) RC Deluxe 25-gauge resilient channels or single-leg channels that can be shown to have equivalent laboratory acoustical performance to USG RC-1 channels.

2. Use 1-inch type S Bugle Head dry wall (or similar) screws.

3. Attach channels with the gypsum board mounting flange facing up and prepunched holes facing down.

4. Drive screws through holes in channel mounting flange.

5. Hold back ends of channels 1/2 inch from intersecting surfaces.

6. Splice channels only at studs and overlap butt ends no more than 1-1/2 inches. Screw attach through both flanges.

7. Locate channels a maximum of 3 inches from framing at base and head of wall. .

8. Channel shall not touch base or head plate or other horizontal framing member.

9. Add additional framing if necessary so that channels are cantilevered no more than 6 inches.

b. Attaching Gypsum Board

1. Apply gypsum board of maximum practical length, the long edge parallel with and centered on channels. Orienting the long edge vertically is acceptable on walls where a single sheet of gypsum board extends from floor to ceiling.

2. Mark location of all framing members, piping, and other material that could impair the resiliency of the channel. Locate screws at least 2 inches away from the marked areas.

3. Fasten gypsum board using type S Bugle Head dry wall screws (or equal) of appropriate length to prevent penetration into framing. Space screws 12 inches center-to-center in field of gypsum board and along all edges.

4. Hold back edges of resiliently hung gypsum board edges 1/4 inch at all intersecting surfaces.

c. Two-layer Option

1. When a construction with two layers of gypsum board on resilient channels is recommended, apply the face gypsum board layer in the same manner as the base layer, except offset the long edge joints by 24 inches and the short edge joints by 48 inches.

2. Fasten the face layer panel to channels using type S Bugle Head dry wall screws (or equal) spaced 12 inches on center in field of panels and along butting edges. Use screws of appropriate length to prevent rigid contact with framing.

3. Offset face layer screw pattern 6 inches from base layer screws along all channels. Face layer screws must not penetrate into framing.

4. Hold back edges of resiliently hung gypsum board 1/4 inch at all intersecting surfaces.

d. Caulking Gypsum Board/Resilient Channel Construction

1. For all constructions, caulk the perimeter void full and airtight with an acoustical sealant.

2. Recessed light fixtures, junction boxes, fire sprinkler pipes, and other penetrations must be sealed airtight with acoustical sealant.

e. Baseboard and Trim Attachment

1. Do not rigidly attach baseboard or other finishing trim to framing through resiliently suspended gypsum board.

2. Screw attach baseboard to channels. Gluing baseboard to gypsum board could also be considered.

Note: The fire-rating requirements for a construction may modify these instructions.

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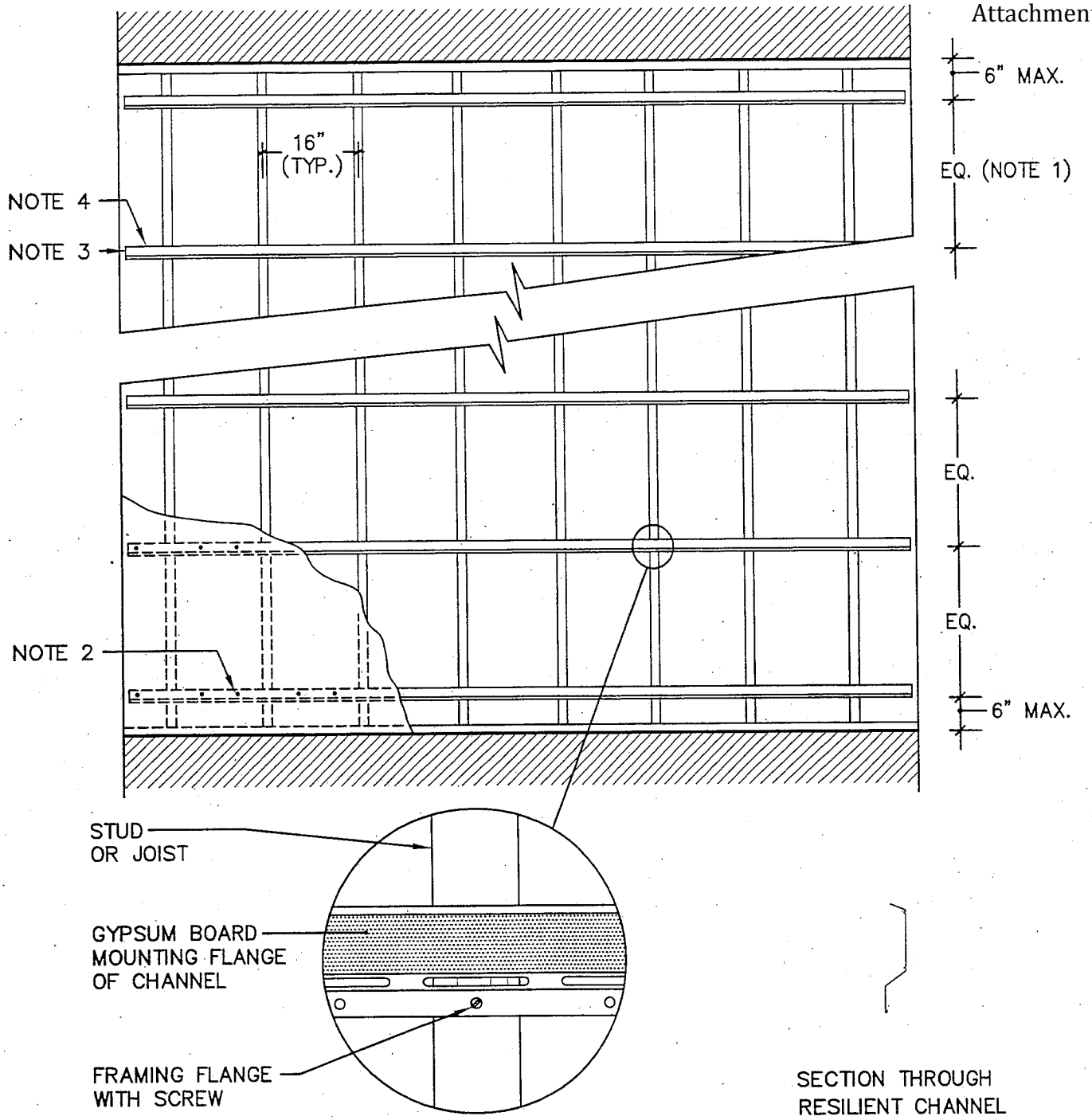

SECTION THROUGH RESILIENT CHANNEL

NOTES:

1. INSTALL CHANNELS 24" ON CENTER UNLESS OTHERWISE SPECIFIED
2. AVOID STUD OR JOIST WHEN FASTENING GYPSUM BOARD TO CHANNEL— GYPSUM BOARD SCREWS MUST NOT CONTACT FRAMING
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4. DO NOT CANTILEVER CHANNEL BY MORE THAN 6" FROM FRAMING

INSTALLATION GUIDE FOR RESILIENT CHANNEL

FIGURE

682
1.1.1.4 04.12.02

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Kandice Lee
Rebecca Cowger
Brian Good
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4 February 2005

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Subject: **Eden Shores East Outdoor Use Areas -- Acoustical Consulting**
CSA Project No: 03-0447

Dear Joe:

This letter presents our outdoor noise analysis for the subject planned residential development (Tract 7489) in Hayward. According to the site plan dated 29 September 2004, the project would consist of 139 single-family homes and 122 townhome units. For the outdoor use areas and residential lots located nearest the Union Pacific (UPRC) train line, we compared train noise levels to the relevant outdoor noise standards, incorporating noise mitigation in the form of sound walls. We also discuss the noise associated with the existing pump station located next to Lot 123 of the single-family homes.

In summary, the City of Hayward's outdoor noise standards can be achieved in all dwelling units located along the train line. With a sound wall and a substantial setback from the train line, the adjusted DNL's would meet the City of Hayward's outdoor noise standards for the outdoor use areas associated with both the single- and multi-family dwelling units.

Acoustical Goals

Appendix N of the Hayward Conservation and Environmental Protection Element, entitled "Noise Guidelines for the Review of New Development" and adopted in 2002, has outdoor noise goals that the Hayward Planning Department interprets in the following way. On Page N-3, this section states:

> New development projects shall meet acceptable noise level standards. The "acceptable" noise standards for new land uses as established in Land Use Compatibility for Community Exterior Noise Environments (Figure 1 from Page N-5 attached) shall be used with further consideration of the following:
>
> 1. The maximum acceptable exterior noise level in residential areas is an L_{dn} of 55 dB for single-family development and an L_{dn} of 60 dB for multi-family development. These levels shall guide the design

and location of future development, and are the goals for the reduction of noise in existing development. These goals will be applied where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). The outdoor standard will normally be applied to any area considered to be "useable open space", including decks and balconies associated with apartments and condominiums.

The Hayward Planning Department applies the DNL 55 dB for single-family developments and DNL 60 dB for multi-family development as the outdoor noise standards for new residential developments. The planning department allows for the "Adjustments to Ambient Noise Levels for Periodic Noise Events" shown in Table 1 (from Page N-6).

Table 1

Noise and Land Use Compatibility Standards

Adjustments to Ambient Noise Levels for Periodic Noise Events

Maximum Cumulative Duration of Noise Event in Any One-Hour Period	Residential Exterior Noise Level Standards (dB)	
	Daytime (7 AM-10 PM)	Nighttime (10 PM-7 AM)
30 Minutes +	+5	0
15 Minutes+	+10	+5
5 Minutes+	+15	+10
1 Minute+	+20	+15
0-1 Minute	+25	+20

Except for construction noise, Chapter 4 of the Hayward Municipal Code does not include specific noise limitations for evaluating public nuisances.

Noise Measurements

On 13 to 14 November 2003, we conducted a continuous 24-hour noise measurement to document the current noise environment. The monitor was located near the southwest property line of the Eden Shores East site at the end of Eden Park Place, and near the grade-crossing of the UPRC train line. At a distance of 50 feet from the train tracks, the approximate setback of the proposed sound wall, we measured DNL 74 dB. The outdoor use areas located along Street "Y" would be located as near as 100 feet from the train tracks. At this setback, the DNL would be 70 dB. The proposed Lot 108 house, Linear and Pocket Parks, as well as the Plan 3 townhomes at the end of seven 6-plexes would be located as near as 160 feet from the train tracks. At this setback, the DNL would be 67 dB.

As you know, we had also conducted several days of acoustical measurements during the last three years at the other side of the train tracks for Eden Shores[1]. At a setback of 160 feet, we measured DNLs ranging from 62 to 72 dB. Therefore, the DNL 67 dB that we measured in 2003 falls right in the middle of this measurement range. The range of DNLs was dictated by the daily variation in train activity, the primary noise source heard on-site. Increased nighttime train activity contributes to the higher DNLs, as nighttime noise levels are penalized 10 dB.

On 7 January 2005, we measured the noise levels generated by the pump station, including the emergency engine generator located next to Lot 123 of the future single-family development. The pumps are located underground and would be barely noticeable at the adjacent homes. The engine generator is enclosed in a building and generates 84 dB at a distance of 25 feet perpendicular to the air intake louvers. The noise level in the backyard of the Lot 123 home would be approximately 72 dB. Besides emergencies, the engine generator would operate for about two hours a month on a weekday for testing.

Discussion

With the measured DNLs ranging from 62 to 72 dB at a distance of 160 feet from the train line, we are using the "worst-case" DNL of 72 dB for our outdoor noise analysis. The DNL of 72 dB was due primarily to 12 train operations, 5 of which occurred during nighttime hours. Based on our measurement data, from 28 to 29 May 2002 each train passby had a duration between approximately one-half to 1-1/2 minutes. Per the Hayward Planning Department, adjustments from Table 1 were made to the hourly average noise levels (L_{eq}) that had train activity. For example, the L_{eq} for the 4 a.m. hour was 70 dB. During this period, a 1-1/2-minute train passed the measurement location. Therefore from Table 1, 15 dB is subtracted from this L_{eq} for an adjusted L_{eq} of 55 dB. After these adjustments were made for each hour that had train activity, we recalculated the DNL to be 55 dB at a distance of 160 feet from the train line. This adjusted DNL does not include the acoustical shielding provided by the property line sound wall.

Assuming that an 18- to 20-foot-tall sound wall (18 feet above the elevation of the train tracks) would be constructed along the southwest property line to help mitigate noise to the indoors, we calculated that 5 to 6 dB of acoustical shielding would be provided for the second floor balconies of the townhomes. Also, this wall would provide approximately 10 dB of shielding to the ground level use spaces. By calculation, the adjusted DNL at the second floor balconies nearest the train track would be approximately DNL 50 dB, meeting the City's outdoor noise standard for multi-family dwelling units. The adjusted DNL at the ground level outdoor use spaces of dwelling units nearest the train track would be approximately 45 dB, 15 and 10 dB less than the City's outdoor noise standard for multi- and single-family dwelling units, respectively. This is same adjusted noise level that would occur at the Linear and Pocket Parks associated with the single-family development. At the outdoor use areas located along street "Y", the adjusted DNL would be approximately 48 dB, 12 dB less than the City's

[1] Reports prepared by Charles M. Salter Associates for Standard Pacific Homes of Northern California.

outdoor noise standard for multi-family dwelling units. Therefore, no further mitigation would be required for the outdoor use spaces at the project.

The emergency engine generator associated with the pump station would generate approximately 72 dB at the nearest proposed neighbor at Lot 123. It is understood that the generator is tested for approximately two hours once a month on a weekday during daytime hours. For your information, the adjusted DNL is 56 dB for the one day that the generator is tested. We suggest that all potential homeowners of homes located within 250 feet of the pump station be made aware of the typical operations of the engine generator. As the generator is infrequently tested, no mitigation is required for the pump station.

* * *

This concludes our outdoor noise analysis for the subject project. Please call with any questions.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.

Michael D. Toy, P.E.
Principal Consultant

cc: Michael Cady
Duc Housing Partners
E-mail: mcady@duchousing.com

MDT/dg
05Feb04_MDT_ Eden Shores East Outdoor Use Areas – A. C.

CITY OF HAYWARD

SOUTH OF ROUTE 92 SPECIFIC PLAN AMENDMENT (LEGACY EDEN SHORES) PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

PREPARED FOR

CITY OF HAYWARD
DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT
777 B STREET
HAYWARD, CA 94541

PREPARED BY

PMC

1440 BROADWAY, SUITE 1008
OAKLAND, CA 94612

JUNE 2007

CITY OF HAYWARD

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1.0 INTRODUCTION

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1.1 OVERVIEW

A Draft Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed South of Route 92 Specific Plan Amendment project was submitted to the State Clearinghouse and released for public and agency review for a 30-day review and comment period on May 11, 2007. The comment period closed June 11, 2007.

This document, the Final IS/MND, includes comments received on the Draft IS/MND, responses to those comments and minor changes and edits to the Draft IS/MND that must be considered by the City of Hayward (the lead agency) before the Proposed Project can be approved or rejected. This document also contains a mitigation monitoring and reporting program (MMRP) to be adopted if the Proposed Project is approved.

1.2 ORGANIZATION OF THE DOCUMENT

The Final IS/MND is organized into six sections, including this section, Section 1.0, Introduction. Section 2.0, Executive Summary, provides a brief project description and a summary table of project environmental effects. Section 3.0, Comment Letters and Responses, provides a list of commentors and copies of written comments (coded for reference), as well as lead agency responses to written comments. Section 4.0, contains a Mitigation Monitoring and Reporting Program (MMRP) to be adopted if the Proposed Project is approved. Section 5.0, Minor Changes and Edits to the Draft, summarizes correction made to the Draft IS/MND. Section 6.0 contains information on the preparation of this document.

2.0 EXECUTIVE SUMMARY

2.0 EXECUTIVE SUMMARY

2.1 INTRODUCTION

The project site, part of the Oliver East portion of the Specific Plan area, is located in an area surrounded by light industrial/business park uses and a residential community currently under construction. The site is bordered on the north by light industrial uses. The site is bounded on the east by Hesperian Boulevard. The site is bordered on the south by Eden Park Place and a sports complex consisting of baseball diamonds and soccer fields. To the west of the project site (Parcel 1) is the Union Pacific Railroad right-of-way (railroad lines/tracks) and other easements identified on plans, and a flood control channel, beyond which lies the new Eden Shores residential development, as well as wetlands on the Weber portion of the Specific Plan area. A previous wetland determination determined that 0.22 acres of the City of Hayward's parcel were found to be Section 404 jurisdictional (Corps of Engineers 2000). However, this Corps delineation has expired and a new delineation would be required prior to project development as part of a new Section 404 permit request.

2.2 DESCRIPTION OF PROJECT

The project site addressed in this Initial Study is located in the southwestern portion of the City of Hayward, between Industrial Boulevard and Eden Park Place immediately west of Hesperian Boulevard. The site is immediately east of the Union Pacific (UPRR) train line at the northern end and is adjacent to Marina Drive and the new housing developments of Bridgeport and The Crossings. The existing 56.41 acre vacant site is relatively flat. The areas north and south of Eden Shores Boulevard and east of Marina Drive are currently designated as Industrial Corridor in the General Plan and Business Park in the Specific Plan. Implementation of the project includes the following actions:

- General Plan Amendment (GPA) PL-2007-0231. Change the General Plan land use designation for portions of the area from Industrial Corridor (36.3 acres) to Medium Density Residential (14.6 acres) and Retail and Office Commercial (21.8 acres).

- Zone Change (ZC) 2007-0232 and Text Amendment (TA) 2007-0233. Change the zoning for portions of the area from BP-Business Park (33.4 acres) and CR-Commercial Retail (3.0 acres) to RM-Residential Medium Density (14.6 acres), CN-Neighborhood Commercial (6.25 acres), and a new zoning district of CR-Regional Commercial (15.5 acres);

- Related revisions to the South of Route 92 Specific Plan, Development Guidelines, and Development Agreement to address the above described changes from business park uses to residential uses and commercial uses.

Access to the project would be provided by existing public streets. All other streets would be private and provide for internal access and circulation in the business park, commercial, single-family home and townhome developments.

The applicant has prepared an illustrative site plan to indicate potential development with amendment of the Specific Plan. The conceptual plan would increase the amount of residential use within the Specific Plan area and create opportunities for expanded neighborhood retail and regional retail uses. The area shown as Parcel 1 would be split between the Business Park zoning and Medium Density Residential (RM) zoning and would incorporate within the RM zoning a parcel currently owned by the City of Hayward (0.67 acres). The area shown as Parcel 2

would retain the BP zoning on the northern portion and be amended to Regional Commercial (CR) zoning for the southern portion. The area shown as Parcel 3 would change the BP zoning into a split between Medium Density Residential (RM) and Neighborhood Commercial (CN) zoning (**Figure 2.1**).

2.3 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 2-1 presents a summary of project impacts and proposed mitigation measures that would avoid or minimize potential environmental impacts. In this table, the level of significance of each environmental impact is indicated both before and after the application of the recommended mitigation measure. For detailed discussion of all project impacts and mitigation measures, the reader is referred to the environmental analysis contained in Section 3.0 of the Draft IS/MND.

Abbreviations used in **Table 2-1** include the following:

LTS: Less-Than-Significant Impact: The impact would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.

PS: Potentially Significant Impact: An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (State CEQA Guidelines §15382); however, the occurrence of the impact cannot be immediately determined with certainty.

T:_CS\Work\Hayward, City of\Route 92 Initial Study - 26-0187\Figures\Figure 2.1 - Legacy Eden Shores East.ai, June 2007

PARCEL 1 — 14.02 ACRES

OFFICE:

ACREAGE:	7.62 ACRES
F.A.R:	
MAX. F.A.R. AREA ALLOWED	0.6 = 199,156 S.F.
F.A.R. PROVIDED	0.32 = 106,500 S.F.
PARKING:	
PARKING REQUIRED (4:1000)	426 SP.
PARKING PROVIDED	436 SP.
SURPLUS	10 SP.

RESIDENTIAL:

ACREAGE:	6.40 ACRES
UNITS:	100
DENSITY:	15.6 UNITS/ACRE

PARCEL 2A — 12.45 ACRES

OFFICE:

F.A.R:	
MAX. F.A.R. AREA ALLOWED	0.6 = 325,405 S.F.
F.A.R. PROVIDED	0.73 = 396,000 S.F.
PARKING:	
PARKING REQUIRED (4:1000)	1584 SP.
PARKING PROVIDED	1589 SP.
SURPLUS	5 SP.

PARCEL 2B — 15.50 ACRES

RETAIL:

F.A.R:	
MAX. F.A.R. AREA ALLOWED	0.3 = 202,554 S.F.
F.A.R. PROVIDED	0.24 = 160,000 S.F.
PARKING:	
PARKING REQUIRED (4:1000)	800 SP.
PARKING PROVIDED	940 SP.
SURPLUS	140 SP.

PARCEL 3 — 14.44 ACRES

RETAIL:

ACREAGE:	6.25 ACRES
F.A.R:	
MAX. F.A.R. AREA ALLOWED	0.3 = 81,675 S.F.
F.A.R. PROVIDED	0.24 = 66,500 S.F.
PARKING:	
PARKING REQUIRED (5:1000)	333 SP.
PARKING PROVIDED	341 SP.
SURPLUS	8 SP.

RESIDENTIAL:

ACREAGE:	8.19 ACRES
UNITS:	
TOWNHOUSE UNITS	28
SINGLE FAMILY	46
TOTAL UNITS	74
DENSITY:	9.0 UNITS/ACRE

ALTERNATE-2 OVERALL STATISTICS — 56.41 ACRES

RETAIL

	SITE AREA	BUILDING AREA
PARCEL 2B	15.50 ACRES	160,000 S.F.
PARCEL 3	6.25 ACRES	66,500 S.F.
TOTAL	21.75 ACRES	226,500 S.F.

OFFICE

	SITE AREA	BUILDING AREA
PARCEL 1	7.62 ACRES	106,500 S.F.
PARCEL 2A	12.45 ACRES	396,000 S.F.
TOTAL	20.07 ACRES	502,500 S.F.

RESIDENTIAL

	SITE AREA	BUILDING AREA
PARCEL 1	6.40 ACRES	100 UNITS
PARCEL 3	8.19 ACRES	74 UNITS
TOTAL	14.59 ACRES	174 UNITS

PARKING

	PARKING SPACES PROVIDED
PARCEL 1 - OFFICE	436 SP.
PARCEL 2A - OFFICE	1,589 SP.
PARCEL 2B - RETAIL	940 SP.
PARCEL 3 - RETAIL	341 SP.
TOTAL	3,306 SP.

Source: MBH Architects, 2007

NOT TO SCALE

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Figure 2.1
Legacy Eden Shores

PMC

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Air Quality			
Short-term Construction Emissions Dust emissions could result in both nuisance and health effects to nearby residents. Residences, park users and some businesses along Industrial Boulevard, Hesperian Boulevard, Eden Park Place and Marina Drive would be located near construction areas for the proposed residential development. These residents would be exposed to potential air quality nuisance and health impacts from construction activities. Nuisance affects would include dust fall on nearby properties. Fine particulate matter (PM_{10}) is the air pollutant of greatest concern associated with construction dust. If uncontrolled, PM_{10} concentrations attributable to construction activities can exceed air quality standards that are designed to protect human health. This is a potentially adverse affect.	PS	**MM III-1** Dust emissions from construction-related activities can be greatly reduced by implementing control measures. The BAAQMD has developed feasible control measures for construction emissions of PM_{10}. With these measures implemented the impacts are expected to be reduced to a less than significant level. The following measures, pertinent to Mitigation Measure 3.2.4-1 of the 1997 Plan EIR, shall be incorporated into all construction contract documents and implemented: Basic Control Measures. • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e. the minimum required space between the top of the load and the top of the trailer). • Pave, apply water three times daily, or apply (non-stick) soil stabilizers on all unpaved access roads, parking areas and staging areas. • Sweep daily (preferably with water sweepers) all paved access roads, parking	LTS

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			areas and staging areas. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. Coordinate streets to be swept with the City Engineer. <u>Enhanced Control Measures (sites greater than four acres)</u> • <u>All "Basic" control measures listed above.</u> • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.) • Limit traffic speeds on unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • <u>Replant vegetation in disturbed areas as quickly as possible.</u> <u>Optional Control Measures (large construction sites, located near sensitive receptors that may warrant additional emissions reductions)</u> • Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. • Install wind breaks, or plant trees/vegetative wind breaks at windward	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		side(s) of construction areas if conditions warrant. • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. • Limit the area subject to excavation, grading and other construction activity at any one time. The following is in addition to the measures recommended by BAAQMD: Post a publicly visible sign with the telephone number and person to contact regarding dust complaints at the construction sites. This person shall respond and take corrective action within 24 hours. The telephone number of the AQMD shall also be visible to ensure compliance with BAAQMD Rule 2: Hazardous Materials; Asbestos Demolition, Renovation and Manufacturing.	
Biological Resources			
Special-Status Plant Species Updated records on file at the California Natural Diversity Data Base (CNDDB) for the project area (San Leandro, Redwood Point, Newark, Milpitas, Mountain View, Palo Alto, Dublin, Niles and Hayward USGS 7.5 minute topographic quadrangles) indicate the potential occurrence of seven candidate, sensitive or special status plants and 23 similar status animals (see Appendix D of BRA). Although potentially occurring within the vicinity of the project area, there is no suitable habitat on the project site for these animal species, with exception of the burrowing owl. There is a moderate potential for the following CNPS list 1B plant species to occur within the PSA: alkali milk-vetch (*Astralgus tener var. tener)*, Santa Cruz tarplant (*Holocarphas macradenia), and Contra*	PS	**MM IV.1a** A focused pre-construction survey for special-status plant species with moderate to high potential to occur within the PSA shall be conducted within the species blooming period, prior to the start of construction activities. If no species are found then the project will not have any impacts to the species and no additional mitigation measures are necessary. **MM IV.1b** If special-status plant species are found within the PSA, then the project applicant shall consult with the appropriate agency (CDFG and/or USFWS) on the mitigation to reduce impacts to a less than significant level,	LTS

	Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure	Level of Significance After Mitigation
	Costa goldfields (Lasthenia conjugens). The most recent CNDDB map (**Figure 2** in the BRA) shows that there is a record for alkali milk-vetch within the PSA. Santa Cruz tarplant and Contra Costa goldfields also have previously recorded occurrences within five miles of the PSA. The other species have a low probability of occurring on the site because of the graded and disturbed conditions of the soil and sparse, non-native vegetation cover. The following mitigation is recommended to avoid impacts to special-status species. Therefore, the project would not result in impacts to these endangered, threatened, or rare species or their habitats.			including but not limited to, fencing off the area where this species is found and posting of signs to publicize the sensitive nature of the area. The protective fencing would be required to ensure that the plant or plants are not destroyed, crushed of damaged during construction. Other mitigation will likely include avoidance and minimization measures to apply to both the construction and post-construction phases of the project.	
	Burrowing Owls Based on the lack of suitably sized burrows or signs of active burrow use (excrement, pellets, debris, grass, feathers, etc.), burrowing owls are not currently using the project site as habitat. The current conditions do not preclude the development of suitable burrows and use by burrowing owls prior to project construction, a potential outcome identified in the 1997 Plan EIR. Because burrowing owls could migrate to the project area from nearby locations, the mitigation measure identified in the 1997 Plan EIR, including pre-construction surveys and provisions for the protection of owls if nests are encountered, would continue to reduce the potential significance of project construction on burrowing owls to less than significant levels. This mitigation measure is relevant to the proposed Amendment to the Specific Plan. Construction activities may impact burrowing owls on the project site.	PS	**MM IV-2**	The following steps clarify the Mitigation Measure 3.2.3-5 identified in the earlier 1997 Plan EIR. - A preconstruction survey will be conducted within 30 days prior to the beginning of construction/grading activities of all suitable burrowing owl habitat within the project area and the adjacent 250 foot buffer in accordance with CDFG protocol (Burrowing Owl Consortium 1993). The first step of this protocol is to map potential burrowing owl burrow sites. If no burrowing owl sites are present during the mapping procedure, then no further mitigation is required. - If burrowing owl burrows are identified through the preconstruction surveys, protective measures will be required as a CEQA mitigation measure to ensure impacts would be less than significant. These would include such avoidance actions as the following: • If any owls are present in areas scheduled for disturbance or degradation (e.g.,	LTS

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			grading) or within 50 meters (160 feet) of a permanent project feature, and nesting is not occurring, owls are to be passively relocated by a qualified biologist per CDFG-approved relocation as described in the burrowing owl guidelines (CBOC 1993). A time period of at least one week is recommended to allow the owls to move and acclimate to alternate burrows. • If any owls are present within 50 meters (160 feet) of a temporary project disturbance areas (i.e., parking areas) then active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify additional losses from nest abandonment and/or loss of reproductive effort (e.g., killing of young). If additional losses occur then the qualified biologist/monitor has the authority to stop construction and consult with CDFG to determine further mitigation. One-way doors should be left in place 48 hours to insure owls have left the burrow before excavation. • If any owls are nesting in areas scheduled for disturbance or degradation, nest(s) should be avoided from February 1 through August 31 by a minimum of a 75 meter (250-foot) buffer or until fledging has occurred. Following fledging, owls may be passively relocated as described in the burrowing owl guidelines (CBOC 1993).	

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure		Level of Significance After Mitigation
				• Active burrows shall be monitored by a qualified biologist(s)/monitor(s) throughout construction to identify additional losses from nest abandonment. • One alternate natural or artificial burrow should be provided for each burrow that will be excavated in the project impact zone. The project area should be monitored daily for one week to confirm owl use of alternate burrows before excavating burrows in the immediate impact zone. • Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.	
	Wetlands Jurisdictional wetlands have been previously identified within the Project Study Area (PSA); however, these delineations are over five years old and no longer valid. During the field visit conducted on December 10, 2006, features which exhibit wetland characteristics were observed within the PSA (see Figure 3 of the BRA). The PSA may contain jurisdictional wetlands or other waters of the U.S. as defined by Section 404 of the Clean Water Act. Because the wetland areas within the PSA are potentially jurisdictional waters, project activities could possibly be regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the CWA. Therefore, disruption of federally protected wetlands and other waters of	PS	**MM IV.3a** **MM IV.3b**	A wetland delineation shall be conducted and the delineation verified by the USACE to confirm or deny the presence of wetlands or other waters of the U.S. within the PSA before any ground disturbance. If the wetland delineation determines that jurisdictional wetland features are present within the PSA, the Applicant shall apply for a Section 404 permit from the USACE and a Section 401 permit from the Regional Water Quality Control Board. Adherence to the federal and state permitting requirements identified above would ensure that impacts to	LTS

	Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure	Level of Significance After Mitigation
	the U.S. from implementation of the proposed project is considered a significant impact. Even though wetland delineations have previously been conducted, it is recommended that a new wetlands delineation be conducted before any ground disturbance since the verification of those wetlands determinations have expired. A less than significant impact to federally protected wetlands as defined by Section 404 would occur with the implementation of the mitigation below. There is no new information, or change in circumstances since the certification of the 1997 Plan EIR that would result in new significant environmental effects to wetlands. The proposed land uses would have no effect on existing wetlands permits received from natural resource agencies (U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Game).			wetlands and water of the United States would be less than significant.	
	Avian Species Noise and other human activity may also result in nest abandonment if nesting raptors and/or migratory birds are present within 100 feet of the work site for raptors and 50 feet for migratory birds. Suitable raptor nesting habitat occurs in the mature eucalyptus trees adjacent to the PSA along Industrial Boulevard. Construction activities proposed within the PSA could potentially result in significant adverse impacts to raptors and/or migratory birds and therefore is considered a **potentially significant** impact if mortality occurs. The following mitigation is required to reduce impacts to a less than significant level.	PS	**MM IV.4**	If proposed construction activities are planned to occur during the nesting season for avian species (typically March 1 through August 31), the Applicant shall retain a qualified biologist to conduct a focused survey for nesting raptors and migratory birds within 100 feet of the construction area no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys, USFWS and/or CDFG shall be notified regarding the status of the nests. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with USFWS and/or CDFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius around the nest of 100 feet for raptors and 50 feet for migratory birds. No action is necessary if	LTS

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure		Level of Significance After Mitigation
				construction will occur during the non-breeding season (generally September 1 through February 28). Reference to this requirement, the MBTA, and Section 3503.5 of the California Fish and Game Code shall be included in the construction specifications. Such measures will reduce these potential impacts to a less than significant level.	
Cultural Resources					
	Prehistoric or Historic Resources Excluding the Oliver/State Route 92 parcel, according to research conducted by the Northwest Information Center at Sonoma State University, a review of records and literature on file indicates that the Plan area contains no recorded Native American or historic cultural resources listed with the Historic Resources Information System. However, the Northwest Information Center has no record of an archaeological study of the Plan area. Thus, the prospect of buried cultural resources within the project area cannot definitively be ruled out. Potential damage to or disturbance of important archaeological or historical resources, resulting from the proposed project would be considered a significant impact. The following measure would reduce this impact to a less than significant level.	PS	**MM V-1**	If prehistoric or historic cultural resources are inadvertently discovered during any ground-disturbing activities, all work in the area shall stop immediately and the City shall be notified of the discovery. No work shall be done in the area of the find and within 100 feet of the find until a professional archaeologist can determine whether the resource(s) is significant. If necessary, the archaeologist shall develop mitigation measures consistent with the State CEQA Guidelines in consultation with the appropriate state agency and, if applicable, a representative from the Native American Heritage List. A mitigation plan shall be submitted to the City for approval and implementation, which shall ensure such impacts are less than significant. Mitigation in accordance with this plan shall be implemented before any work is done in the area of the resource find. Therefore, impacts to archaeological resources are considered less than significant.	LTS
	Paleontological Resources	PS	**MM V-2**	If fossils or other paleontological resources are encountered, there shall be no further	LS

	Environmental Impact	Level of Significance Before Mitigation		Mitigation Measure	Level of Significance After Mitigation
	Erosion and excavation can expose marine and terrestrial fossils, particularly at outcrops. No outcrops are found on the project site as it is relatively flat and has been previously graded and filled. It is unlikely that fossils would be uncovered during the project development; however, the potential does exist for fossils to be uncovered during any excavation activities.			disturbance of the area surrounding this find until the materials have been evaluated by a qualified paleontologist, and appropriate treatment measures have been identified and implemented.	
	Hazards and Hazardous Materials				
	Brownfield's Site Application According to a review by Northgate Environmental, none of the 38 sites listed on the Cortese List near the project study area are likely to impact soil or groundwater quality at the subject site due to their distance or topographic position relative to the subject site. Therefore, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, a Request for Oversight of a Brownfield's Site Application was required from Standard Pacific prior to the start of construction of the residential homes in the Bridgeport and The Crossings project. An underground storage tank (UST) was located adjacent to a shed located to the south of an unnamed road. The shed was identified by the California Department of Toxic Substances Control (DTSC) as located south of Street "E" on VTM 7065 dated June 1999, which is now Eden Park Place. Soil and groundwater samples collected on the former Eden Shores East site (now Bridgeport and The Crossings) showed no detectable levels of constituents of concern in the soil or groundwater. Since the entire Oliver property was formerly agricultural and subsequently covered with imported fill prior to development, a change in land use to residential would need a similar clearance from DTSC and/or the San Francisco Bay Regional Water Quality Control Board (RWQCB), as was required for the Eden Shores East project. The possibility of soil and groundwater contamination on the Legacy Eden Shores property.	PS	**MM VII-1**	Pursuant to the California Health and Safety Code, Division 20, Chapter 6.8, the project developer shall be required to coordinate with the City of Hayward Fire Department, DTSC and/or RWQCB on the methodology to collect soil and groundwater samples in conjunction with a submission of a Request for Oversight of a Brownfield's Site Application. For the sites to be developed with residential use, DTSC and/or RWQCB shall be required to identify that no further investigation/action is necessary for unrestricted residential use prior to any grading or construction activities occurring on site. Upon receipt of a clearance letter from DTSC and/or RWQCB, that letter shall be forwarded to the Hayward Fire Department Hazardous Materials Program Coordinator for review.	LTS

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Hydrology and Water Quality			
Project Construction Activities During construction period, soils at the project site could be exposed to the erosive forces of wind and storm runoff to a potentially significant degree. Grading activities on the site for foundations, structures and parking lots, could adversely affect downstream water quality through erosion, the transport of sediments and dissolved constituents entering receiving waters (Old Alameda Creek, San Francisco Bay) by increasing turbidity and contaminant load.	PS	The *1997 Plan EIR* previously proposed *Mitigation Measure 3.2.2-2,* which would reduce erosion impacts to a less than significant level. *"Mitigation Measure ~~3.4.4-2~~ 3.2.2-2* *(a) Construction should be scheduled for the dry season.* *(b) The project will be subject to an NPDES permit from the RWQCB. This permit requires that the applicant develop a Storm Water Pollution Prevention Plan. The permit requirements of the Regional Board would be satisfied prior to granting of a building permit by the City of Hayward.* (c) *A soil erosion and sedimentation control plan would be submitted to the City of Hayward by the applicant for individual development sites proposed under the Specific Plan prior to grading. This plan may include, but would not be limited to, the erosion control methods outlined in Mitigation Measure 3.2.1-4 (soil erosion control)."*	LTS
Project Operations The project would connect to the City of Hayward and Alameda County Flood Control storm water system and comply with City standards requiring that all new projects do not result in new or increased flooding impacts on adjoining parcels on upstream and downstream areas. The *1997 Specific Plan EIR* proposed Mitigation Measure 3.2.2-5 to address these impacts. In addition, the proposed project is required to comply with the new San Francisco Bay Area Regional Water Quality Control Board numeric standards for post-construction. The following measure would ensure that	PS	**MM VIII-1** The 1997 Plan EIR proposed Mitigation Measure 3.2.2-1, which would incorporate runoff control design in the drainage collection system for the project. Implementation of this previously proposed mitigation measure would reduce this impact to a less than significant level. Mitigation Measure 3.2.2-1 from	LTS

	Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
	non-point source pollution would not enter the stormwater runoff after construction.		1997 Plan EIR: (a) The project engineer would perform detailed, site-specific hydrologic and hydraulic analyses for the proposed development areas, to validate the drainage calculations for the Specific Plan Area as a whole. The analyses would be in conformance with City of Hayward and ACFCWCD standards for the 100-year storm, would quantify the proposed development area's increased stormwater runoff volumes, and would quantify the effect on the capacity of the existing drainage facilities, including the levees along Old Alameda Creek. (b) The proposed additions to the storm-drainage system would be designed to accommodate the anticipated flows from the Specific Plan Area. The project engineer would include facilities in the storm-drain infrastructure that would avoid increasing the risk of offsite flooding or increasing the area of offsite 100-year floodplains. Such facilities could include detention or storage structures. (c) Facilities to accommodate the additional volume of stormwater	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		runoff would be designed, reviewed, and incorporated into development prior to completion of the permitting process for this project. Specific structural mitigation measures that could be included in the facilities include detention basins, energy reducers, and oversized pipes and catch-basins that could act as temporary storage facilities for stormwater runoff. In addition, the following mitigation is required to comply with new Alameda County C.3 Stormwater Regulations for project operations: At least 85 to 90 percent of annual average stormwater runoff from the site would be treated per the standards in the 2003 California Stormwater Best Management Practice New Development and Redevelopment Handbook. Drainage from all paved surfaces, including streets, parking lots, driveways, and roofs shall be routed either through swales, buffer strips, or sand filters or treated with a filtering system prior to discharge to the storm drain system. Landscaping shall be designed to effect some	

	Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. The specifications of the StormFilter © by Stormwater Management, Inc. adequately meets the requirements of the Regional Water Quality Control Board (RWQCB) for a "box-in-ground" filtering system. A filtering system with similar specifications may be used based on the size of the project site, if landscape-based stormwater treatment measures cannot effect the required level of treatment. Roofs shall be designed with down-spouting into landscaped areas, bubbleups, or trenches. Driveways shall be curbed into landscaping so runoff drains first into the landscaping. Permeable pavers and pavement shall be utilized to construct the development, where appropriate. Any one or combination of these suggested RWQCB treatment measures will potentially meet RWQCB requirements for controlling runoff.	
	Noise			
	Short-term Ambient Noise Activities occurring during the more noise-sensitive evening and nighttime hours may result in increased levels of	PS	**MM XI-1 Short-term Increases in Ambient Noise Levels** Construction noise would be temporary, but the following mitigation measure from the *1997 Specific Plan EIR* would	LTS

	Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
	annoyance and potential sleep disruption to occupants of nearby residential dwellings.		reduce this impact to less than significant: *"Mitigation Measure 3.2.5-1* • *To minimize construction noise impacts upon nearby residents, limit construction hours to between 7:00 AM and 7:00 PM on weekdays. Any work outside of these hours including work on weekends, should require a special permit from the City of Hayward based on compelling reasons and compatibility with nearby residences.* • *Construction equipment should be properly outfitted and maintained with noise reduction devices to minimize construction-generated noise.* • *The contractor shall located stationary noise sources away from residents in developed areas and require use of acoustic shielding with such equipment when feasible and appropriate."* In addition to 1997 EIR *Mitigation Measure 3.2.5-1* the following shall apply during construction activities: • Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer's recommendations, • When not in use, motorized construction equipment shall not be left idling.	
	Long-term Noise – Stationary Sources Depending on the specific activities conducted, hours of operation, and distance to the nearest residential land use,	PS	**MM XI.2 Long-term Increases in Ambient Noise Levels – Stationary Sources**	LTS

	Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
	predicted noise levels could potentially exceed the City's exterior and interior noise standards of 60 dBA and 45 dBA L_{dn}, respectively. As a result, stationary-source noise generated by the proposed commercial land uses would be considered ***potentially significant***.		<u>Proposed Residential Land Uses</u> • Residential dwellings shall be equipped with central heating and air conditioning systems to allow closure of windows during inclement weather conditions. • Exterior air-conditioning units located within 10 feet of adjacent residential dwellings shall be low-noise rated. • Exterior air-conditioning units located within 10 feet of adjacent residential dwellings shall be shielded from direct line-of-sight to adjacent residential dwellings. Shielding may include (but is not limited to) the use of wood fencing, provided no visible air gaps are detectable between individual panels. Use of tongue-and-grove or over-lapping panels is recommended. • Residential dwellings shall be insulated to exceed Title 24 standards. <u>Proposed Commercial Land Uses</u> • Material deliveries, landscape maintenance, waste-collection activities, and the operation of noise-generating stationary equipment, such as solid-waste compactors and compressors (excluding HVAC units), shall be limited to between the hours of 7:00 a.m. and 10:00 p.m. • The City shall require an acoustical assessment to be performed prior to construction of proposed commercial land uses. Where acoustical analysis determines	

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			that stationary source noise levels would exceed applicable City noise standards, the City shall require the implementation of noise attenuation measures sufficient to achieve compliance with City noise standards at nearby noise-sensitive land uses. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, or equipment enclosures. Implementation of these measures would reduce Long-term noise impacts from stationary sources to a less than significant level.	
	Long-term Noise Increases – Traffic In comparison to existing conditions (**Table XI.3**), implementation of the proposed project would result in predicted increases of approximately 1 dBA, or less, along Industrial and Hesperian Boulevards. Predicted increases in traffic noise levels would primarily occur along Eden Shores Boulevard and Marina Drive, which would range from approximately 7 to 9 dBA, respectively. However, assuming a minimum setback of 60 feet from the centerline of the near travel lane, increases in predicted traffic noise levels would not be predicted to exceed the City's "normally acceptable" noise level of 60 dBA L_{dn} at adjacent residential land uses. Current City zoning requirements and Development Guideline standards call for a minimum 50 foot front yard setback, which together with a parking lane would approximate 60 feet. If the final design plans submitted by the applicant request a variation from City standards, or proposed group or private open space areas are within the 50-foot setback, then the applicant would be required to provide a new noise analysis to ensure that the City's "normally acceptable" noise level for residential use is still	PS	**MM XI-3** ~~In the event that the final design plans request a change from the current 50 foot front yard setback requirement, or poroposed group or private open space areas are within the 50 foot setback,~~If future development proposals show residential units or required group or private open space areas are within the 50-foot setback, the developer shall retain a noise consultant to prepare a noise analysis to ensure that residential uses would not be affected by traffic noise levels in excess of 60 dBA L_{dn}. If the City's "normally acceptable" noise level as defined in the Hayward General Plan would be exceeded, then appropriate mitigation must be incorporated to ensure ~~no impact would occur~~ City standards are met. This measure would reduce long-term noise impacts from traffic to a less than significant level.	LTS

	Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
	met. The developer would also be required to provide acceptable mitigation, if necessary, to meet the 60 dBA L_{dn} at adjacent residential land uses.			
	Compatibility of Land Use with Predicted Noise The existing UPRR is currently used for freight transport. The number of trains traveling along the UPRR varies from day to day, but typically averages fewer than 5 trains per day. An analysis of train noise levels was recently completed for the adjacent *Eden Shores East* development project in February 2005. Based on the analysis conducted, the predicted train noise levels measured approximately 74 dBA L_{dn} at 50 feet from the track. Based on this noise level, the predicted traffic noise levels would decrease to approximately 65 dBA L_{dn} at 240 feet from the track and to approximately 60 dBA L_{dn} at approximately 650 feet. Maximum intermittent noise levels associated with the sounding of train horns ranged from 86 to 89 dB at a distance of 160 feet (City of Hayward 2005). Based on these noise levels, predicted train noise levels at proposed residential dwellings located within approximately 650 feet of the UPRR track could exceed the City's "normally acceptable" exterior noise standard of 60 dBA L_{dn}/CNEL, as well as the City's interior noise standard of 50 dBA L_{max}. As a result, exposure to exterior noise levels would be considered ***potentially significant***, subject to mitigation.	PS	**MM XI.4** **Compatibility of Proposed Land Uses with Predicted Noise Environment** Mitigation measures to be implemented will be dependent on site design and structural features/characteristics incorporated in the building design and construction. The City shall require an acoustical assessment to be performed prior to construction of proposed residential land uses to evaluate exposure to train noise. Where acoustical analysis determines that train noise levels would exceed applicable City noise standards, the City shall require the implementation of noise attenuation measures sufficient to achieve compliance with City noise standards at affected residential land uses. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, or equipment enclosures. As an alternative to the preparation of an acoustical assessment to analyze train noise impacts, the following mitigation measures, derived from the recently prepared acoustical assessment prepared for the adjacent *Eden Shores East* development project (City of Hayward 2005), shall be implemented: • All residential dwellings shall be constructed of a 3-coat stucco system. • All potential homebuyer shall be provided a written disclosure statement describing the current train activity and expected noise	LTS

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		levels. • A sound barrier shall be constructed along the northwest boundary of the project site to a minimum height of 18 feet above the elevation of the train track. • Residential dwellings located within approximately 160 feet of the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Both the staggered-stud and resilient channel exterior wall assembly should consist of two layers of gypsum board on the interior side. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-42 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-42 rating or use STC-31 storm doors over standard gasketed entry doors. Exterior doors on non-exposed facades shall achieve a minimum STC-37 rating. • Residential dwellings located between 160 to 240 feet from the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
		rating along facades located within line-of-sight of the UPRR and a minimum STC-40 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-42 rating or use STC-31 storm doors over standard gasketed entry doors. Exterior doors on non-exposed facades shall achieve a minimum STC-34 rating. • Residential dwellings located between 240 to 480 feet from the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-37 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-40 rating. Exterior doors on non-exposed facades shall achieve a minimum STC-32 rating. • Residential dwellings located in excess of 480 feet from the UPRR track shall be constructed with windows that achieve a minimum STC-38 rating along facades located within line-of-sight of the UPRR and a minimum STC-29 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-29 rating.	
Recreation			
Increased Park Use by New Residents Although the project would increase the use of existing	PS	**MM XIV-1** The applicant shall establish a Landscape Lighting and Assessment District (LLD) or other	LTS

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure		Level of Significance After Mitigation
neighborhood and regional parks, or other recreational facilities, it would not result in substantial physical deterioration of the facility or undue acceleration of same. However, HARD has expressed concern that maintenance is needed for the neighborhood serving component of the 25-acre regional park that serves the existing Eden Shores community and would be taxed by the additional 551 potential new residents.			funding mechanism prior to selling the 174 residential units to individual homeowners that would be prorated to the fair share of the project. Implementation of the LLD would provide a portion of funds necessary to maintain the community-oriented facilities in the Sports Park and mitigate the impacts of increased usage of the Sports Park as a neighborhood facility.	
Transportation and Circulation				
Impacts to Level of Service The addition of project-generated trips would cause the intersection of Hesperian Boulevard & Industrial to degrade from LOS D to LOS F during the AM peak hour. Similarly, the intersection of Industrial Boulevard & I-880 NB ramps would degrade from LOS C to LOS F during the PM peak hour. This would be considered a ***potentially significant impact.***	PS	**MM XV-1**	**Hesperian Boulevard & Industrial Boulevard Intersection** To achieve acceptable levels of service under the Project Condition, the intersection requires an additional left-turn lane in the westbound direction. This improvement will convert the Hesperian Blvd. & Industrial Blvd. Intersection to: two left-turn lanes, two through lanes and one exclusive right-turn lane in the westbound direction. Adding a left-turn lane would require modification to the east, west and south legs of the intersection as well as modification to the traffic signal. These improvements can be accommodated within the existing right-of-way. This improvement will mitigate the impacts to LOS E or better for each of the alternatives during the peak hours.	LTS
	PS	**MM XV.2**	**Industrial Boulevard and I-880 NB Ramps Intersection** ~~Each of the three alternatives~~ The project also results in the unsignalized left turn from	LTS

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure		Level of Significance After Mitigation
				Industrial Parkway to the NB I-880 ramps deteriorating to LOS F in the PM peak hour. This impact is significant and is essentially the result of homeward bound business park workers accessing northbound I-880 since the trip distribution assumption for this type of use indicates that 42% of those office workers will use this ramp to return home. The analysis indicates that constructing a left turn only signal on Industrial Parkway will achieve ~~LOS D under Alternative 1 and~~ LOS B under Alternatives 2 ~~and 3~~. Hayward's General Plan circulation Element also identifies the need for an improvement to the Industrial Parkway Interchange to add a northbound I-880 off-ramp, which would include a signal, at this location. Timing of this mitigation should be coordinated with any other improvements at this interchange, and because there is uncertainty in when that might occur, it should also be tied to the amount of development ~~in each alternative~~ at which the intersection would expect to be at LOS E. It would be reasonable to tie this to office development: for Alternative 1 that would be 25%, for Alternative 2 it would be 50% and for Alternative 3 it would be 20%. Coordination will also be needed with Caltrans since, even today, the metering lights at the northbound ramps impact through movements on Industrial.	
		PS	**MM XV-3a**	**Transportation Management Plan:** The project sponsor(s) shall develop and implement a Transportation Management Plan (TMP) to minimize the transportation-related effects to local residents during construction. Key implementation measures of the plan shall	LTS

Environmental Impact		Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
			include: • Coordinate the timing and route selection for movement of heavy equipment and truck traffic on major streets within the project vicinity with the Public Works Department to minimize traffic and physical road impacts. • Coordinate construction activities with City officials to minimize disruption to local traffic.	
		PS	**MM XV-3b** **Transportation Management Plan:** The project sponsor(s) shall develop and implement a Transportation Management Plan (TMP) to be included in the lease agreements to minimize the transportation-related effects to local residents during implementation. Key implementation measures of the plan shall include: • Electrification of loading docks for commercial businesses to limit idling of trucks that produce diesel emissions to reduce particulate matter and NOx to the surrounding residences. • Business Park occupants shall be required to have a Transportation Management Demand Plan that includes one or more of the following: bike lockers, showers, carpool assistance, transit subsidies (e.g., $175 per month). • Larger retail businesses shall be required to offer delivery services to customers within a 3-mile radius.	LTS

3.0 COMMENT LETTERS AND RESPONSES

3.0 COMMENT LETTERS AND RESPONSES

3.1 INTRODUCTION

This section includes a list of commentors, comment letters, and responses to comments on the Draft IS/MND. The Draft IS/MND was released for public and agency review on May 11, 2007, and the 30-day review and comment period extended through June 11, 2007. Responses to comments are limited to explanations, elaborations, or clarifications of data presented in the Draft IS/MND.

TABLE 3-1
LIST OF COMMENTORS

Letter Number	Affiliation	Signature	Date
A	California Public Utilities Commission	Kevin Boles, Environmental Specialist	June 1, 2007
B	California Department of Fish and Game	Charles Armor, Acting Regional Manager	June 5, 2007
C	Alameda County Congestion Management Agency	Saravana Suthanthira	June 8, 2007

Letter A

STATE OF CALIFORNIA — Arnold Schwarzenegger, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

RECEIVED
JUN 05 2007
PLANNING DIVISION

June 1, 2007

David Rizk
City of Hayward
777 B Street, 1st Floor
Hayward, CA 94541

RE: Legacy Eden Shores, SCH# 2007052067

Dear Mr. Rizk:

As the state agency responsible for rail safety within California, we recommend that any development projects planned adjacent to or near the rail corridor in the City be planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings. This includes considering pedestrian circulation patterns/destinations with respect to railroad right-of-way (ROW).

Safety factors to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and appropriate fencing to limit the access of trespassers onto the railroad right-of-way. A-1

Of specific concern is that the installation of continuous vandal-resistant fencing along the entire length of the Union Pacific Railroad ROW should be a requirement of approval to deter trespassing.

The above-mentioned safety improvements should be considered when approval is sought for the new development. Working with Commission staff early in the conceptual design phase will help improve the safety to motorists and pedestrians in the City.

If you have any questions in this matter, please call me at (415) 703-2795.

Very truly yours,

Kevin Boles
Environmental Specialist
Rail Crossings Engineering Section
Consumer Protection and Safety Division

cc: Terrel Anderson, Union Pacific Railroad

3.2 RESPONSES TO COMMENTS

Letter A. California Public Utilities Commission – Kevin Boles, Environmental Specialist

Response A-1

The CPUC recommends that any development projects planned adjacent to or near a rail corridor in the City be planned with the safety of the rail corridor in mind. The comment does not note any significant impact due to the proposed concept plan in the Initial Study; however, Eden Shores Boulevard already provides a grade separation for motorists, pedestrians and bicyclists traveling in the project area in an east-west direction.

State of California – The Resources Agency **Letter B**
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov

POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

ARNOLD SCHWARZENEGGER, Governor

file

RECEIVED
JUN 11 2007
PLANNING DIVISION

June 5, 2007

David Rizk, AICP
Planning Manager
City of Hayward
777 B Street
Hayward, CA 94541-4214

Dear Mr. Rizk:

Subject: Legacy Eden Shores, South of Route 92 Specific Plan Amendment Project Initial Study/Mitigated Negative Declaration, SCH 2007052067, Hayward, Alameda County

The Department of Fish and Game (DFG) personnel have reviewed the South of Route 92 Specific Plan Amendment (Legacy Eden Shores) Project Initial Study/Mitigated Negative Declaration. The site is located west of Hesperian Boulevard and south of Industrial Boulevard in the City of Hayward in Alameda County. The site consists of 56.41 acres of land that have been previously graded for development.

The site provides suitable habitat for burrowing owls, and burrowing owls have been documented near the project area. Timely surveys must be conducted on the site to ensure that there is no take of burrowing owls or their nests. Pre-construction surveys alone are not adequate to assess impacts to burrowing owls. Surveys and mitigation measures, which follow established DFG protocol, should be conducted on-site and within a 250-foot buffer of any proposed project site with potential habitat during the breeding season for burrowing owls. If burrowing owls or their nests will be impacted by the project, mitigation should be provided in consultation with DFG. **B-1**

We appreciate your consideration of our comments. If you have questions regarding our comments, please contact Ms. Marcia Grefsrud, Environmental Scientist, at (707) 944-5559; or Mr. Serge Glushkoff, Acting Habitat Conservation Supervisor, at (707) 944-5597.

Sincerely,

Charles Armor
Acting Regional Manager
Bay Delta Region

cc: State Clearingnouse

Conserving California's Wildlife Since 1870

Letter B. California Department of Fish and Game – Charles Armor, Acting Regional Manager

Response B-1

CDFG notes that the project site provides suitable habitat for burrowing owls, and burrowing owls have previously been documented near the project area. Timely surveys must be conducted on the site to ensure that there is no take of burrowing owls or their nests and pre-construction surveys alone are not adequate to assess impacts to burrowing owls.

The following mitigation measure has been modified to ensure that surveys will follow DFG protocol and will be conducted on-site and within a 250-foot buffer of any proposed project site with potential habitat during the breeding season for burrowing owls.

MM IV-2 The following steps clarify the Mitigation Measure 3.2.3-5 identified in the earlier 1997 Plan EIR.

- A preconstruction survey will be conducted within 30 days prior to the beginning of construction/grading activities of all suitable burrowing owl habitat within the project area and the adjacent 250 foot buffer in accordance with CDFG protocol (Burrowing Owl Consortium 1993). The first step of this protocol is to map potential burrowing owl burrow sites. If no burrowing owl sites are present during the mapping procedure, then no further mitigation is required.

- If burrowing owl burrows are identified through the preconstruction surveys, protective measures will be required as a CEQA mitigation measure to ensure impacts would be less than significant. These would include such avoidance actions as the following:

  - If any owls are present in areas scheduled for disturbance or degradation (e.g., grading) or within 50 meters (160 feet) of a permanent project feature, and nesting is not occurring, owls are to be passively relocated by a qualified biologist per CDFG-approved relocation as described in the burrowing owl guidelines (CBOC 1993). A time period of at least one week is recommended to allow the owls to move and acclimate to alternate burrows.

  - If any owls are present within 50 meters (160 feet) of a temporary project disturbance areas (i.e., parking areas) then active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify additional losses from nest abandonment and/or loss of reproductive effort (e.g., killing of young). If additional losses occur then the qualified biologist/monitor has the authority to stop construction and consult with CDFG to determine further mitigation. One-way doors should be left in place 48 hours to insure owls have left the burrow before excavation.

  - If any owls are nesting in areas scheduled for disturbance or degradation, nest(s) should be avoided from February 1 through August 31 by a minimum of a 75 meter (250-foot) buffer or until

fledging has occurred. Following fledging, owls may be passively relocated as described in the burrowing owl guidelines (CBOC 1993).

- Active burrows shall be monitored by a qualified biologist(s)/monitor(s) throughout construction to identify additional losses from nest abandonment.

- One alternate natural or artificial burrow should be provided for each burrow that will be excavated in the project impact zone. The project area should be monitored daily for one week to confirm owl use of alternate burrows before excavating burrows in the immediate impact zone.

Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

Letter C

ALAMEDA COUNTY
CONGESTION MANAGEMENT AGENCY

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

June 8, 2007

Mr. David Rizk
Planning Manager
City of Hayward
777 B Street,
Hayward, CA 94541

SUBJECT: Comments on the Initial Study/Mitigated Negative Declaration for the South of Route 92 Specific Plan Amendment (Legacy Eden Shores) in the City of Hayward

Dear Mr. Rizk:

Thank you for the opportunity to comment on the Initial Study/Mitigated Negative Declaration for the South of Route 92 Specific Plan Amendment (Legacy Eden Shores) in the City of Hayward. The project site, approximately 60 acres, is generally located west of Hesperian Boulevard and east of Marina Drive, between Industrial Boulevard and Eden Park Place. The project includes a General Plan Amendment to change the land use designation for portions of the area from Industrial Corridor (36.4 acres) to Medium Density Residential (14.6 acres) and Retail and Office Commercial (21.8 acres); to change the zoning for portions of the area from BP-Business Park (33.4 acres) and CR-Commercial Retail (3.0 acres) to RM-Residential Medium Density (15.5 acres); and to make related changes in the Specific Plan. C-1

The Traffic Impact Analysis report prepared by DKS Associates for this project analyzed the existing conditions under Alternative-1 and the proposed project under Alternative-2. Based on the review of the Initial Study/Mitigated Negative Declaration and the Traffic Impact Analysis, the proposed project, analyzed as Alternative-2, appears to generate equal or less p.m. peak hour trips compared with the existing General Plan land use (Alternative-1). Since the Land Use Analysis Program compliance is required only if a project generates 100 or more p.m. peak hour trips *above the existing* conditions, this project is therefore exempt from the Land Use Analysis Program of the CMP.

Once again, thank you for the opportunity to comment on this Initial Study/Mitigated Negative Declaration. Please do not hesitate to contact me at 510/836-2560 ext. 24 if you require any additional information.

Sincerely,

Saravana Suthanthira
Senior Transportation Planner

file: CMP - Environmental Review Opinions - Responses - 2007

Letter C. Alameda County Congestion Management Agency – Saravana Suthanthira, Senior Transportation Planner

Response C-1

ACCMA notes that the proposed project analyzed in this Initial Study, analyzed as Alternative 2 in the Traffic Impact Analysis prepared by DKS Associates, Inc. (DKS 2007), appears to generate equal or less p.m. peak hour trips compared with the existing General Plan land use (City of Hayward 2002). Since the Land Use Analysis Program compliance is required only if a project generates 100 or more p.m. peak hour trips *above the existing* conditions, the project is exempt from the Land Use Analysis Program of the CMP.

Letter D

34009 ALVARADO-NILES ROAD
UNION CITY, CALIFORNIA 94587
(510) 471-3232

June 12, 2007

Mr. David Rizk
Planning Manager
City of Hayward
City Hall
777 B Street
Hayward, CA 94541

Re: South of Route 92 Specific Plan Amendment Environmental Analysis and Staff Recommendations

Dear Mr. Rizk:

This letter is to request that the City of Hayward complete an EIR on the proposed Route 92 Specific Plan Amendment due to significant traffic impacts that are not clearly mitigated as identified in the Mitigated Negative Declaration (MND) and the Mitigation Monitoring and Reporting Program (MMPR). Additionally, the staff report and the Mitigation Monitoring and Reporting Program (MMPR) were received on June 11, the day the public review period for the MND ended. **D-1**

There are two traffic mitigation measures in the MND and the MMRP (MM XV-1 and MM XV-2) that are required in order to reach a less than significant standard. The mitigations call for intersection improvements at Hesperian Boulevard and Industrial Boulevard, and the addition of a new, northbound off-ramp on I-880 at Industrial Boulevard to fully mitigate impacts. Yet these mitigation measures do not identify who will implement the required improvements, when the improvements will be made, or, in the case of improvements to I-880, if the improvements are feasible. Further, the MND recommends that the land use programs (office development) be reduced until a northbound I-880 off-ramp is provided (MM XV-2); yet there is no discussion of how the build out of the land use program will be monitored (and "reduced" if circumstances warrant). CEQA requires that mitigation measures be capable of being accomplished in a successful manner within a reasonable period of time. **D-2**

The staff report findings state that the CEQA document is adequate for the Specific Plan Amendment, and all other proposed and related amendments; however, as previously stated the MND and the MMPR fail to identify how the mitigations are feasible or how the land use will be monitored to limit traffic impacts. In effect, the finding that the MND is adequate cannot be made because the mitigations may not be feasible based upon the documentation provided. **D-3**

Letter D continued

Hence, the proposed project could have a significant impact on the environment and an EIR may be required. **D-3 cont.**

The inclusion of mitigation measures that are likely unattainable for this proposed project (addition of a northbound I-880 off-ramp), and the lack of specificity in how the traffic mitigations will be achieved or how the land use will be monitored, raise solid concerns that the environmental analysis is not adequate with regards to traffic impacts. As a result of the lack of adequate mitigations, Union City is concerned that the impacts to Whipple Road and Union City Boulevard have not be adequately or accurately analyzed. We, therefore, believe that this project, as currently proposed, may have significant unavoidable impacts on our roadways. **D-4**

Again, we respectfully request that the City of Hayward continue this application until an adequate environmental document can be prepared.

Very Truly Yours,

Joan Malloy
Planning Manager
City of Union City

Cc: Mayor Mark Green
Vice Mayor Jim Navarro
Councilmember Richard Valle
Councilmember Carol Dutra-Vernaci
Councilmember Manny Fernandez
Larry Cheeves, City Manager
Mark Leonard, Economic and Community Development Director

Letter D. City of Union City – Joan Malloy, Planning Manager

Response D-1

Response D-2

Response D-3

Response D-4

4.0 Minor Changes and Edits to the Draft IS/MND

4.0 MINOR CHANGES AND EDITS TO THE DRAFT IS/MND

The following changes and edits to the Draft IS/MND have been made as a result of comments received during the 30-day public and agency period. The following changes and edits are noted by the location where they would appear within the Draft IS/MND, and are hereby incorporated.

AIR QUALITY

Based on a discussion with Greg Tholen, CEQA Specialist for the Bay Area Air Quality Management District, an additional mitigation measure was added to the Traffic section of the IS/MND to address potential impacts to operational air emissions. These additional measures would, in addition to the project concept as a mixture of uses, serve to reduce the potential impacts to less than significant.

MM XV-3b **Transportation Management Plan:** The project sponsor(s) shall develop and implement a Transportation Management Plan (TMP) to be included in the lease agreements to minimize the transportation-related effects to local residents during implementation. Key implementation measures of the plan shall include:

- Electrification of loading docks for commercial businesses to limit idling of trucks that produce diesel emissions to reduce particulate matter and NOx to the surrounding residences.
- Business Park occupants shall be required to have a Transportation Management Demand Plan that includes one or more of the following: bike lockers, showers, carpool assistance, transit subsidies (e.g., $175 per month).

BIOLOGICAL RESOURCES

IS/MND, page 42, the following text change is made:

Less than Significant with Mitigation Incorporated. The entire project site is rough graded and disturbed with the exception of the 0.67 acres currently owned by the City of Hayward. ~~The sparse vegetation cover consists primarily of upland plant species. Low, topographic spots on the site, areas cleared of covering vegetation, pond after winter rains but these areas lack the defining characteristics of wetlands.~~ Several wetland delineations have been conducted within the project vicinity; however, they are all over five years old and thus no longer considered valid delineations. These delineations are available for review from the Army Corps of Engineers. Relevant reports include the following:

- July 31, 2000 Oliver East property wetland determination (LSA 2002)
- Addendum to Section 10 Rivers and Harbors Act of 1899 and Section 404 Clean Water Act Delineation Report for the Oliver Properties (East and West) and the adjacent parcel owned by the City of Hayward (EIP 1999).

Although wetlands were previously identified within the PSA as noted in the documents described above, the verification of these wetland delineations has expired since it has been more than five years since the last wetland determination.

During a recent site visit, three potential wetland areas were observed within the PSA. One is in a fenced off area in the far west portion of the PSA (Section A). This wetland contained hydrophytic (water-loving) vegetation such as giant European reed (*Arundo donax*). Outside and to the south of the fenced area, there is a low area that may be considered to be a wetland that seemed to flow into the fenced off wetland.

Another potential wetland area is located in a low area adjacent to the landscaped border to the southwest of the intersection at Eden Shores Boulevard and Hesperian Boulevard. This wetland area contains hydrophytic vegetation such as cattails (*Typha latifolia*), annual beard grass (*Polypogon monospeliensis*), curly dock (*Rumex crispus*), tall nutsedge (*Cyperus eragrostis*), and hyssop loosestrife (*Lythrum hyssopifolium*). There are several other low areas or depressions within the PSA that may also be considered wetlands.

Wetland areas provide foraging habitat for herons, egrets, and other wading birds and shorebirds. Species observed within and around these wetland areas include bullfrog (*Rana catesbeiana*) and black phoebe (*Sayornis nigricans*). California gulls (*Larus californicus*), a great egret (*Ardea alba*) and unidentified ducks were also observed flying overhead, probably because there are several wetland areas to the west of the PSA.

GEOLOGY AND SOILS

IS/MND, page 51, the following text change is made:

The State of California ~~currently is planning to map~~ has mapped the distribution of liquefaction hazard within the Hayward area as part of CDMG's ongoing efforts to implement the statewide Seismic Hazards Mapping Act.

TRANSPORTATION/TRAFFIC

IS/MND, page 89, the following text changes are made:

a) ***Less than Significant.*** The project site is located at the southwestern portion of the intersection of Industrial Boulevard and Hesperian Boulevard. In the *1997 Plan EIR* the 2010 Level of Service for this intersection was forecast at "F" for this intersection. The intersection at Industrial and Hesperian Blvd. operated at LOS E in 2001 according to the *Hayward General Plan* (City of Hayward, 2002). The deterioration in level of service is based on project local growth as well as regional growth according the General Plan EIR (Hayward 2001). The General Plan Update includes comprehensive policies and strategies that address regional and local traffic through a coordinated effort to provide roadway improvements, transit service, encourage bicycling and walking, carpooling, traffic calming (speed humps, barriers, etc.) and land use strategies to reduce private auto use. The Trip Generation Analysis for the ~~Alternative 2 (~~Legacy Eden Shores project~~)~~ determined that the proposed project would generate 22,499 daily new trips, including 1,281 AM peak hour trips (945 in, 335 out) and 1,919 PM peak hour trips (711 in, 1,208 out).[1] This estimate is conservative, as no internal trip capture was considered for the proposed project. This would be a net decrease of 449 trips in the PM peak hour, as compared to the trip generation projected for Alternative 1 in the Traffic Impact Analysis, which is based on uses allowed by the current land use designation and zoning in the 1997 Specific Plan and amended in 2005. When accounting for the change in methodology in calculating the trip generation for office uses

[1] Trip rates are from Trip Generation, Institute of Transportation Engineers, Seventh Edition, 2003.

in 2007 versus that used in the 1997 Specific Plan EIR, and as amended in the 2005 Specific Plan Mitigated Negative Declaration, (square feet vs. acres), the trip generation is comparable. Since there would be a net decrease in PM peak hour trips for the Legacy Eden Shores project ~~Alternative 2 as compared to Alternative 1~~, the project impact is less than significant.

IS/MND, page 90, the following text changes are made:

b) ***Less than Significant with Mitigation Incorporated.*** According to the City of Hayward intersection level of service standards, all study intersections would continue to operate at acceptable levels of service for the project condition, with the exception of the intersection of Hesperian Boulevard & Industrial Boulevard and the intersection of Industrial Boulevard & I-880 NB ramps.

Intersection operational levels of service along with their associated critical and average delays are summarized in **Table XV.2.** Detailed level of service analysis sheets for the project condition, are included in ~~Appendix C~~ the appendix to the DKS Traffic report**.**

The addition of project-generated trips would cause the intersection of Hesperian Boulevard & Industrial to degrade from LOS D to LOS F during the AM peak hour. Similarly, the intersection of Industrial Boulevard & I-880 NB ramps would degrade from LOS C to LOS F during the PM peak hour. This would be considered a ***potentially significant impact.***

The following mitigation measures would reduce the impacts at both intersections to LOS E. or better Appendix F in the DKS report includes the mitigation layout at the intersection of Hesperian Blvd. & Industrial Blvd.

5.0 MITIGATION MONITORING AND REPORTING PROCESS

5.0 MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to "adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." A MMRP is required for the proposed project because IS/MND has identified significant adverse impacts, and measures have been identified to mitigate those impacts.

TABLE 4-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
Air Quality				
M III-1	Dust emissions from construction-related activities can be greatly reduced by implementing control measures. The BAAQMD has developed feasible control measures for construction emissions of PM_{10}. With these measures implemented the impacts are expected to be reduced to a less than significant level. The following measures, pertinent to Mitigation Measure 3.2.4-1 of the 1997 Plan EIR, shall be incorporated into all construction contract documents and implemented: Basic Control Measures (all construction sites) • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e. the minimum required space between the top of the load and the top of the trailer). • Pave, apply water three times daily, or apply (non-stick) soil stabilizers on all unpaved access roads, parking areas and staging areas. • Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. Coordinate streets to be swept with the City Engineer. Enhanced Control Measures (sites greater than four acres) • All "Basic" control measures listed above. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).	During all grading and construction phases of the project by construction contractor During all grading and construction phases of the project (greater than four acres) by construction	City of Hayward Public Works Department City of Hayward Public Works Department	

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	• Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.) • Limit traffic speeds on unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. Optional Control Measures (large construction sites, located near sensitive receptors that may warrant additional emissions reductions) • Install wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. • Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction area if conditions warrant. • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. • Limit the area subject to excavation, grading and other construction activity at any one time. The following is in addition to the measures recommended by BAAQMD: Post a publicly visible sign with the telephone number and person to contact regarding dust complaints at the construction sites. This person shall respond and take corrective action with 24 hours. The telephone number of the AQMD shall also be visible to ensure compliance with BAAQMD Rule 2: Hazardous Materials; Asbestos Demolition, Renovation and Manufacturing.	contractor During all grading and construction phases of the project located near sensitive receptors and/or residences	City of Hayward Public Works Department	
Biological Resources				
MM IV-1a	A focused pre-construction survey for special-status plant species with moderate to high potential to occur within the PSA shall be conducted within the species blooming period, prior to the start	Prior to any grading and construction phases of the project by the construction	City of Hayward Planning Division and Public Works Department, CDFG and/or	

	Mitigation Measure	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	of construction activities. If no species are found then the project will not have any impacts to the species and no additional mitigation measures are necessary.	contractor	USFWS	
MM IV-1b	If special-status plant species are found within the PSA, then the project applicant shall consult with the appropriate agency (CDFG and/or USFWS) on the mitigation to reduce impacts to a less than significant level, including but not limited to fencing off the area where this species is found and posting of signs to publicize the sensitive nature of the area. The protective fencing would be required to ensure that the plant or plants are not destroyed, crushed or damaged during construction. Other mitigation will likely include avoidance and minimization measures to apply to both the construction and post-construction phases of the project.			
MM IV-2	The following steps clarify the Mitigation Measure 3.2.3-5 identified in the earlier 1997 Plan EIR. - A preconstruction survey following CDFG-established survey protocols will be conducted within 30 days prior to the beginning of construction/grading activities. - If burrowing owl burrows are identified through the preconstruction surveys, protective measures will be required as a CEQA mitigation measure to ensure impacts would be less than significant. These would include such avoidance actions as the following: • If any owls are present in areas scheduled for disturbance or degradation (e.g., grading) or within 50 meters (160 feet) of a permanent project feature, and nesting is not occurring, owls are to be passively relocated by a qualified biologist per CDFG-approved relocation as described in the burrowing owl guidelines (CBOC 1993). A time period of at least one week is recommended to allow the owls to move and acclimate to alternate burrows.	During all grading and construction phases of the project by the construction contractor	City of Hayward Planning Division and Public Works Department	

	Mitigation Measure	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	• If any owls are present within 50 meters (160 feet) of a temporary project disturbance areas (i.e., parking areas) then active burrows shall be protected with fencing/cones/flagging and monitored by a qualified biologist throughout construction to identify additional losses from nest abandonment and/or loss of reproductive effort (e.g., killing of young). If additional losses occur then the qualified biologist/monitor has the authority to stop construction and consult with CDFG to determine further mitigation. One-way doors should be left in place 48 hours to insure owls have left the burrow before excavation. • If any owls are nesting in areas scheduled for disturbance or degradation, nest(s) should be avoided from February 1 through August 31 by a minimum of a 75 meter (250-foot) buffer or until fledging has occurred. Following fledging, owls may be passively relocated as described in the burrowing owl guidelines (CBOC 1993). • Active burrows shall be monitored by a qualified biologist(s)/monitor(s) throughout construction to identify additional losses from nest abandonment. • One alternate natural or artificial burrow should be provided for each burrow that will be excavated in the project impact zone. The project area should be monitored daily for one week to confirm owl use of alternate burrows before excavating burrows in the immediate impact zone. • Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.			
MM IV-3a **MM IV-3b**	A wetland delineation shall be conducted and the delineation verified by the USACE to confirm or deny the presence of wetlands or other waters of the U.S. within the PSA before any ground disturbance. If the wetland delineation determines that jurisdictional wetlands	Prior to any grading and construction phases of the project by the construction contractor	City of Hayward Planning Division, US Army Corps of Engineers City of Hayward Planning	

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	features are present within the PSA, the Applicant shall apply for a Section 404 permit from the USACE and a Section 401 permit from the Regional Water Quality Control Board. Adherence to the federal and state permitting requirements identified above would ensure that impacts to wetlands and waters of the United States would be less than significant.		Division, US Army Corps of Engineers and Regional Water Quality Control Board	
MM IV-4	If proposed construction activities are planned to occur during the nesting season for avian species (typically March 1 through August 31), the Applicant shall retain a qualified biologist to conduct a focused survey for nesting raptors and migratory birds within 100 feet of the construction area no more than 30 days prior to ground disturbance or tree removal. If active nests are located during preconstruction surveys, USFWS and/or CDFG shall be notified regarding the status of the nests. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a biologist deems disturbance potential to be minimal (in consultation with USFWS and/or CDFG). Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius around the nest of 100 feet for raptors and 50 feet for migratory birds. No action is necessary if construction will occur during the non-breeding season (generally September 1 through February 28). Reference to this requirement, the MBTA, and Section 3503.5 of the California Fish and Game Code shall be included in the construction specifications. Such measures will reduce such potential impacts to levels of insignificance.	Prior to any grading and construction phases of the project by the construction contractor	City of Hayward Planning Division	
Cultural Resources				
MM V-1	If prehistoric or historic cultural resources are inadvertently discovered during any ground-disturbing activities, all work in the area shall stop immediately and the City shall be notified of the discovery. No work shall be done in the area of the find and within 100 feet of the find until a professional archaeologist can determine whether the resource(s) is significant. If necessary, the archaeologist shall develop mitigation measures consistent with the State CEQA Guidelines in consultation with the appropriate	During all grading and construction phases of the project by construction contractor	City of Hayward Planning Division	

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	state agency and, if applicable, a representative from the Native American Heritage List. A mitigation plan shall be submitted to the City for approval and implementation, which shall ensure such impacts are less than significant. Mitigation in accordance with this plan shall be implemented before any work is done in the area of the resource find. Therefore, impacts to archeological resources are considered less than significant.			
MM V-2	If fossils or other paleontological resources are encountered, there shall be no further disturbance of the area surrounding this find until the materials have been evaluated by a qualified paleontologist, and appropriate treatment measures have been identified and implemented.	During all grading and construction phases of the project by construction contractor	City of Hayward Planning Division	
Hazards and Hazardous Material				
MM VII-1	Pursuant to the California Health and Safety Code, Division 20, Chapter 6.8, the project developer shall be required to coordinate with the City of Hayward Fire Department, DTSC and/or RWQCB on the methodology to collect soil and groundwater samples in conjunction with a submission of a Request for Oversight of a Brownfields Site Application. For the sites to be developed with residential use, DTSC and/or RWQCB shall be required to identify that no further investigation/action is necessary for unrestricted residential use prior to any grading or construction activities occurring on site. Upon receipt of a clearance letter from DTSC and/or RWQCB, that letter shall be forwarded to the Hayward Fire Department Hazardous Materials Program Coordinator for review.	Prior to start of grading and construction activities	City of Hayward Fire Department, California Department of Toxic Substances Control, San Francisco Bay Regional Water Quality Control Board	
Hydrology and Water Quality				
	For construction activities, the 1997 Plan EIR previously proposed *Mitigation Measure 3.2.2-2,* which would reduce erosion impacts to a less than significant level. Mitigation Measure 3.2.2-2 from 1997 Plan EIR:	During all grading and construction phases of the project by the construction contractor	City of Hayward Public Works Department	

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	(a) Construction should be scheduled for the dry season. (b) The project will be subject to an NPDES permit from the RWQCB. This permit requires that the applicant develop a Storm Water Pollution Prevention Plan. The permit requirements of the Regional Board would be satisfied prior to granting of a building permit by the City of Hayward. (c) A soil erosion and sedimentation control plan would be submitted to the City of Hayward by the applicant for individual development sites proposed under the Specific Plan prior to grading. This plan may include, but would not be limited to, the erosion control methods outlined in Mitigation Measure 3.2.1-4 (soil erosion control)."			
MM VIII-1	The 1997 Plan EIR proposed Mitigation Measure 3.2.2-1, which would incorporate runoff control design in the drainage collection system for the project. Implementation of this previously proposed mitigation measure would reduce this impact to a less than significant level. <u>Mitigation Measure 3.2.2-1 from 1997 Plan EIR:</u> (a) The project engineer would perform detailed, site-specific hydrologic and hydraulic analyses for the proposed development areas, to validate the drainage calculations for the Specific Plan Area as a whole. The analyses would be in conformance with City of Hayward and ACFCWCD standards for the 100-year storm, would quantify the proposed development area's increased stormwater runoff volumes, and would quantify the effect on the capacity of the existing drainage facilities, including the levees along Old Alameda Creek. (b) The proposed additions to the storm-drainage system would be designed to accommodate the anticipated flows from the Specific Plan Area. The project engineer would include facilities in the storm-drain infrastructure that would avoid	Prior to project construction and operations	City of Hayward Public Works Department	

Mitigation Measure	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
increasing the risk of offsite flooding or increasing the area of offsite 100-year floodplains. Such facilities could include detention or storage structures. (c) Facilities to accommodate the additional volume of stormwater runoff would be designed, reviewed, and incorporated into development prior to completion of the permitting process for this project. Specific structural mitigation measures that could be included in the facilities include detention basins, energy reducers, and oversized pipes and catch-basins that could act as temporary storage facilities for stormwater runoff. In addition, the following mitigation is required to comply with new Alameda *County* C.3 Stormwater Regulations for project operations: At least 85 to 90 percent of annual average stormwater runoff from the site would be treated per the standards in the 2003 California Stormwater Best Management Practice New Development and Redevelopment Handbook. Drainage from all paved surfaces, including streets, parking lots, driveways, and roofs shall be routed either through swales, buffer strips, or sand filters or treated with a filtering system prior to discharge to the storm drain system. Landscaping shall be designed to effect some treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. The specifications of the StormFilter © by Stormwater Management, Inc. adequately meets the requirements of the Regional Water Quality Control Board (RWQCB) for a "box-in-ground" filtering system. A filtering system with similar specifications may be used based on the size of the project site, if landscape-based stormwater treatment measures cannot effect the required level of treatment. Roofs shall be designed with down-spouting into landscaped areas, bubbleups, or trenches. Driveways shall be curbed into landscaping so runoff drains first into the landscaping. Permeable pavers and pavement shall be utilized to construct the development, where appropriate. Any one or	Prior to project operations by construction contractor	City of Hayward Public Works Department	

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	combination of these suggested RWQCB treatment measures will potentially meet RWQCB requirements for controlling runoff.			
Noise – Short-term Increases in Ambient Noise Levels				
MM XI-1	In accordance with 1997 Plan EIR *Mitigation Measure 3.2.5-1* the following shall apply during construction activities: • *To minimize construction noise impacts upon nearby residents, limit construction hours to between 7:00 AM and 7:00 PM on weekdays. Any work outside of these hours including work on weekends, should require a special permit from the City of Hayward based on compelling reasons and compatibility with nearby residences.* • *Construction equipment shall be properly maintained with noise-reduction devices to minimize construction-generated noise.* • *The contractor shall locate stationary noise sources away from residents in developed areas and require the use of acoustic shielding with such equipment when feasible and appropriate.* In addition, the following would serve to clarify Mitigation Measure 3.2.5-1 and shall apply during construction activities: • Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer's recommendations. • When not in use, motorized construction equipment shall not be left idling. Implementation of Mitigation Measure MM XI-1 will reduce the project's construction noise impacts to less than significant levels.	During all grading and construction phases of the project by the construction contractor	City of Hayward Planning Division and Public Works Department	
Noise – Long-term Increases in Ambient Noise Levels – Stationary Sources				

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
MM XI-2	Proposed Residential Land Uses • Residential Dwellings shall be equipped with central heating and air conditioning systems to allow closure of window during inclement weather conditions. • Exterior air-conditioning units located within 10 feet of adjacent residential dwellings shall be low-noise rated. • Exterior air-conditioning units located within 10 feet of adjacent residential dwellings shall be shielded from direct line-of-sight to adjacent residential dwellings. Shielding may include (but is not limited to) the use of wood fencing, provided no visible air gaps are detectable between individual panels. Use of tongue-and-grove or over-lapping panels is recommended. • Residential dwellings shall be insulated to exceed Title 24 standards. Proposed Commercial Land Uses • Material deliveries, landscape maintenance, waste-collection activities, and the operation of noise-generating stationary equipment, such as solid-waste compactors and compressors (excluding HVAC units), shall be limited to between the hours of 7:00 a.m. and 10:00 p.m. • The City shall require an acoustical assessment to be performed prior to construction of proposed commercial land uses. Where acoustical analysis determines that stationary source noise levels would exceed applicable City noise standards, the City shall require the implementation of noise attenuation measures sufficient to achieve compliance with City noise standards at nearby noise-sensitive land uses. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, or equipment enclosures. Implementation of these measures would reduce Long-term noise	Prior to approval of Tentative Map or Site Plan Review application	City of Hayward Planning Division	

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	impacts from stationary sources to a less than significant level.			
Noise – Long-term Increases in Ambient Noise Levels - Traffic				
MM XI-3	~~In the event that the final design plans request a change from the current 50-foot front yard setback requirement, or poroposed group or private open space areas are within the 50-foot setback,~~If future development proposals show residential units or required group or private open space areas are within the 50-foot setback, the developer shall retain a noise consultant to prepare a noise analysis to ensure that residential uses would not be affected by traffic noise levels in excess of 60 dBA L_{dn}. If the City's "normally acceptable" noise level as defined in the Hayward General Plan would be exceeded, then appropriate mitigation must be incorporated to ensure ~~no impact would occur~~City standards are met. This measure would reduce long-term noise impacts from traffic to a less than significant level.	Prior to approval of Tentative Map or Site Plan Review application	City of Hayward Planning Division	
Noise – Compatibility of Proposed Land Uses with Predicted Noise Environment				
MM XI-4	Mitigation measures to be implemented will be dependent on site design and structural features/characteristics incorporated in the building design and construction. The City shall require an acoustical assessment to be performed prior to construction of proposed residential land uses to evaluate exposure to train noise. Where acoustical analysis determines that train noise levels would exceed applicable City noise standards, the City shall require the implementation of noise attenuation measures sufficient to achieve compliance with City noise standards at affected residential land uses. Such measure may include, but are not limited to, the incorporation of setbacks, sound barriers, berms, or equipment enclosures. As an alternative to the preparation of an acoustical assessment to analyze train noise impacts, the following mitigation measures, derived from the recently prepared acoustical assessment prepared for the adjacent *Eden Shores East* development project (City of Hayward 2005), shall be implemented:	Prior to approval of Tentative Map or Site Plan Review application	City of Hayward Planning Division	

Mitigation Measure	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
• All residential dwellings shall be constructed of a 3-coat stucco system. • All potential homebuyers shall be provided with a written disclosure statement describing the current train activity and expected noise levels. • A sound barrier shall be constructed along the northwest boundary of the project site to a minimum height of 18 feet above the elevation of the train track. • Residential dwellings located within approximately 160 feet of the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Both the staggered-stud and resilient channel exterior wall assembly should consist of two layers of gypsum board on the interior side. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-42 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-42 rating or use STC-31 storm doors over standard gasketed entry doors. Exterior doors on non-exposed facades shall achieve a minimum STC-37 rating. • Residential dwellings located between 160 to 240 feet from the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-40 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-42 rating or use STC-31 storm doors over standard gasketed entry doors. Exterior doors on non-exposed facades shall achieve a minimum STC-34 rating.			

	Mitigation Measure	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	• Residential dwellings located between 240 to 480 feet from the UPRR track shall be constructed with a staggered-stud or resilient channel wall assembly along building facades located within line-of-sight of the track. Facades facing away from the UPRR may be constructed without the staggered-stud or resilient channel wall assembly. Windows shall achieve a minimum STC-45 rating along facades located within line-of-sight of the UPRR and a minimum STC-37 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-40 rating. Exterior doors on non-exposed facades shall achieve a minimum STC-32 rating. Residential dwellings located in excess of 480 feet from the UPRR track shall be constructed with windows that achieve a minimum STC-38 rating along facades located within line-of-sight of the UPRR and a minimum STC-29 rating on non-exposed facades. Exterior doors on exposed facades shall achieve a minimum STC-29 rating.			
Recreation				
MM IV-1	The applicant shall establish a Landscape Lighting and Assessment District (LLD) or other funding mechanism prior to selling the 174 residential units to individual homeowners that would be prorated to the fair share of the project. Implementation of the LLD would provide a portion of funds necessary to maintain the community-oriented facilities in the Sports Park and mitigate the impacts of increased usage of the Sports Park as a neighborhood facility.	Prior to the sale of the residential lots	City of Hayward Planning Division	
Transportation/Traffic – Hesperian Boulevard and Industrial Boulevard Intersection				
MM XV-1	To achieve acceptable levels of service under the Project Condition, the Hesperian Blvd. & Industrial Blvd. intersection requires an additional left-turn lane in the westbound direction. This improvement will convert the Hesperian Blvd. & Industrial Blvd. Intersection to: two left-turn lanes, two through lanes and one exclusive right-turn lane in the westbound direction. Adding a left-turn lane would require modification to the east, west and south legs of the intersection as well as modification to the traffic signal. These improvements can be accommodated within the	Prior to development of 50% of the proposed office space	City of Hayward Public Works Department	

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
	existing right-of-way. This improvement will mitigate the impacts to LOS E or better for ~~each of the alternatives~~ the project during the peak hours.			
Transportation/Traffic – Industrial Boulevard and I-880 NB Ramps Intersection				
MM XV-2	~~Each of the three alternatives~~ The project also results in the unsignalized left turn from Industrial Parkway to the NB I-880 ramps deteriorating to LOS F in the PM peak hour. This impact is significant and is essentially the result of homeward bound business park workers accessing northbound I-880 since the trip distribution assumption for this type of use indicates that 42% of those office workers will use this ramp to return home. The analysis indicates that constructing a left turn only signal on Industrial Parkway will achieve ~~LOS D under Alternative 1 and~~ LOS B under Alternatives 2 ~~and 3~~. Hayward's General Plan circulation Element also identifies the need for an improvement to the Industrial Parkway Interchange to add a northbound I-880 off-ramp, which would include a signal, at this location. Timing of this mitigation should be coordinated with any other improvements at this interchange, and because there is uncertainty in when that might occur, it should also be tied to the amount of development ~~in each alternative~~ at which the intersection would expect to be at LOS E. Coordination will also be needed with Caltrans since, even today, the metering lights at the northbound ramps impact through movements on Industrial.	Prior to development of 50% of the proposed office space	City of Hayward Public Works Department and Caltrans	
MM XV-3a	**Transportation Management Plan:** The project sponsor(s) shall develop and implement a Transportation Management Plan (TMP) to minimize the transportation-related effects to local residents during construction. Key implementation measures of the plan shall include: • Coordinate the timing and route selection for movement of heavy equipment and truck traffic on major streets within the project vicinity with the Public Works Department to minimize traffic and physical road impacts. • Coordinate construction activities with City officials to minimize disruption to local traffic.	Prior to and during construction and grading activities	City of Hayward Public Works Department, Hayward Police Department, Caltrans	

Mitigation Measure		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and initials)
MM XV-3b	**Transportation Management Plan:** The project sponsor(s) shall develop and implement a Transportation Management Plan (TMP) to be included in the lease agreements to minimize the transportation-related effects to local residents during implementation. Key implementation measures of the plan shall include: • Electrification of loading docks for commercial businesses to limit idling of trucks that produce diesel emissions to reduce particulate matter and NOx to the surrounding residences. • Business Park occupants shall be required to have a Transportation Management Demand Plan that includes one or more of the following: bike lockers, showers, carpool assistance, transit subsidies (e.g., $175 per month). • Larger retail businesses shall be required to offer delivery services to customers within a 3-mile radius.	Prior to occupancy of business and commercial firms	City of Hayward Planning Division	

6.0 REPORT PREPARATION AND CONSULTATIONS

6.1 REPORT PREPARATION

PMC—ENVIRONMENTAL IMPACT ANALYSIS

Janet Palma, AICP	Project Manager
Joyce Hunting	Director of Biological Services
Angela Calderaro	Biologist

DKS ASSOCIATES—TRAFFIC ANALYSIS

Mark Spencer, P.E.	Principal

AMBIENT AIR QUALITY AND NOISE CONSULTING-AIR AND NOISE ANALYSIS

Kurt Legleiter	Principal

6.2 PERSONS AND AGENCIES CONSULTED

Alex Ameri, Deputy Director of Public Works/City Engineer, City of Hayward

Bob Bauman, Director of Public Works, City of Hayward

Gary Calame, Senior Planner, City of Hayward

Roxy Carmichael-Hart, Interim Transportation Manager, City of Hayward

David Rizk, AICP, Planning Manager, City of Hayward

Greg Tholen, Bay Area Air Quality Management District

6.3 REFERENCES

BAAQMD CEQA Guidelines, December 1999.

California Department of Fish and Game, The California Burrowing Owl Consortium. Burrowing Owl Survey Protocol and Mitigation Guidelines. April 1993.

City of Hayward General Plan, 2002

City of Hayward General Plan DEIR, November 2001.

City of Hayward South of Route 92 Specific Plan DEIR. October 1997.

DKS Associates, Inc. South of Route 92 Specific Plan Amendment, Traffic Impact Analysis. May 2007.

INTRODUCTION

A Draft Initial Study and Mitigated Negative Declaration (IS/MND) for the South of Route 92 Specific Plan Amendment project was prepared in May 2007 and circulated for a 30-day public review until June 11, 2007. A Final IS/MND was prepared in June 2007 that responded to comments and outlined associated adjustments to draft mitigation measures. An Errata was also prepared in June 2007 to incorporate one additional comment letter from the California Highway Patrol with a response into the Final IS/MND. Due to the landowner's desire to re-visit the project components, action by the Planning Commission and City Council was delayed from June to September 2007.

The project site design has undergone some minor modifications since the Final IS/MND were prepared in June 2007. These modifications resulted in the re-distribution of proposed land uses and a reduction in the proposed square footage of land uses and residential units across the project site. This Technical Memo has been prepared in order to discuss these minor modifications to the project in relation to the previously conducted environmental review and analysis. This Technical Memo also addresses the need to substitute a corrected version of the Existing General Plan Designation map for the project site as compared to the version included in the Draft IS/MND.

The project description evaluated in the June 2007 Final IS/MND is as follows:

> "The project site addressed in this Initial Study is located in the southwestern portion of the City of Hayward, between Industrial Boulevard and Eden Park Place immediately west of Hesperian Boulevard. The site is immediately east of the Union Pacific (UPRR) train line at the northern end and is adjacent to Marina Drive and the new housing developments of Bridgeport and The Crossings. The existing 56.41 acre vacant site is relatively flat. The areas north and south of Eden Shores Boulevard and east of Marina Drive are currently designated as Industrial Corridor in the General Plan and Business Park in the Specific Plan. Implementation of the project includes the following actions:
>
> - General Plan Amendment (GPA) PL-2007-0231. Change the General Plan land use designation for portions of the area from Industrial Corridor (36.3 acres) to Medium Density Residential (14.6 acres) and Retail and Office Commercial (21.8 acres).
>
> - Zone Change (ZC) 2007-0232 and Text Amendment (TA) 2007-0233. Change the zoning for portions of the area from BP-Business Park (33.4 acres) and CR-Commercial Retail (3.0 acres) to RM-Residential Medium Density (14.6 acres), CN-Neighborhood Commercial (6.25 acres), and a new zoning district of CR-Regional Commercial (15.5 acres);
>
> - Related revisions to the South of Route 92 Specific Plan, Development Guidelines, and Development Agreement to address the above described changes from business park uses to residential uses and commercial uses.
>
> Access to the project would be provided by existing public streets. All other streets would be private and provide for internal access and circulation in the business park, commercial, single-family home and townhome developments.

> The applicant has prepared an illustrative site plan to indicate potential development with amendment of the Specific Plan. The conceptual plan would increase the amount of residential use within the Specific Plan area and create opportunities for expanded neighborhood retail and regional retail uses. The area shown as Parcel 1 would be split between the Business Park zoning and Medium Density Residential (RM) zoning and would incorporate within the RM zoning a parcel currently owned by the City of Hayward (0.67 acres). The area shown as Parcel 2 would retain the BP zoning on the northern portion and be amended to Regional Commercial (CR) zoning for the southern portion. The area shown as Parcel 3 would change the BP zoning into a split between Medium Density Residential (RM) and Neighborhood Commercial (CN) zoning."

The Figures that pertain to this June 2007 project description are **Figure 4**, **Figure 5**, and **Figure 6** in the Draft IS/MND and **Figure 2.1** in the Final IS/MND. Please note that **Figure 4** incorrectly shows an entire parcel to be designated Industrial Corridor, which should have a portion of that parcel designated as Retail and Office Commercial (3.0 acres).

The September 2007 modified project description, which supersedes the June 2007 project description, is as follows:

> "The project site addressed in this Initial Study is located in the southwestern portion of the City of Hayward, between Industrial Boulevard and Eden Park Place immediately west of Hesperian Boulevard. The site is immediately east of the Union Pacific (UPRR) train line at the northern end and is adjacent to Marina Drive and the new housing developments of Bridgeport and The Crossings. The existing 56.41 acre vacant site is relatively flat. The areas north and south of Eden Shores Boulevard and east of Marina Drive are currently designated as Industrial Corridor and Retail and Office Commercial in the General Plan and Business Park and Retail Commercial in the Specific Plan and Zoning Ordinances. Implementation of the project includes the following actions:
>
> - General Plan Amendment (GPA) PL-2007-0231. Change the General Plan land use designation for portions of the area from Industrial Corridor (33.3 acres) and Retail and Office Commercial (3.0 acres) to Medium Density Residential (14.4 acres) and Retail and Office Commercial (21.9 acres).
>
> - Zone Change (ZC) 2007-0232 and Text Amendment (TA) 2007-0233. Change the zoning for portions of the area from BP-Business Park (33.3 acres) and CR-Commercial Retail (3.0 acres) to RM-Medium Density Residential (14.4 acres), CN-Neighborhood Commercial (5.4 acres), and a new zoning district of CR-Regional Commercial (16.5 acres);
>
> - Related revisions to the South of Route 92 Specific Plan, Development Guidelines, and Development Agreement to address the above described changes from business park uses to residential uses and commercial uses.
>
> Access to the project would be provided by existing public streets. All other streets would be private and provide for internal access and circulation in the business park, commercial, single-family home and townhome developments.
>
> The applicant has prepared an illustrative site plan to indicate potential development that could result with an amendment to the Specific Plan. The

conceptual plan would increase the amount of residential use within the Specific Plan area and create opportunities for expanded neighborhood retail and regional retail uses. The existing BP-Business Park zoning for the area shown as **BP NW** would remain unchanged. The existing BP-Business Park zoning for the area shown as **BP SE** would remain unchanged. The existing BP-Business Park zoning for the area shown as **R RETAIL** and **N RETAIL** would be amended to CR-Regional Commercial and CN-Neighborhood Commercial, respectively. The existing BP-Business Park and CR-Commercial Retail zoning for the area shown as **RESIDENTIAL I** and **RESIDENTIAL II** would be amended to RM-Medium Density Residential."

The Figures that pertain to this September 2007 project description are attached to this Technical Memo as **Figure 1**, **Figure 2**, and **Figure 3,** which currently supersede the aforementioned **Figure 4**, **Figure 5**, and **Figure 6** in the Draft Initial Study/Mitigated Negative Declaration and **Figure 2.1** in the Final Initial Study/Mitigated Negative Declaration.

All of the numeric aspects and description of the project included in the May 2007 Draft IS/MND and the June 2007 Final IS/MND are updated by reference to reflect the new project description.

EVALUATION OF MODIFICATIONS

Under the California Environmental Quality Act (CEQA), minor modifications to the project that do not result in any new significant impacts or a substantial increase in the severity of previously identified significant impacts should still be considered by the decision making body prior to making a decision on a project.

Based upon a comparison of the June 2007 and September 2007 project site plans as shown in **Table 1**, the modifications to the project result in the redistribution of proposed land uses across the project site and a reduction in the proposed square footage of land uses and residential units across the project site.

TABLE 1
COMPARISON OF JUNE 2007 AND SEPTEMBER 2007 PROJECT SITE PLANS

Project Site Plan	Office-flex / R&D	Neighborhood Retail	Regional Retail	Residential
June 2007	20.1 acres 502,500 sf	6.3 acres 66,500 sf	15.5 acres 160,000 sf	14.6 acres 174 units
September 2007	20.5 ac.* 500,000 sf	5.4 ac. 56,000 sf	16.5 ac 160,000 sf	14.4 ac. 167 units

**Includes a 42,000 square foot fitness facility*
sf = square feet
Source: City of Hayward Planning Department

In preparing this Technical Memo, all of the potential impacts identified on the *CEQA Environmental Checklist Form* were considered. The environmental analysis, impacts, and mitigation measure requirements identified in the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remain applicable and substantially unchanged by the modifications to the project regarding the following topics:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazards & Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems
- Mandatory Findings of Significance

AESTHETICS

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to aesthetics as the changes are consistent with the previously analyzed land uses proposed within the project site. The environmental analysis of potential aesthetic impacts in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding aesthetics, and in particular the topic of project design as it relates to the production of light and glare.

AGRICULTURAL RESOURCES

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to agricultural resources. The environmental analysis of potential impacts to agricultural resources in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding agricultural resources.

AIR QUALITY

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to air quality. The City's Acting Transportation/Development Manager and Planning Manager has indicated that the previous traffic impact findings remain relevant for the project as it has been modified, especially in regards to the generation of peak hour trips (Rizk and Carmichael-Hart, 2007). The project still would include neighborhood serving retail, which reduces overall air quality impacts due to the reduction in the distance traveled

associated with daily shopping trips for current and future neighborhood residents. The project would not generate additional transportation impacts, therefore no additional air quality impacts beyond those which were previously identified would result and mitigation measures remain relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding air quality, as well as air quality mitigation measure MM III-1 in the June 2007 Final IS/MND.

BIOLOGICAL RESOURCES

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to biological resources as the same amount of land area is proposed for development. The environmental analysis of potential impacts to biological resources in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding biological resources, as well as the biological resources mitigation measures MM IV-1 through MM IV-4 in the June 2007 Final IS/MND.

CULTURAL RESOURCES

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to cultural resources as the same area is proposed for development. The environmental analysis of potential impacts to cultural resources in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding cultural resources, as well as the cultural resources mitigation measures MM V-1 through MM V-2 in the June 2007 Final IS/MND.

GEOLOGY/SOILS

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to geology and soils as the same or similar type of development is proposed. The environmental analysis of potential impacts to geology/soils in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding geology and soils.

HAZARDS & HAZARDOUS MATERIALS

The modifications to the project do not create new significant or increase the severity of any previously identified impacts associated with hazards and hazardous materials. The environmental analysis of potential impacts associated with hazards and hazardous materials in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding hazards and hazardous materials, as well as the hazards and hazardous materials mitigation measure MM V.II-1 in the June 2007 Final IS/MND.

HYDROLOGY/WATER QUALITY

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to hydrology and water quality as approximately the same amount of impervious surface is proposed. The environmental analysis of potential impacts to hydrology and water quality in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding hydrology and water quality, as well as the hydrology and water quality mitigation measure MM III-1 in the June 2007 Final IS/MND.

LAND USE/PLANNING

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to land use and planning. The environmental analysis of potential impacts to land use and planning in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding land use and planning and the project still requires City Council approval of all aspects of the project, including all proposed amendments to the 1997 Specific Plan, rezoning, development guideline modifications and other aspects of project development.

MINERAL RESOURCES

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to mineral resources as development is proposed within the same footprint as the previous site plan. The environmental analysis of potential impacts to mineral resources in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding mineral resources.

NOISE

The modifications to the project do not create new significant or increase the severity of any previously identified noise impacts. Although the proposed residential land uses have been moved to the southern portion of the project area, the soundwall proposed in mitigation measure MM XI-4 along the UPRR corridor remains proposed for public safety and noise purposes for the proposed business park campus. However, portions of the mitigation measure MM XI-4 that pertain to insulation of the residential units that previously were proposed adjacent to the UPRR no longer apply as these units have been moved to the southern portion of the site. Instead, the applicable noise standards for business/office uses from Appendix N of the General Plan would apply to the four office buildings now proposed for the northwest section of the site. There would also be a berm incorporated into the future landscaped area along Industrial Boulevard behind the proposed Retail Anchor land use to buffer the loading area. The environmental analysis of potential noise impacts in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding noise, as well as the noise mitigation measures MM XI-1 through MM XI-3 in the June 2007 Final IS/MND.

POPULATION/HOUSING

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to population and housing, due to the fact that the project now proposes slightly fewer residential units, which in turn translates into slightly fewer projected new residents. The environmental analysis of potential impacts to population and housing in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding population and housing.

PUBLIC SERVICES

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to public services as the same or similar need for public services remains the same. The environmental analysis of potential impacts to public services in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding public services.

RECREATION

The modifications to the project do not create new significant or increase the severity of any previously identified recreation impacts, as the project incorporates a minor reduction in the number of housing units. The environmental analysis of potential recreation impacts in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding recreation, as well as the recreation mitigation measure MMXIV-1 in the June 2007 Final IS/MND.

TRANSPORTATION/CIRCULATION

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to transportation and circulation. As noted above, communication from the City's Acting Transportation/Development Manager and Planning Manager have indicated that the previous traffic impact findings remain relevant for the project as it has been modified, especially in regards to the generation of peak hour trips (Rizk and Carmichael-Hart, 2007). The location for the proposed residential units is now closer to the nearby sports park and other recreational facilities, potentially reducing the need for cross-neighborhood trips. The environmental analysis of potential impacts to transportation and circulation in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding air quality, as well as transportation and circulation mitigation measures MM XV-1 through MM XV-3.b in the June 2007 Final IS/MND.

UTILITIES/SERVICE SYSTEMS

The modifications to the project do not create new significant or increase the severity of any previously identified impacts to utilities and service systems as the same or similar need for utilities extension still remains applicable. The environmental analysis of potential impacts to utilities and service systems in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains relevant. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable regarding utilities and service systems.

MANDATORY FINDINGS OF SIGNIFICANCE

The modifications to the proposed project site plan do not create new significant or increase the severity of any previously identified impacts. The environmental analysis in the May 2007 Draft IS/MND and June 2007 Final IS/MND remains relevant as it includes discussions on potential cumulatively considerable impacts of the project, as well as the need for mitigation measures in order reduce the identified potential impacts of the project on air quality, biological resources, cultural resources, hazards and hazardous materials, noise, traffic, hydrology and water quality, and recreation to a less than significant level. The 1997 Specific Plan, mitigation measures from the 1997 Specific Plan EIR, and the City of Hayward General Plan and Zoning Ordinances remain applicable, as well as the mitigation measures identified above in the June 2007 Final IS/MND regarding those topics considered for making the mandatory findings of significance.

SUMMARY OF ISSUES

This Technical Memo supports the finding that the modified project as described herein does not raise any new issues and does not exceed the level of impacts identified in the June 2007 Final IS/MND. This Technical Memo confirms that the environmental analysis, impacts, and mitigation requirements identified in the May 2007 Draft IS/MND and the June 2007 Final IS/MND for the South of Route 92 Specific Plan Amendment Project remains substantially unchanged by the modifications to the project.

There are no substantial changes proposed for the project, which would require major revisions of the IS/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

No substantial changes have occurred with respect to the circumstances under which the project is undertaken, which would require major revisions of the IS/MND due to the involvement of new significant environmental effects or substantial increase in the severity of previously identified significant effects.

No new information of substantial importance exists, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous negative declaration was adopted, including:

- The proposed modifications have no have significant effects that were not previously discussed in the IS/MND.
- There are no significant effects previously examined that will be substantially more severe that shown in the IS/MND.

- There are no mitigation measures or alternatives previously found not to be feasible that would in fact be feasible and would substantially reduce one or more significant effects of the project.

- There are no mitigation measures or alternatives which are considerably different from those analyzed in the IS/MND that would substantially reduce one or more significant effects on the environment.

APPLICABLE DOCUMENTS IN CIRCULATION

This Technical Memo should be considered a part of the Final IS/MND for the City of Hayward South of Route 92 Specific Plan Amendment (Legacy Eden Shores) Project.

Copies of all applicable documents associated with this project are available for review at the City of Hayward Department of Community and Economic Development, 777 B Street, Hayward, CA, 94541.

- City of Hayward South of Route 92 Specific Plan EIR. 1997.

- City of Hayward South of Route 92 Specific Plan Amendment (Legacy Eden Shores) Project Draft Initial Study/Mitigated Negative Declaration. May 2007.

- City of Hayward South of Route 92 Specific Plan Amendment (Legacy Eden Shores) Project Final Initial Study/Mitigated Negative Declaration and Errata. June 2007.

ATTACHMENTS

Figure 1: Existing and Proposed General Plan Designations

Figure 2: Existing and Proposed Zoning Designations

Figure 3: Legacy Eden Shores Parking & Site Study

REFERENCES

Carmichael-Hart, Roxy. 2007. Acting Transportation/Development Manager. City of Hayward. Email. August 30, 2007.

Legacy Partners. 2007. *Revised Site Plan for Legacy Eden Shores*. August 30, 2007.

Rizk, David, AICP. 2007. Planning Manager. City of Hayward. Email. August 30, 2007.