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DRAFT ENVIRONMENTAL IMPACT REPORT for GOLDEN EAGLE CENTER SPECIFIC PLAN 3-90 THE CITY OF CARSON

State Clearinghouse # 90010838

Vol. I

Prepared for
The City of Carson
701 East Carson Street
Carson, CA 90749

April 1993

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THE PLANNING CENTER

DRAFT
ENVIRONMENTAL IMPACT REPORT
SCH. NO. 90010838

GOLDEN EAGLE CENTER SPECIFIC PLAN 3-90
Vol. I

Prepared for:

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April 1993
COC-01

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1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This Environmental Impact Report (EIR) addresses the environmental effects of the Golden Eagle Center Specific Plan for an area located in the City of Carson. The project area encompasses approximately 76 acres of land located one-fourth mile south of the San Diego (I-405) Freeway and immediately east of the Harbor (I-110) Freeway. Specifically, the project site is located at the southeast corner of Torrance Boulevard and Figueroa Street.

The Golden Eagle Center Specific Plan project proposes the development of commercial retail, visitor commercial, commercial, office, research and development, and light industrial uses. They are intended to offer a combination of professional, economic, fiscal (tax base), and aesthetic interactions not possible in a single-use office, industrial or commercial park.

The project would be implemented through the adoption of the Specific Plan by the City of Carson. This EIR addresses the environmental impacts associated with the Specific Plan. The guidelines and land use regulations in the Specific Plan would provide the framework for design and consider both project-wide and site-specific issues. The guidelines express a desired character and quality for future development and address site planning, architecture, signage, landscape and hardscape concepts.

This document will provide environmental information for responsible and interested agencies including, but not limited to, the California Department of Transportation, the California Environmental Protection Agency Department of Toxic Substance Control, South Coast Air Quality Management District, the Southern California Association of Governments, the California Public Utilities Commission, and the County of Los Angeles.

1.2 INTENDED USES OF THIS EIR

In its role as lead agency for this project, the City of Carson has prepared an Initial Study and distributed a Notice of Preparation (NOP) to the State Clearinghouse, responsible agencies and other interested parties. This EIR is intended to aid decision makers, including the City Council and the Carson Redevelopment Agency in the evaluation of the project and its potential effects on the environment. Future ministerial actions related to the project, including grading permits, required to implement the project are exempt from CEQA and do not require additional environmental review. However, should individual development projects within the Golden Eagle Center Specific Plan area differ significantly from the proposed land uses or development densities described in this Draft EIR, additional environmental documentation may be required.

This document will also provide environmental information to other agencies affected by, or which are likely to have an interest in the proposed project, which may include: Caltrans, South Coast Air Quality Management District, the Southern California Association of Governments, the California Public Utilities Commission, the County of Los Angeles, and others. Public agencies and interested parties not contacted, or who did not respond to a request for comment during the preparation of the EIR, will have an opportunity to comment during the public review period for the Draft EIR.

1.3 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

The following table provides a summary of the project's impacts, identified mitigation measures, the potential impacts of certain mitigation improvements, and the level of impact after mitigation.

The mitigation column also identifies measures whose implementation require the approval of another public agency. This additional approval is not assured. To the extent that these mitigation measures are rejected, the level of impact significance determination shown in the table may require modification.

In certain instances, the implementation of a mitigation measure would result in additional impact. For example, a road improvement may require additional right-of-way, which results in residential or business displacements. Any such displacements are identified in the last column as a significant impact. However, it should be recognized that additional mitigation (such as relocation benefits) would be available as these improvements are implemented to reduce these impacts (possibly to a less than significant level).

SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
LAND USE AND RELEVANT PLANNING **General Plan Land Use** The mix of retail/visitor commercial uses (possibly including a 300-room hotel), office/retail commercial, and office/R&D/light industrial uses proposed in the Golden Eagle Center Specific Plan are consistent with the current Light Industrial land use designation in the General Plan Land Use Element and the Redevelopment Plan. The proposed uses would not conflict with surrounding commercial or industrial uses. The Specific Plan is also generally compatible with nearby residential uses, since the City has high standards that address incompatibility between residential and industrial uses. However, the proposed hotel and retail uses may generate noise, light and glare that impacts the residential uses south of the project site. **Zoning** All of the proposed uses in the Golden Eagle Center Specific Plan fall into categories that are permitted in the current ML (Manufacturing, Light) and ML-ORL (Manufacturing, Light-Organic Refuse Landfill) zone, so no zone change would be required. However, a Conditional Use Permit (CUP) would be required for development of the hotel.	1. To avoid potential noise, light and glare impacts to the residential area south of the project site, development of the Visitor Commercial (Hotel) use shall be restricted to the northern half of the 40-acre Retail/Visitor Commercial area.	None.	Not significant for land use and relevant planning.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Development within the ML-ORL (Manufacturing, Light-Organic Refuse Landfill) zone also requires a CUP approved by both the Planning Commission and City Council and a civil engineering report, which must be approved by the Building and Safety Division. Future development in the ML-RL zone is subject to requirements of CMC Section 9141.12, prior to use of the site, even once an approved CUP is obtained. As shown in Figure 16, the boundaries of the landfill limit as identified in the Specific Plan do not precisely match the boundaries of the ML-ORL.			
In addition, this site was too contaminated, as determined by Cal-EPA, for safe use prior to remediation. This would pose a potential for significant impacts if the proposed land uses were developed prior to removal of this constraint.	2. Prior to development, site environmental clearance must be provided in the form of a Health Risk Assessment (HRA) approved by the California EPA. This may take the form, subject to the willingness of the Cal-EPA, of approval of partial HRAs that allow for sequential development of the site as portions are remediated.	None.	Not significant.
TRANSPORTATION AND CIRCULATION			
Scenario with widening of the Torrance Blvd. underpass at the I-110			
Ambient Growth Conditions			
Without mitigation these intersections will be impacted:			
Figueroa Street/Torrance Boulevard (PM Peak Hour)	1. Figueroa Street/Torrance Boulevard - Add through lanes on the north and southbound approaches. (This mitigation measure requires the approval of Caltrans.)	Approximately 6 feet of Caltrans' right-of-way is required on the west side of Figueroa Street to accommodate the additional southbound through lane.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Figueroa Street/I-110 NB Ramp (PM Peak Hour)	2. Figueroa Street/I-110 NB On-Ramp - Add a northbound left-turn lane within the existing street width by restriping. (This mitigation measure requires the approval of Caltrans.)	None.	Not significant.
Vermont Avenue/Torrance Boulevard (AM/PM Peak Hour)	3. Vermont Avenue/Torrance Boulevard - Add north and southbound through lanes striped within the existing roadway widths. "No Stopping" provisions are required on both sides of Vermont Avenue. (This mitigation measure requires the approval of the County of Los Angeles.)	None.	Not significant.
Vermont Avenue/Del Amo Boulevard (PM Peak Hour)	4. Vermont Avenue/Del Amo Boulevard - Add a southbound left-turn lane and an eastbound through lane within the existing street width by re-striping. North and south of the intersection, approximately 300 feet of "No Stopping" area is required on the west side of Vermont Avenue. (This mitigation measure requires the approval of the County of Los Angeles and the City of Los Angeles.)	None.	Not significant.
1995 Project Conditions Without mitigation project traffic would cause impacts at the following intersections:			
Figueroa Street/Torrance Boulevard (AM/PM Peak Hour)	1. Figueroa Street/Torrance Boulevard - Add an eastbound through lane and a left-turn lane requiring approximately 24 feet of widening on the south side of Torrance Boulevard between Figueroa Street and Hamilton Avenue. A westbound left-turn lane mirrors the eastbound approach. This would involve 24 feet of widening for approximately 225 feet on the southeast corner of Torrance Boulevard and	Right-of-way requirements for widening of the Torrance Blvd. underpass at the I-110 impact a block wall and a portion of a house belonging to a private property owner located adjacent to the west side of the I-110 Freeway. Caltrans' right-of-way is also required for the widening of the I-110 overpass.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	Figueroa Street. Approximately 6 feet of widening for a length of 200 feet and then tapering for 300 feet, on the west side of Figueroa north of Torrance, would also be required to accommodate a third southbound through lane. Appropriate signal modifications are necessary. (The estimated $9 million dollar cost and the multi-agency coordination required with Caltrans and the County of Los Angeles may make this improvement infeasible, which led to the proposed interim mitigation scenario).		
Figueroa Street/I-110 NB Ramp (AM/PM Peak Hour)	2. Figueroa Street/I-110 NB On-Ramp - Add a through lane and a right-turn lane on the southbound approach. Widening within Caltrans' right-of-way on the west side of Figueroa Street is required to support the southbound right-turn lane to approximately 200 feet north of the I-110 ramp, and 6 feet of widening is required south of the ramp. Parking prohibitions are required on both sides of Figueroa Street between Torrance Boulevard and Del Amo Boulevard. Signal modifications are essential to these improvements. (Caltrans right-of-way and approval are required for this mitigation measure).	None.	Not significant.
Vermont Avenue/Torrance Boulevard (AM/PM Peak Hour)	3. Vermont Avenue/Torrance Boulevard - Add a northbound and southbound right-turn lane and a westbound through lane. The right-turn lanes can be accommodated within the existing roadway width. Approximately 12 feet of right-of-way and widening are necessary along the north side of Torrance Boulevard both east and west of Vermont. Eleven feet of additional right-of-way is required on the west side of Vermont Avenue north of Torrance Boulevard and the east side of Vermont south of Torrance. In addition, traffic	This widening would impact a commercial building (Alpine Village Inn) and vacant lot. These properties are located east of Vermont Avenue. The landscape berm of the west side of the intersection would also be affected.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	signal modifications are necessary with this improvement. (This mitigation measure requires the approval of the County of Los Angeles).		
Figueroa Street/Carson Street (AM/PM Peak Hour)	4. Figueroa Street/Carson Street - Add an eastbound left-turn lane requiring approximately 12 feet of widening to accommodate a 250-foot right turn pocket and transition area. Add a westbound left-turn lane and a right-turn lane requiring 12 feet of widening. Approximately 450 feet west and east of Figueroa Street would be designated as "No Stopping" areas. Traffic signal modifications are necessary on the northeast and southwest corners of the intersection.	Widening would affect both the commercial properties located at the northeast corner and the Unocal Service Station pump islands located on the southwest corner. The landscaping and three parking spaces would be lost at the shopping center; two parking spaces would be lost at the adjacent building fronting Carson. Along the northeast corner only 10 feet separate the existing roadway from the building housing the Sing Along Center (part of a small shopping center on the corner) where the proposed mitigation would take 12 feet. The mitigation would take the landscaping for the center, plus three parking spaces from the shopping center and two spaces from an adjacent office building fronting on Carson.	Not significant. The right-of-way requirements for this mitigation measure would displace business uses as described. However, state law requires mitigation of displacement impacts through payment of fair market value and relocation benefits.
Figueroa Street/Del Amo Boulevard (AM/PM Peak Hour)	5. Figueroa Street/Del Amo Boulevard - Add a southbound right-turn lane by restriping within the existing roadway and prohibit parking on Figueroa Street.	None.	Not significant.
Main Street/Carson Street (PM Peak Hour)	6. Main Street/Carson Street - Add a southbound right-turn lane on Main Street requiring approximately 11 feet of widening (north of Carson) . A total of 265 feet on the west side of Main would be sufficient for a right-turn pocket and transition area.	Right-of-way needs would impact a small commercial building along with pump islands at the service station located on the northwest corner of the intersection.	Not significant. State law requires mitigation of displacement impacts through payment of fair market value and relocation benefits.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Main Street/Torrance Boulevard (AM/PM Peak Hour)	7. Main Street/Torrance Boulevard - Add a northbound left-turn lane, and on the southbound approach add a through lane and an exclusive right-turn lane. Approximately 12 feet of widening together with restriping modifications on the east side of Main (both north and south of Torrance Boulevard) are required to accommodate the two additional lanes. Convert the median on the eastbound approach to a left-turn lane and the number one eastbound through lane to a left/through combination lane by restriping. Traffic signal modification to provide for an east/west split phase on Torrance accompanied with protected lefts from Main Street are also necessary. "No Stopping" would be required on all four directional approaches.	Additional right-of-way on the northeast corner would impact a vacant lot and some light industrial buildings north of the lot. Right-of-way needs on the southeast corner impact a second vacant lot and more light industrial businesses south of the lot.	Not significant. State law requires mitigation of displacement impacts through payment of fair market value and relocation benefits.
Main Street/Del Amo Boulevard (PM Peak Hour)	8. Main Street/Del Amo Boulevard - Approximately 30 feet of additional pavement width (partial buildout of ultimate width) is required on the north side of Del Amo Boulevard, west of Main Street, to accommodate an eastbound left-turn lane and would continue to westbound through lanes. A southbound through lane would require 13 feet on the west side of Main Street (partial buildout of ultimate width). Installation of a left-turn lane requires 10 feet of widening, north of the existing improvement on the east side of Main Street for approximately 200 feet. Installation of a traffic signal is required. Parking prohibitions would be required on the west side of Main Street, north and south of Del Amo Boulevard.	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Hamilton Avenue/Torrance Boulevard (Reflects mitigation at Figueroa/Torrance)	9. Hamilton Avenue/Torrance Boulevard - On the southbound approach, convert the free right-turn lane to a controlled right-turn lane and add a left/right option lane. In addition, it is necessary that the westbound free right-turn lane be converted to a through/right combination lane. The addition of an eastbound left-turn lane is an extension of Torrance Boulevard/Figueroa Street widening to improve alignment for eastbound vehicles. Ten feet of widening and Caltrans right-of-way are required along the east side of Hamilton Avenue. (This mitigation measure requires the approval of the County of Los Angeles and Caltrans).	None.	Not significant.
Scenario with Implementation of the Interim Mitigation (no left turn from eastbound Torrance Boulevard to northbound Figueroa Street.) **Interim Mitigation - Ambient Growth Conditions** Without mitigation these intersections would be impacted:			
Figueroa Street/Del Amo Boulevard (PM Peak Hour)	1. Figueroa Street/Del Amo Boulevard - Add a southbound right-turn lane by restriping within the existing roadway. Prohibit parking on Figueroa Street.	None.	Not significant.
Hamilton Avenue/Del Amo Boulevard (PM Peak Hour)	2. Hamilton Avenue/Del Amo Boulevard - Add an eastbound right-turn lane by restriping. Parking would be prohibited on Del Amo Boulevard. Anticipated traffic volumes with the construction of the Del Amo/I-405 overcrossing are expected to require signalization of this intersection. (This mitigation measure requires the approval of the City of Los Angeles and County of Los Angeles).	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Vermont Avenue/Torrance Boulevard (AM/PM Peak Hour)	3. Vermont Avenue/Torrance Boulevard - Add north and southbound through lanes by restriping within the existing road width. "No Stopping" provisions are required on both sides of Vermont Avenue. Add a westbound through lane requiring approximately 12 feet of additional right-of-way. Another 12 feet of right-of-way is needed for a second eastbound left-turn pocket. In addition, traffic signal modifications are necessary with this improvement. (This mitigation measure requires the approval of the County of Los Angeles).	This widening would impact a commercial building (Alpine Village Inn) and the corner lot. These properties are located east of Vermont Avenue. The landscape berm on the west side of the intersection would also be affected. These widening needs would impact the south side of Torrance Blvd. for 500 feet east and west of the intersection. Single-family properties would have to reduce their front lawn setback. Widening would affect the flood control channel on the southwest corner. Right-of-way needs would impact the pump island clearance for a Mobil Service Station and some existing single-family dwellings.	Not significant.
Vermont Avenue/Del Amo Boulevard (PM Peak Hour)	4. Vermont Avenue/Del Amo Boulevard - Add a northbound right-turn lane and southbound left-turn lane within the existing street width by restriping. North and south of the intersection approximately 300 feet of "No Stopping" area is required on both sides of Vermont Avenue. Add an eastbound through lane on the west intersection leg by restriping. Traffic signal modifications are required at this location. (This mitigation measure requires the approval of the County of Los Angeles and the City of Los Angeles.)	None.	Not significant.
Main Street/Torrance Boulevard (Although not significantly impacted by ambient growth this intersection's operation can be simply improved.)	5. Main Street/Torrance Boulevard - Convert the eastbound median to a left-turn pocket to improve operating conditions at the intersection.	None.	Not significant.
Interim Mitigation - 1995 Project Conditions Without mitigation project traffic would impact the following intersections:			

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Figueroa Street/Del Amo Boulevard (PM Peak Hour)	1. Figueroa Street/Del Amo Boulevard - Add an eastbound right-turn lane to Del Amo Boulevard. Two options are available: 1) add a right turn lane and allow dual right turns or add a free right turn lane; or 2) widen Figueroa to provide for merging eastbound to southbound vehicle turns. In addition, traffic signal modifications would be required to provide for an East/West split phase.	For option 2, widening and right-of-way on the southwest corner is required to facilitate the added right turn lane. Adding a free right-turn lane might create safety problems due to weaving as drivers in the two southbound through lanes merge to the right, to access the northbound I-110 ramp located just south of the intersection. The other alternative mitigation measure identified, the dual right turn option, would only partially mitigate the impact and long eastbound right turn queues could develop on Del Amo.	Significant. Either the project's impact on LOS at this intersection or the potential safety problem that could result from a free right-turn lane represents an unmitigated significant impact.
Hamilton Avenue/Del Amo Boulevard (PM Peak Hour)	2. Hamilton Avenue/Del Amo Boulevard - Add a westbound left-turn lane within the existing roadway width by restriping. "No Stopping" restrictions are required on Del Amo Boulevard on the approach to Hamilton. (This mitigation measure requires the approval of County of Los Angeles and the City of Los Angeles.)	None.	Not significant.
Figueroa Street/Carson Street (AM/PM Peak Hour)	3. Figueroa Street/Carson Street - Add eastbound and westbound left-turn lanes and through lanes requiring widening and right-of-way on both sides of Carson. Striping modifications allow for the addition of a southbound right-turn lane. Signal modifications and "No Stopping" prohibitions on all four legs of the intersection are required.	Some commercial retail and the pump islands at the Unocal Service Station, located on the southwest corner, would be impacted due to the mitigation measures proposed. On the northwest corner, the Kentucky Fried Chicken restaurant drive-thru driveway and commercial retail located west of the restaurant would be impacted. Right-of-way needs on the northeast corner include the parking lot of a commercial retail building and building frontage of an adjacent professional building. Pump islands of an Arco Service Station and adjacent commercial retail property located on the southeast corner would not be impacted by these improvements. Along Carson Street only 10 feet separate the existing roadway from the building housing the Sing Along Center (part of a small shopping center on the corner) where the proposed mitigation would take 11	Not significant. The right-of-way requirements for this mitigation measure would displace business uses as described. However, state law requires mitigation of such impacts through payment of fair market value and relocation benefits.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
		feet. Even at 10 feet the mitigation would take the landscaping for the center, plus three parking spaces from the shopping center and two spaces from an adjacent office building fronting on Carson Street. The transition right-of-way take could be modified to avoid taking a mobile home at Carson Gardens. The addition of east and westbound through lanes would require widening of the Carson Street bridge over the I-110. This portion of the mitigation would not be needed (with its potentially large cost) if the Torrance Boulevard undercrossing were constructed.	
Figueroa Street/I-110 NB Ramp (PM Peak Hour)	4. Figueroa Street/I-110 NB On-Ramp - Add a northbound left-turn lane and a southbound right-turn lane. Striping modifications would accommodate the added northbound left-turn lane within the existing street width. The addition of an exclusive southbound right-turn lane would require approximately 6 feet of widening in Caltrans' right-of-way. Widening is necessary from north of the ramp for approximately 275 feet. Traffic signal modifications are necessary. (This mitigation measure requires the approval of Caltrans.)	None	Not significant.
Main Street/Carson Street (PM Peak Hour)	5. Main Street/Carson Street - Widening along the west side of Main Street by 11 feet is required (11 feet of right-of-way is required), 575 feet south of Carson and 450 feet north of Carson, to provide for a second northbound and southbound left-turn lane.	Building frontage of a commercial business and pump islands of a service station would be impacted on the northwest corner. The southwest corner would require the deletion of the Del Taco drive-thru driveway and parking/frontage of a commercial center to the south of Del Taco. Signal modifications would be required. In addition to affecting the Del Taco outlet this mitigation would take the sun room at Alfredo's restaurant. An additional 11 feet of right-of-way is required for 225 feet south of Carson Street. Widening relocates the sidewalk which interferes with the restaurant building.	Not significant. The right-of-way requirements for this mitigation measure would displace business uses as described. However, state law requires mitigation of such impacts through payment of fair market value and relocation benefits.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Main Street/Torrance Boulevard (AM/PM Peak Hour)	6. Main Street/Torrance Boulevard - Add a northbound left-turn lane by restriping within the existing street width. Add a southbound through lane and an exclusive right-turn lane. Approximately 9 feet of additional right-of-way on east side of Main Street north of Torrance Blvd. and 13 additional feet of right-of-way on east side of Main Street south of Torrance Blvd., together with restriping modifications on the east side of Main (both north and south of Torrance Boulevard) are required to accommodate the two additional lanes. Convert the number one eastbound through lane to a left/through combination lane by restriping. Traffic signal modification to provide for an east/west split phase on Torrance accompanied with protected lefts from Main street, are also necessary. "Stopping" would be prohibited on all four directional approaches.	Additional right-of-way on the northeast corner would impact a vacant lot and some light industrial buildings north of the lot. Right-of-way needs on the southeast corner impact a second vacant lot and more light industrial businesses south of the lot. The no parking prohibition would require elimination of approximately 22 on-street parking spaces.	Not significant. State law requires mitigation of displacement impacts through payment of fair market value and relocation benefits.
Main Street/Del Amo Boulevard (PM Peak Hour)	12. Main Street/Del Amo Boulevard - Approximately 30 feet of additional pavement width is required on the north side of Del Amo Boulevard, west of Main Street, to accommodate an eastbound left-turn lane and two westbound through lanes. A southbound through lane would require 13 feet on the west side of Main Street. Installation of a left-turn lane requires 10 feet of widening, north of the existing improvement on the east side of Main Street for approximately 200 feet. Parking would be restricted on the west side of Main Street both north and south of Del Amo Boulevard. Presently, the eastbound approach is closed. With the opening of Del Amo Boulevard and the development of the parcel east of the intersection, volumes would increase sufficiently to warrant signalization of the intersection.	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
AIR QUALITY			
Short-Term			
Short-term mobile construction equipment emissions would not result in emissions that could threaten local attainment of clean air standards. However, during later phases of the project development, sensitive receptors in occupied portions of the project could be subject to construction-related emissions, especially NOx.	To minimize fugitive dust during grading and construction activities, the following methods shall be applied to the project (percentage refers to the effectiveness of measure to reduce emissions):		Not significant for short-term air quality.
	1. Graded surfaces shall be watered at least twice daily to form a wind-resistant temporary crust. The program shall include control of wind-blown dust on site access roadways and in the existing paved areas of the site. (45-90%)	None.	
	2. The site and the construction equipment shall be sprayed with water in the morning and the evening.	None.	
	3. Ground cover shall be planted as soon as practical in the construction process. (20-65%)	None.	
	4. Any earth being transported shall be covered and the wheels and lower portions of transport trucks will be sprayed with water before they leave the construction site. This includes trucks moving excavated earth from one portion of the site to the other if fugitive dust is visible from the transporting activity.	None.	
	The following mitigation measures serve to minimize mobile source emissions during the construction:		
	5. Construction equipment shall be selected considering emission factors and energy efficiency. All equipment shall be properly tuned and maintained.	None.	

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	6. Electric or diesel-powered equipment shall be utilized in lieu of gasoline-powered engines.	None.	
	7. Construction activities shall minimize obstruction of through traffic lanes adjacent to the site and, if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.	None.	
Long-Term			
Long-term air emission impacts associated with the change in permanent usage of the project site are anticipated to be 3,581 pounds of CO, 66 pounds of ROG, 332 pounds of Nox and 61 pounds of particulates on a daily basis. Air emissions of this magnitude exceed the criteria of significance suggested by the South Coast Air Quality Management District. Carbon monoxide levels in the project vicinity are expected to exceed the 8-hour state and federal standards with or without the project. The carbon monoxide levels projected in the project area reflect cumulative conditions with the project in the year 1995.	8. Energy Use • Use light colored roof materials to reflect heat. • Use building materials that do not require use of paints and solvents such as pre-primed and a wood moulding and trim products and pre-primed wallboard. (80-100%) • Require recycling bins in addition to trash bins and contract for recycling services. • Increase walls and attic insulation beyond Title 24 requirements. (5-9%) • Extensive use of shade trees to reduce building heat. (55%) • Use energy efficient and automated controls for air conditioners. (30%) • Use energy efficient parking lot lights such as metal halide, clean lucalox, high pressure sodium, or low pressure sodium. (55%) • Use lighting controls and energy efficient lighting. (60-75%)	None.	Significant for long-term air quality. (Despite the application of substantial mitigation, this impact remains a significant impact).

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	• Low-polluting and high-efficiency appliances shall be installed wherever possible.	None.	
	9. Motor Vehicle Trips/Emissions		
	• Utilize a mix of services on-site to provide further amenities for employees and customers that would reduce off-site vehicle trips. Consideration shall be given to postal services, bank automated teller machines, medical office facilities, restaurants, and day care. (25-50%).		
	• Synchronize any traffic signals installed in conjunction with the project with other signals in the project vicinity.		
	• Design parking lot layouts to limit access so that a parking control device could be easily added if parking pricing becomes a city-wide or regionwide strategy.		
	• Provide for future electric vehicle spaces by identifying preferential locations that have access to an electrical supply. Conduit access to electrical supply should be available so that reconstruction is not necessary to convert spaces.		
	• The project shall implement applicable transportation demand management and trip reduction measures as required by the City's CMP/TDM Ordinance, including provision of a transportation demand management association to facilitate ridesharing among the Center's employees.		

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
NOISE			
Throughout the project area, sensitive land uses exist and could be impacted by construction noise emanating from the project site or from construction vehicles on site access routes. The residential community just south of and adjacent to the site would be the nearest receptor of concern. During later phases of project construction, office and commercial workers in earlier phases of development on-site may be subject to the sight and sound of construction operations to implement the proposed land uses. Residential areas exist south of the site, so construction vehicles accessing the site should avoid routes adjacent to these sensitive land uses. The noise emanating from these operations may be less than is occurring today with the clean-up project and, therefore, is not expected to be a significant impact on adjacent receptors. No "audible" increases in noise level are anticipated for future off-site conditions. Future on-site conditions are not expected to exceed standards since the existing noise levels are relatively low.	1. Construction activities shall take place only between 7:00 A.M. and 6:00 P.M. Monday through Saturday as specified in the City of Carson Noise Ordinance. Hours of operation shall be incorporated in all construction contracts.	None.	Not significant for noise.
	2. All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers. The construction contracts shall require that all equipment and noise mufflers are in proper working order.	None.	
	3. Stationary equipment shall be placed such that emitted noise is directed away from occupied buildings in the project area. The construction contracts shall require the proper placement of all stationary construction equipment.	None.	
	4. Construction vehicle routing shall avoid routes adjacent to residential uses where feasible.	None.	
	5. Site design in retail commercial areas in Parcel 1 in proximity to the Harbor Freeway shall consider attenuation of roadway noise. Buildings can be setback to increase the distance to the roadway, locating parking areas and landscaping in intervening spaces. Further analysis is required to determine specific mitigation when exact uses and building footprints are available.		
	6. Truck access, parking area design and air conditioning refrigeration units should be carefully designed and evaluated at more detailed levels of planning to minimize the potential for acoustic incompatibilities between land uses.	None.	

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	7. Truck loading areas will be oriented and designed in a manner that minimizes noise intrusion into the residential areas south of the site. Should noise from loading activities become a nuisance, truck access could be restricted to the hours between 7:00 a.m. and 7:00 p.m.	None.	
	8. For proposed transient lodging uses, a site specific analysis will be required to address appropriate mitigation and site design after building plans have been developed. Other noise mitigation methods exist which shall be considered in project-level development design to attenuate roadway noise. These methods include: • The location of bedrooms and quiet living areas in transient lodgings should face away from the Harbor Freeway while areas (such as kitchens, garages, bathrooms and recreation rooms) that are more noise tolerant should face the source. • Where a recreational area associated with the hotel facilities is designed for quiet activities, it should not be located near the Harbor Freeway. • Courtyards, plazas and open space areas designed for pedestrian uses should be shielded from intrusive noise levels by intervening structures wherever possible.	None.	
	9. An eight-foot wall between the project site and the residential neighborhood to the south would be sufficient to mitigate any noise impacts. The wall must be built of solid material and be placed contiguous with the ground surface with no intervening air space. To minimize	None.	

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	potential aesthetic impacts, the walls should blend with the surrounding environment. Extensive landscaping with a variety of plants, trees and vines will be required to reduce visual impacts.		
GEOLOGY			
The Specific Plan would add both structures and large numbers of people to the site, which may be impacted by on-site weak soils and regional geologic/seismic hazards as the Golden Eagle Center is developed. Hotel visitors, over 4,000 employees, and a large number of customers for the commercial and retail uses become the on-site "population at risk" for any natural and man-made hazards effecting this area.	1. Future development projects shall include a geotechnical report identifying seismic parameters (such as peak ground acceleration) to which buildings must be built to enable structures to withstand the maximum credible earthquake. This determination shall be made by a licensed, registered geologist or engineering geologist. Such studies shall be provided prior to building plan approval, as directed by the City's Building Official, and shall include design requirements to address all site-specific soils, geologic, and seismic hazards.	None.	Not significant for geology.
The Golden Eagle Center is likely to be subjected to severe ground shaking from earthquakes originating from active faults within about 100 kilometers (62 miles) from the City within the design lifetime of the proposed structures. Tilt-up concrete construction, high occupancy, and high-rise structures are all permitted, but are especially susceptible to damage unless designed to withstand site-specific ground shaking hazards.	2. For each development application, the development plan shall include provisions relating to general public safety (for employees and visitors), including adequate access and a disaster plan.	None.	
Potentially present on-site problem soils include: soils susceptible to liquefaction, significant increases/decreases in volume (shrink-swell or expansive soils) as moisture content changes, or structural weakness. Problem soils would require some form of stabilization, design, or an engineering solution to reduce potential for property damage.	3. The City shall update its Emergency Plan to include development of the 76-acre site for the land uses proposed; if the City determines it is necessary, each developer shall provide a pro-rated share of the cost of updating and implementing the Emergency Plan.	None.	

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Engineering suitability characteristics have not been determined to date. Soil mixing required for remediation of on-site contaminated soils could significantly alter physical properties of on-site soils, for better or worse. Additional site-specific geotechnical assessment may be required to determine engineering suitability of on-site soils after remediation and replacement and site preparation is completed.			
AESTHETICS			
The Specific Plan would combine defined landscape palates, perimeter and interior streetscape standards, landscaped buffers, signage and lighting standards and site development standards to create a coherent, attractive and harmonious development. Implementation of the Specific Plan would prevent adverse impacts due to building design and would eliminate the existing offensive conditions.	Because no significant impacts are anticipated, no mitigation measures are necessary.	None.	Not significant for aesthetics.
The primary potential impact is shading of the nearby existing residences. A shade/shadow analysis indicates that the only land use sensitive to shadow impacts are the residences located directly south of the project site. However, the two-story height limit for retail commercial structures that could be built along the southern edge of the Golden Eagle site, combined with the southern edge buffer zone and height/setback requirements for office buildings, would avoid creating shadows that could impact residents living in the adjacent homes.			

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
POPULATION, EMPLOYMENT, & HOUSING			
Local Population, Employment & Housing Impacts The development planned under the Specific Plan would result in long-term, unavoidable changes in land use. The 76-acre project site has been vacant for a number of years, with the exception of the landfill in the northeast portion of the site. The Specific Plan does not include any dwelling units, and no significant increases in population would occur due to development of residential uses. There may be a slight increase in housing demand created by the additional employment. Development of the proposed Golden Eagle Specific Plan area would add both temporary construction jobs and about 4,731 long-term permanent jobs in the categories of: hotel/restaurant service jobs, retail/commercial, office, research and development, and industrial jobs. It is assumed that most of the newly created employment opportunities would be filled either by City residents or residents of surrounding communities. The impacts on employment are expected to be beneficial. The addition of jobs with the Specific Plan would occur gradually as individual development projects are added.	No mitigation measures are required.	None.	Not significant for local population, employment and housing.
Regional Population, Employment, Housing & Jobs/Housing Balance Impacts			

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
The proposed development is not expected to increase the population in the SCAG Central Los Angeles subregion, since no residential development is included. The proposed increases in employment are not expected to create a significant additional demand upon housing in the region. The added employment from the Golden Eagle Specific Plan represents 2.4 percent of growth in jobs projected for the subregion. According to the specific criteria used by SCAG, the proposed Golden Eagle Center development would be determined as having a regional significance. However, the Growth Management Plan also specifies that projects which add low-income housing, housing for senior citizens, or which add jobs in economically depressed areas should be exempted from the review and mitigation process. The proposed Golden Eagle Specific Plan would add jobs to an economically depressed area, would be locally beneficial, and should be accordingly exempted from the SCAG review and mitigation process.	Although impacts on jobs/housing balance are not thought to be significant, the following mitigation measure would ensure that this potential for impacts is considered prior to approval of future development projects. This would reduce potential impacts to a less than significant level. Future development project applications involving Research and Development land uses within the "Office/R&D Light Industrial" areas of the Golden Eagle Center Specific Plan shall include an estimate of the number of jobs by income categories and the potential for generating long-distance commutes.	None.	Not significant for regional population, employment, housing and jobs/housing balance.
RISK OF UPSET Existing regulation has developed to prevent accidents that can impact human welfare within and in the vicinity of businesses that utilize hazardous materials. All businesses storing above the minimum amounts of hazardous or flammable materials (55 gallons, 500 pounds or 200 cubic feet of a gas) are required to file a Business Plan, including a materials	Due to the extensive existing regulatory framework, no additional mitigation measures are considered necessary.	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
inventory and an emergency response plan, with the Los Angeles County Fire Department (LACFD). This filing satisfies the State and Federal requirements for public disclosure under California Health and Safety Code, Chapter 6.95, Sections 25500 et seq., and the Federal Superfund Amendments and Reauthorization Act of 1986, Section 312.			
Portions of the project site are located within 1000 feet of an organic landfill generating methane gas which can create a risk of explosion.	In accordance with Los Angeles County Uniform Building Code 308C, a state registered civil engineer, whom the County recognizes as having experience and expertise in the control of landfill gas, shall design and install landfill gas monitoring and protection measures whenever structures are located within 1,000 feet of an organic waste landfill.	None.	Not significant
PUBLIC SERVICES & UTILITIES			
Police Protection			
There is adequate police staff to serve the proposed project at buildout.	Because no impacts are expected, no mitigation is required.	None.	Not significant.
Fire Protection			
Fire protection within the project area is currently adequate, but future service levels may be cut back due to limited tax revenues. Fire services could also be impacted by site design.	1. Fire hydrants shall be placed at 300 foot intervals on interior site roadways.	None.	Not significant.
	2. Fire flows of up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for a five hour duration will be required. The applicant shall address this and other fire life safety requirements at the building plan check stage.	None.	Not Significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Wastewater/Sewerage			
Wastewater collection and treatment facilities either now have capacity or will be expanded to handle the expected flow from project development. The developers of the project would be responsible for connection fees and a Permit for Industrial Wastewater Discharge (if required).	Because no impacts are expected, no mitigation is required.	None.	Not significant.
Solid Waste			
Buildout of the project site would not cause adverse impacts on solid waste services. However, the shortage of long term landfill capacity and hazardous waste facilities in Los Angeles County is a potentially significant impact.	1. The applicant or future developers shall provide future tenants with recycling services. This information shall include identifying local buy back centers and recycling markets and shall encourage recycling and the use of recycled products in each business.	None.	Not Significant.
	2. Where feasible, the developer shall use insulation and other products made from recycled materials in project construction.	None.	
	3. Storage areas for recyclable materials shall be included in the development design to meet or exceed the requirements of the ordinance adopted pursuant to the California Solid Waste Reuse and Recycling Access Act (PRC Sections 42900 through 42911).	None.	
Electricity			
Contact with Southern California Edison indicates there is sufficient capacity to serve the project.	Because no impacts are expected, no mitigation is required.	None	Not significant.
Natural Gas			
The Southern California Gas Company indicates no significant impacts to natural gas supply are expected.	Because no impacts are expected, no mitigation is required.	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Flood Control			
The site is in a developed area with storm drains already installed. Flow will increase but required facilities can accommodate the increased runoff.	1. Prior to approval of development plans under the Specific Plan, the applicant, or the applicant's contractor, shall perform a hydrology study following the County of Los Angeles standards to the satisfaction of the City Engineer, to determine the adequacy of the existing drainage system to handle the expected storm water flows.	None.	Not significant.
	2. If the hydrology study demonstrates that the drainage system would be inadequate following implementation of the Specific Plan, then concurrent with site construction all necessary storm system improvements shall be implemented to the satisfaction of the City Engineer and the County of Los Angeles.	None.	
Water Supply			
Development along Figueroa Street would require the extension of new water mains. All water mains would be required to deliver adequate flows for fire suppression.	1. Upon final design of development along Figueroa Street, the applicant shall consult with the Dominguez Water Corporation to ensure the connection of adequately sized water mains.	None.	Not significant for water supply.
	2. All water mains serving the project shall be sized to deliver adequate flow for fire suppression.	None.	
	3. Landscaping/irrigation plans shall incorporate drought resistant materials.	None.	
	4. Landscaping/irrigation plans shall provide for the future use of reclaimed water.	None.	

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Schools			
The project does not propose the construction of residential uses and therefore would not directly house students requiring school services. An insignificant number of students could be added to the District as children of people employed at the site.	The applicant shall pay all school financing fees required pursuant to state law and local school district policy.	None.	Not significant.
CUMULATIVE IMPACTS			
Traffic and Circulation			
The intersections impacted under cumulative conditions are the same with the widening of the Torrance/I-110 undercrossing or with the interim mitigation. The mitigation measures overlap to a large degree with those proposed to mitigate for project impacts. However, due to different traffic distributions the intersections are impacted in different ways so that the recommended mitigation measures differ.			
Cumulative Condition - Scenario with Torrance I-110 undercrossing widening			
Without mitigation the following twelve intersections would be impacted:			
Figueroa Street/Carson Street (AM/PM Peak Hour)	1. Figueroa Street/Carson Street - Add an eastbound and a westbound through lane. Approximately thirteen (13) feet of widening and right-of-way will be required for the additional eastbound through lane. Signal modifications will also be required at this southwest corner. In addition, parking prohibition is essential on the	These right-of-way needs will affect both the commercial properties and the Unocal Service Station pump islands located on the southwest corner of the intersection.	Not significant. The right-of-way requirements for this mitigation measure would displace business uses as described.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	south side of Carson Street approximately 350 feet prior to the intersection as well as after the intersection to accommodate the third through lane. Sufficient width exists for the westbound through lane to be striped within existing street width. However, a parking prohibition for approximately 400 feet on either side of the intersection is required along the north side of Carson Street. An exclusive southbound right-turn lane is also necessary. The addition of a 175-foot right-turn pocket can be accommodated within the existing roadway width with some striping provisions. A 250-foot "No Stopping" prohibition is necessary on the west side of Figueroa Street just north of Carson Street.		However, state law requires mitigation of such impacts through payment of fair market value and relocation benefits.
Figueroa Street/Torrance Boulevard (AM/PM Peak Hour)	2. Figueroa Street/Torrance Boulevard - Add east and westbound left-turn lanes and an eastbound through lane. The additional left and through lanes require approximately 24 feet of widening on Torrance Boulevard under the I-110 overpass. Widening of the overpass will also be necessary. This mitigation relates to the Hamilton/Torrance intersection by nature of the alignment; therefore, widening of Torrance needs to be extended back to Hamilton Avenue. The westbound approach of Torrance Boulevard at Figueroa mirrors the eastbound dual left-turn lane lanes. Right-of-way from the project site would be required to provide for widening on the south side of Torrance (east of Figueroa) to carry through the lanes.	Additional right-of-way is necessary from property owners adjacent to the I-110 Freeway on the south side of Torrance Boulevard. The existing block wall and corner of a residence would be impacted. Approximately eighteen (18) feet of widening on the west side of Figueroa in Caltrans' right-of-way is required to accommodate the additional southbound through and right-turn lanes.	Not significant. State law requires mitigation of displacement through payment of fair market value and relocation benefits.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	Through lanes on the north and southbound approaches accompanied with a southbound right-turn lane, are also required. A northbound through lane can be added within the existing roadway widths accompanied with striping modifications. The installation of appropriate traffic signal modifications and a "No Stopping" prohibition is also necessary along the eastside of Figueroa south of Torrance Blvd. (This mitigation measure requires the approval of Caltrans and the County of Los Angeles).		
Figueroa Street/I-110 NB Ramp (AM/PM Peak Hour)	3. Figueroa Street/I-110 NB On-Ramp - Add a northbound left-turn lane within the existing street width by restriping and implementing a "No Stopping" prohibition on the east side of Figueroa. No additional right-of-way is required. Improvements on the southbound approach consist of a third through lane and dual right-turn lanes. Six feet of widening on Figueroa, south of the intersection, is required to accommodate the third through lane. Approximately 25 feet of widening on the west side of Figueroa, north of the intersection, will be required to provide dual right-turn lanes. An additional left/right option lane on the eastbound approach will require approximately 12 feet of widening. Traffic signal modifications are necessary to support the mitigation measures at this intersection. (This mitigation measure requires the approval of Caltrans.)	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Figueroa Street/Del Amo Boulevard (AM/PM Peak Hour)	4. Figueroa Street/Del Amo Boulevard - Add northbound left-turn and right-turn lanes and a southbound through lane within the existing roadway width by restriping the two approaches. Approximately 12 feet of widening and right-of-way is required to provide an exclusive southbound right-turn lane. Improvements on the eastbound approach consist of the addition of a through lane and dual right-turn lanes. Eighteen feet of widening and right-of-way is required on the south side of Del Amo, between the I-110 bridge and Figueroa. This would include the widening of the I-110 overpass as well. On the west side of Figueroa, south of Del Amo, approximately 12 feet of widening and right-of-way is needed. This widening will continue to the right-turn lane pocket at the I-110 ramp. Existing roadway width on the west side approach is sufficient to accommodate the left and right-turn lanes necessary to complete mitigation at this location. All legs of the intersection will prohibit parking. Signal modifications are also necessary.	None.	Not significant.
Main Street/Carson Street (PM Peak Hour)	5. Main Street/Carson Avenue - Approximately 21 feet of widening (north of Carson) is required to accommodate a southbound left and right-turn lane on the west side of Main Street. A total of 265 feet on the west side of Main will be sufficient for a right-turn pocket and transition area. Widening of Main Street, south of Carson, will require 12 additional feet of right-of-way. The addition of a northbound right-turn lane will require 12 feet of additional widening on the east side of Main, south of Carson, for approximately 250 feet. Twelve feet of	Right-of-way needs impact a small commercial building along with pump islands at the service station located on the northwest corner of the intersection.	Not significant. State law requires mitigation of displacement through payment of fair market value and relocation benefits.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	widening is necessary on the south side of Carson, east of Main, to facilitate an eastbound left-turn lane. This widening should include a 300 foot taper. Parking restrictions apply to all four legs of the intersection. Signal modifications are essential with the implementation of these improvements.		
Main Street/Torrance Boulevard (AM/PM Peak Hour)	6. Main Street/Torrance Boulevard - Add northbound left-turn and through lanes, and on the southbound approach an additional exclusive right-turn lane. Approximately 12 feet of widening together with restriping modification on the east side of Main (both north and south of Torrance Boulevard) are required to accommodate the additional lane. Striping changes are required on the westbound approach to accommodate a left-turn pocket. Convert the median on the eastbound approach to a left-turn lane and the number one eastbound through lane to a left/through combination lane by restriping. However, traffic signal modification to provide for an east/west split phase on Torrance, accompanied with protected lefts from Main Street, are also necessary. "No Stopping" will be required on all four directional approaches.	The additional 12 feet of right-of-way on the northeast corner will impact a vacant lot and some light industrial buildings north of the lot. Right-of-way needs on the southeast corner impact a second vacant lot and more light industrial businesses south of the lot.	Not significant. State law requires mitigation of displacement through payment of fair market value and relocation benefits.
Main Street/I-405 SB Ramp (PM Peak Hour)	7. Main Street/I-405 SB Ramp - An additional 11 feet of right-of-way is required along the east side of Main Street from the ramp to 250 feet south. Widening of the corner right-of-way radius to 70 feet is required and widening of the ramp by 12 feet is required at Main Street with 400 feet of transition to existing right-of-way.	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	Widening and right-of-way is required on the southeast corner in converting the northbound right-turn lane to a free right. Implementation of this improvement will require parking restrictions as well as signal modifications.		
Main Street/Del Amo Boulevard (AM/PM Peak Hour)	8. Main Street/Del Amo Boulevard - Improvements consist of a left-turn, through and right-turn lanes added to the northbound approach. The southbound approach will require the addition of two left-turn lanes and a through lane. Approximately 11 feet of widening on Main Street, north of Del Amo, and 22 feet of widening on the east side of Main, south of Del Amo, are required to facilitate the north and southbound lane additions. (Additional right-of-way is not required). Two eastbound left-turn lanes, a through lane and a right-turn lane is suggested. The westbound approach will require a through and a right-turn lane. Approximately 24 feet of widening on Del Amo, in the area of the east and westbound right-turn lane, is necessary. This includes a 350 foot transition area. Parking is restricted on all approaches. Implementation of these mitigation measures will require a traffic signal installation.	None.	Not significant.
Hamilton Avenue/I-110 SB Ramp (AM/PM Peak Hour)	9. Hamilton Avenue/I-110 SB Ramp - Convert the southbound through lane to a left-through combination lane. The improvement can be made within the existing street with some striping provisions. At buildout, the intersection warrants a signal operating under a north/south split phase. (This mitigation measure requires the approval of the County of Los Angeles.)	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
Hamilton Avenue/Del Amo Boulevard (AM/PM Peak Hour)	10. Hamilton Avenue/Del Amo Boulevard - Widen Hamilton (and increase right-of-way), south of Del Amo, by 12 feet, to facilitate a northbound right-turn lane. Convert a southbound through lane to a left-turn lane within the existing roadway width. Eastbound traffic through and right-turn lanes can be accommodated with 12 feet of widening on the south side of Del Amo, west of Hamilton. No widening is necessary on the westbound approach for the addition of a left-turn lane. (This mitigation measure requires the approval of the County of Los Angeles and the City of Los Angeles).	None.	Not significant.
Vermont Avenue/Torrance Boulevard (AM/PM Peak Hour)	11. Vermont Avenue/Torrance Boulevard - Add northbound right-turn lane within the existing street width. Add east and westbound through lanes. Eleven feet of widening on the south side of Torrance for 250 feet east and west of Vermont is necessary for the additional eastbound through lane. Approximately 11 feet of right-of-way and widening is necessary to accommodate the westbound through lane. In addition, traffic signal modifications and parking prohibitions are necessary with this improvement. (This mitigation measure requires the approval of the County of Los Angeles).	The frontage of 5 to 6 houses, the flood control channel and the Mobil station would be impacted along the south side of Torrance Boulevard. Widening along the east side of Vermont Avenue would impact a commercial building (Alpine Village Inn) and vacant lot. The landscape berm on the west side of the intersection will also be affected.	Not significant. State law requires mitigation of displacement through payment of fair market value and relocation benefits.
Vermont Avenue/Del Amo Boulevard (AM/PM Peak Hour)	12. Vermont Avenue/Del Amo Boulevard - Add a northbound right-turn lane and a southbound through and left-turn lanes. Eleven feet of widening is necessary on the east side of Vermont, south of Torrance Blvd for the right-turn lane. The southbound additions can be accommodated within the existing roadway width.	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	The eastbound through lane can be accommodated within the existing street width. However, 12 feet of widening on the north side of Del Amo, is required to facilitate the westbound left-turn lane and the through lane. (This mitigation measure requires the approval of the County of Los Angeles and the City of Los Angeles.)		
Cumulative Condition - Scenario with implementation of the Interim Mitigation (no left turn from eastbound Torrance Boulevard to northbound Figueroa Street.)			
Figueroa Street/Carson Street (AM/PM Peak Hour)	1. Figueroa Street/Carson Street - Add an eastbound and a westbound through lane supplemented with a westbound exclusive right-turn lane. Approximately 13 feet of widening and right-of-way would be required for the additional eastbound through lane. In addition, parking prohibition is essential on the south side of Carson Street, approximately 350 feet prior to the intersection, as well as after the intersection, to accommodate the third through lane. Sufficient width exists for the westbound through lane to be striped within existing street width. However, the addition of a westbound right-turn lane requires 12 feet of right-of-way and widening on Carson Street. Parking prohibition, for approximately 400 feet on either side of the intersection, is required along the north side of Carson Street. Traffic signal modifications are required to support the intersection widening.	These right-of-way needs would impact both the commercial properties and the Unocal Service Station pump islands located at the southwest corner of the intersection. Widening impacts commercial businesses on the northeast corner of the intersection. Additional impacts include reducing parking lot capacity on the northeast corner and the frontage setback area of the Carson Professional Center.	Not significant. State law requires mitigation of displacement through payment of fair market value and relocation benefits.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	An exclusive southbound right-turn lane is also necessary. The addition of a 175 foot right-turn pocket can be accommodated within the existing roadway width with some striping revisions. A 250 foot "No Stopping" prohibition is necessary on the west side of Figueroa Street just north of Carson Street.		
Figueroa Street/Torrance Boulevard (PM Peak Hour)	2. Figueroa Street/Torrance Boulevard - Mitigation consists of adding through lanes on the north and southbound approaches. Sufficient street width for the striping modifications required for the through lanes exists on the southbound approach.	None.	Not significant.
Figueroa Street/I-110 NB Ramp (AM/PM Peak Hour)	3. Figueroa Street/I-110 NB On-Ramp - Add northbound left-turn and dual southbound right-turn lanes. Striping modifications will accommodate the added northbound left-turn lane within the existing street width. Eighteen feet of widening is necessary within Caltrans right-of-way from north of the ramp for approximately 275 feet. Approximately 12 feet of widening is required to accommodate an exclusive eastbound right-turn lane. Parking restrictions are essential on all approaches. Traffic signal modifications are necessary. (This mitigation measure requires the approval of Caltrans.)	None.	Not significant.
Figueroa Street/Del Amo Boulevard (AM/PM Peak Hour)	4. Figueroa Street/Del Amo Boulevard - Add eastbound through lane and dual right-turn lanes. Twelve feet of widening and right-of-way is needed on the southwest corner to facilitate the dual right-turn lanes. Widening on Figueroa would be required to provide for merging. The westbound approach requires the addition of a third through lane and left-turn lane. Widening	Approximately 12 on-street parking spaces will be eliminated.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	and right-of-way for approximately 12 feet on the north side of Del Amo is required. Traffic signal modifications are also necessary. The addition of a northbound left-turn lane and southbound right-turn lane would require restriping within the existing roadway width to accommodate the lanes. This improvement requires parking prohibition on Del Amo Boulevard and Figueroa Street. (All widening will occur within existing Caltrans right-of-way).		
Main Street/Carson Street (PM Peak Hour)	5. Main Street/Carson Street - Add north and southbound left-turn lanes and a southbound right-turn pocket. Approximately 13 feet of additional right-of-way is required to accommodate the northbound left-turn pocket. Approximately 24 feet of additional right-of-way is required to accommodate the southbound left and right-turn lanes. Traffic signal modifications, as well as striping changes, would be essential at this locations. The southwest corner of the intersection would also require both striping and traffic signal modifications. Approximately 12 feet of widening and right-of-way is required to accommodate an exclusive westbound right-turn lane. This widening would occur on the north side of Carson, east of Main, for approximately 300 feet.	This widening would impact frontage of a commercial building associated with a service station and its pump islands located on the northwest corner of the intersection. Widening of Main Street would impact a Del Taco drive-thru driveway.	Not significant. State law requires mitigation of displacement through payment of fair market value and relocation benefits.
Main Street/Torrance Boulevard (AM/PM Peak Hour)	6. Main Street/Torrance Boulevard - Add a northbound left-turn lane by restriping within the existing street width. Mitigation on the southbound approach consists of an additional through lane and an exclusive right-turn lane. Approximately 12 feet of widening together with restriping modifications on the east side of Main (both north and south of Torrance Boulevard) are required to accommodate the two additional lanes.	Additional right-of-way on the northeast corner would impact a vacant lot and some light industrial buildings north of the lot. Right-of-way needs on the southeast corner impact a second vacant lot and more light industrial businesses south of the lot.	Not significant. State law requires mitigation of displacement through payment of fair market value and relocation benefits.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	Convert the number one eastbound through lane to a left/through combination lane and the median to a left-turn lane by restriping. However, traffic signal modification to provide for an east/west split phase on Torrance, accompanied with protected lefts from Main Street, are also necessary. "Stopping" would be prohibited on all four directional approaches.		
Main Street/I-405 SB Ramp (PM Peak Hour)	7. Main Street/I-405 SB Ramp - Widening and right-of-way is required on the southeast corner in converting the northbound right-turn lane to a free right. Implementation of this improvement would require parking restrictions as well as signal modifications.	Approximately 12 on-street parking spaces will be eliminated.	Not significant.
Main Street/Del Amo Boulevard (AM/PM Peak Hour)	8. Main Street/Del Amo Boulevard - Approximately 24 feet of additional pavement width is required on the north side of Del Amo Boulevard, west of Main Street, to accommodate dual eastbound left-turn lanes, a through lane and an exclusive right-turn lane. The addition of a westbound through lane and right-turn lane would require approximately 18 feet of widening. The addition of a southbound through lane and a right-turn lane would require 12 feet on the west side of Main Street. Installation of dual left-turn lanes requires 12 feet of widening, north of the existing improvement on the east side of Main Street for approximately 200 feet. Approximately 24 feet of widening is required to accommodate an additional left-turn, through and right-turn lanes on the northbound approach. Parking would be restricted on the west side of Main Street both north and south of Del Amo Boulevard.	None	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	Presently, the eastbound approach is closed. With the opening of Del Amo Boulevard and the development of the parcel east of the intersection, it may be assumed that by 1995, volumes would increase sufficiently to warrant signalization of the intersection. (Adequate right-of-way exists to accommodate these improvements).		
Hamilton Avenue/I-110 SB Ramp (AM/PM Peak Hour)	9. Hamilton Avenue/I-110 SB Ramp - Convert the northbound free right to an exclusive right-turn lane within the existing roadway width. The addition for southbound left-turn lane will require approximately 12 feet of widening and a transition area from 300 feet north of the intersection to 200 feet south. Conversion of the westbound right-turn lane to a free right can be accommodate within existing roadway width. Striping modifications are required on the north and westbound approaches. "No Parking" restrictions are necessary on all legs of the intersection. (This mitigation measure requires the approval of the County of Los Angeles.)	None.	Not significant.
Hamilton Avenue/Del Amo Boulevard (AM/PM Peak Hour)	10. Hamilton Avenue/Del Amo Boulevard - Approximately 12 feet of widening is required to accommodate a northbound free right-turn lane. Sufficient width exists for the addition of a southbound left-turn lane. Parking restrictions are required on Hamilton Boulevard. Mitigation continues with the addition of an eastbound through lane and right-turn lane. These lanes will require 12 feet of widening and 12 feet of additional right-of-way. An additional westbound left-turn lane can be accommodated within the existing roadway width with some striping	Approximately 8 on-street parking spaces will be eliminated on Del Amo Boulevard, west of Hamilton Avenue.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	modifications. "No Stopping" restrictions are required on Del Amo Boulevard on the approach to Hamilton. Anticipated traffic volumes with the construction of the Del Amo/I-405 overcrossing are expected to require signalization of this intersection. (This mitigation measure requires the approval of the County of Los Angeles and the City of Los Angeles.)		
Vermont Avenue/Torrance Boulevard (AM/PM Peak Hour)	11. Vermont Avenue/Torrance Boulevard -Add north and southbound through lanes by restriping within the existing roadway widths. However, "No Stopping" provisions are required on both sides of Vermont Avenue. Approximately 22 feet of right-of-way and widening are necessary for the addition of a westbound through lane and left-turn lane. In addition, traffic signal modifications are necessary with this improvement. (This mitigation measure requires the approval of the County of Los Angeles).	This widening will impact a commercial building (Alpine Village Inn) and the corner lot. These properties are located east of Vermont Avenue. The landscape berm on the west side of the intersection will also be affected. Another 12 feet of right-of-way is needed for a second eastbound left-turn pocket. These widening needs impact the south side of Torrance for 500 feet east and west of the intersection. Single-family properties would have to reduce their front lawn setback. Widening would affect the flood control channel on the southwest corner. Right-of-way impacts the pump island clearance for a Mobil Service Station and some existing single-family dwellings.	No significant. The right-of-way requirements for this mitigation measure would displace business uses and residential land. However, state law requires mitigation of such impacts through payment of fair market value and relocation benefits.
Vermont Avenue/Del Amo Boulevard (AM/PM Peak Hour)	12. Vermont Avenue/Del Amo Boulevard - The additional northbound right-turn lane and through lane will require 12 feet of widening and 12 feet of right-of-way for 250 feet. North and south of the intersection, approximately 300 feet of "No Stopping" area is required on both sides of Vermont Avenue. Traffic signal modifications are required at this location. The southbound approach will require a left-turn lane, through lane and right-turn lane. Eighteen feet of widening and 18 feet of right-of-way are necessary on the west side of Vermont, north of Del Amo for 300 feet. Another 12 feet plus a 300-foot transition are required south of Del	None.	Not significant.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
	Amo, on the west side of Vermont, to facilitate the southbound lane additions. The eastbound approach requires a through lane and right-turn lane. This includes six feet of widening on the south side of Del Amo, west of Vermont. Approximately 12 feet of widening is necessary on the east side of Del Amo for an additional left-turn lane and through lane. (This mitigation measure requires the approval of Los Angeles County and the City of Los Angeles.)		
Year 2010 Freeway (I-110 and I-405) Conditions Project traffic on the I-110 in the vicinity of Torrance is calculated to be only 0.85% of the anticipated 2010 cumulative traffic. Project generated traffic is expected to account for 1.28% of the anticipated 2010 cumulative traffic on the I-405 Freeway in the study area. The freeway segments on the southbound I-110 Freeway in the vicinity of Torrance Boulevard between Carson Street and Del Amo Boulevard, prior to the addition of project traffic, are expected to continue to operate at LOS D or better during peak hours. However, the northbound direction at this location is expected to deteriorate to LOS E during the PM peak hour. All freeway segments on the I-110 Freeway are anticipated to operate at LOS E or LOS F during the peak periods in the Cumulative Without Project condition. The addition of project generated traffic, 6.2 percent of total traffic, is expected to increase the V/C (volume	No project specific mitigation measures are identified for this impact which is being addressed by the Congestion Management Plan.	None.	Significant. The change in PM peak hour LOS from E to F on the I-110, in the 2010 Cumulative condition, due to Golden Eagle Center project traffic is considered a significant effect on the freeway system.

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
to capacity) ratio by 0.06 or less during peak hours at each freeway segment evaluated. Results indicate that, with the project, a change in LOS from E to F (see the traffic section for an explanation of levels of service) will occur in the vicinity of Torrance Boulevard, between Carson Street and Del Amo Boulevard, on the northbound Harbor Freeway during the PM peak hour.			
Freeway Ramps			
The modeling indicates that presently all ramps operate at LOS A. Ramps are expected to operate at acceptable LOS B or better in the Year 2010 without the addition of project traffic. The addition of Golden Eagle Center traffic is estimated to cause a V/C increase of 0.015 or less at the study ramp locations. The addition of project traffic would not have a significant impact on the freeway ramps in the study area. All ramps would remain operating at LOS B or better with the addition of Golden Eagle Center traffic.	Based on assumptions as to Caltrans meter operation and ramp capacity, no mitigation measures were identified.	None.	Not significant.
NOISE	None.	None.	Not significant.
The noise analysis did not identify an audible increase in cumulative noise levels.			

Impacts	Mitigation Measures	Impacts of Mitigation Measures	Level of Significance After Mitigation
PUBLIC SERVICES & UTILITIES Significant cumulative impacts on public services and utilities were not identified.	None.	None.	Not significant.
AIR QUALITY Carbon monoxide levels are expected to exceed the 8-hour state and federal standards when cumulative conditions with or without the project. Cumulative emission levels exceed the criteria of significance suggested by the South Coast Air Quality Management District.	Mitigation measures similar to those identified for this project should be imposed on other projects in the area.	None.	Significant and unavoidable.

2 PROJECT SETTING

2.1 LOCATION

Section 15125 of the CEQA Guidelines requires that the EIR include a description of the physical environment in the vicinity of the project from a regional and local perspective. Since knowledge of the regional setting is important to the assessment of environmental impacts, special emphasis is placed on regional and local land uses, environmental conditions, geographic features, and significant structures and/or landmarks. The detailed description of local land use and planning is found in Section 4.1, Land Use. The EIR shall also address any inconsistencies between the proposed project and applicable general plans, and regional plans.

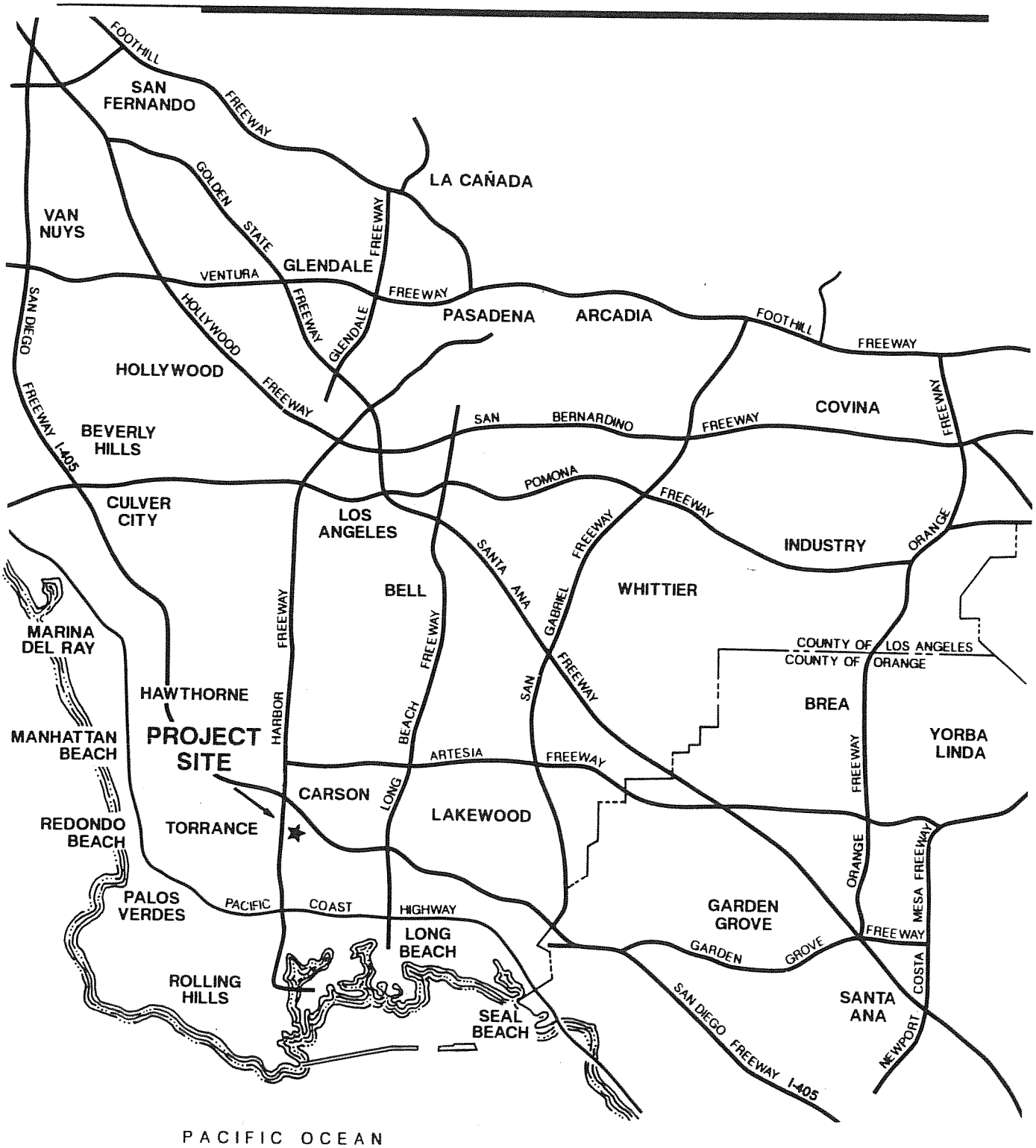
The Golden Eagle Center Specific Plan project site is located at the western edge of the City of Carson, which is in the southern portion of Los Angeles County as shown in Figure 1, the Regional Location Map. The County of Los Angeles and the Cities of Compton, Long Beach and Los Angeles generally surround the City of Carson.

The 76-acre project site is approximately ¼ mile from the San Diego (I-405) Freeway and adjacent to the Harbor (I-110) Freeway. Downtown Los Angeles is approximately 14 miles to the northeast, and the Los Angeles Harbor is about 10 miles to the southeast. Los Angeles International (LAX) Airport is approximately 15 miles to the northwest, and the Long Beach Airport is approximately 10 miles to the northeast.

Access to the project area is from the I-110 Freeway, using the Torrance Boulevard exit. The site, which is currently vacant, is generally bounded by Torrance Boulevard to the north, Main Street to the east, 212 Street to the South and Figueroa Street to the west (refer to Figure 2, Vicinity Map). About 10 acres in the northeast portion of the site were used for a landfill. An asphalt cap covers the Class III landfill,[1] and a methane gas collection system is located in that portion of the site. The site is zoned for ML (Manufacturing, Light) and ML-ORL (Manufacturing Light, Organic Refuse Landfill) and is within Carson Redevelopment Project No. 1. Existing uses adjacent to the project site include

[1] The Final EIR for the Amendment to Redevelopment Project Area 1, City of Carson, California, July 9 1984, Table 3 at page 21, shows that Gardena Valley Landfill No. 5 was operated at this site as a Class II Landfill that received decomposable substances. This landfill also received some inert non-decomposable materials, but as indicated by the landfill's generation of methane, there is decomposing material present. This type of landfill has subsequently been reclassified as Class III; hence, the use of "Class III" to describe this site throughout this document.

REGIONAL LOCATION MAP

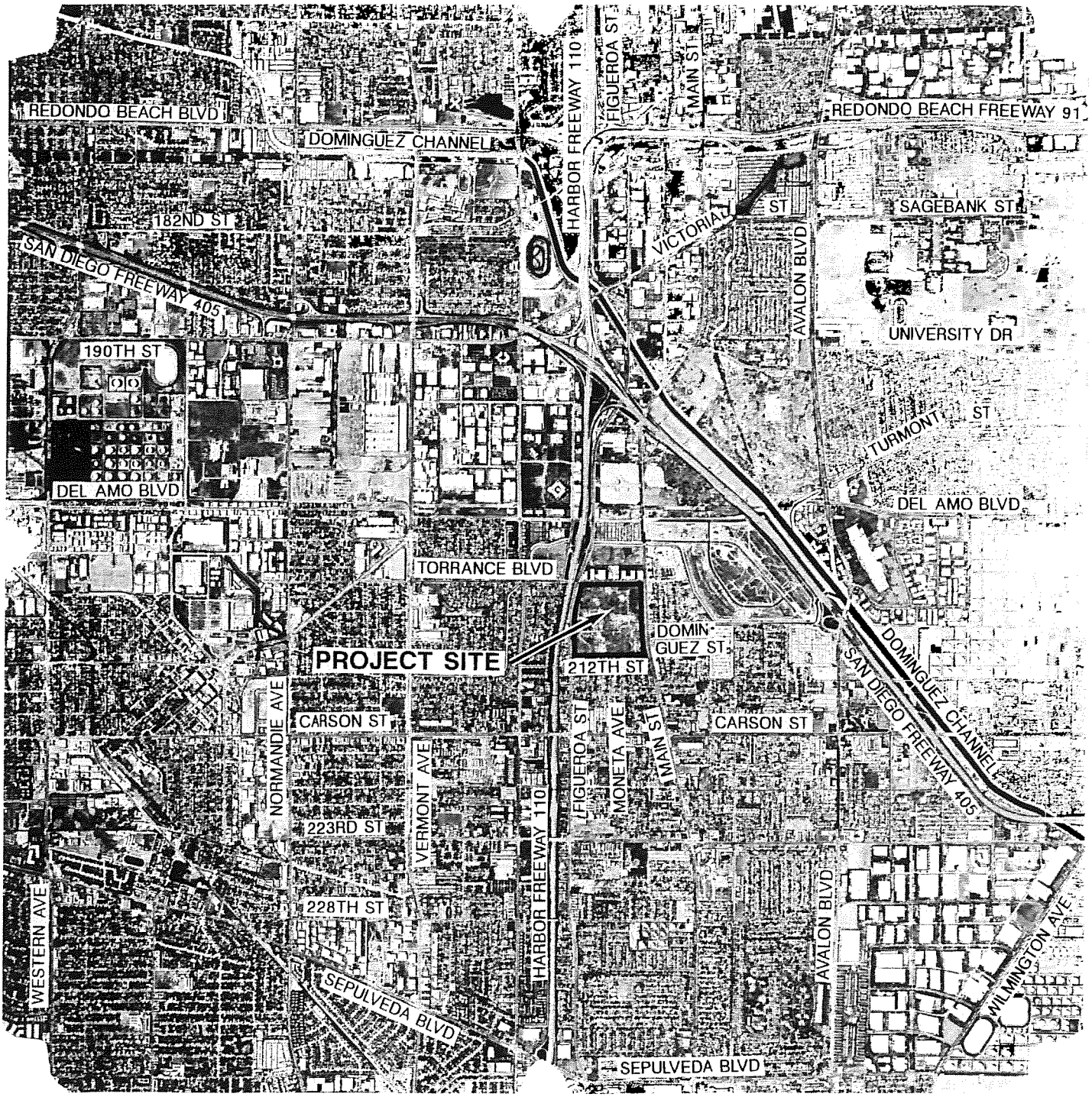


NOT TO SCALE

THE PLANNING CENTER

Golden Eagle Center Specific Plan EIR
Figure 1

VICINITY MAP



NOT TO SCALE

THE PLANNING CENTER

Golden Eagle Center Specific Plan EIR
Figure 2
Page 44

residential, retail/service, commercial, and industrial. The site is located at the southern boundary of the City of Carson Redevelopment Planning Area 1-D, where heavy manufacturing uses are being replaced with limited manufacturingand business parks. The Golden Eagle Refining Company refinery was the previous site occupant.

2.2 CHARACTERISTICS OF THE SITE

2.2.1 Site History

For 62 years (from 1922 to 1984) the proposed project site was developed and operated for petroleum refinery related uses. Between 1922-1945, refinery-related uses occupied the site, including 13 above-ground petroleum storage tanks. In 1945 a four thousand barrels per day petroleum refinery was constructed at the site by Sunset Oil, with additional equipment added in 1948 that increased production of kerosene, fuel oils and gasoline to eight thousand barrels per day. In 1958 the site was purchased by Golden Eagle Refining Company Inc. (GERC) who operated the refinery until it closed. From 1946 to 1970, the southern portion of the site was used to landfarm oily sludges from storage tanks. Landfarming was the practice of spreading oil tank sludge on the ground, allowing it to dry and then discing it into the soil. In essence this was primitive form of air-stripping and bioremediation[2]. Between 1962 and 1963, a 10-acre portion in the northeast corner of the site was used as a landfill for household and freeway construction waste. In 1965, the refinery replaced production of gasoline with production of aviation fuels. The refinery was closed in November 1984 and refinery facilities were demolished in 1985. Two underground storage tanks were removed at that time under supervision of the Los Angeles County Fire Department.

Immediately prior to the removal of the refinery in 1985 the site contained two tank farms, one primary tank farm with large tanks and another area with smaller tanks, a 10-acre landfill area, boiler areas, process areas and facilities, and a land

[2] Air stripping refers to methods for speeding the evaporation of volatile materials. Bioremediation as practiced at this site refers to augmenting the growth conditions for naturally occurring soil micro-organisms with the ability to metabolize hydrocarbons. Such micro-organisms are naturally occurring where hydrocarbons are frequently available; the hydrocarbons serve as an energy source for microbial growth. When growth conditions are right the growth of microorganisms in the soil can significantly reduce concentrations of hydrocarbons allowing on-site treatment for soil contamination. Using soil conditioning techniques to control variables such as temperature, moisture, oxygenation and nutrients, conditions favorable to microbial growth and hydrocarbon degradation can be created.

farm area of about 20 acres as illustrated in Figure 3, Refinery Land Uses[3]. In 1985, site investigations revealed some soil contamination on-site. A landfill gas mitigation/emissions migration control system was installed in 1988. Groundwater beneath portions of the site was found to contain low levels of volatile organic compounds such as: benzene, ethylbenzene, toluene, xylene, and vinyl chloride. In addition, metals including lead, chromium and zinc have been detected in low levels in groundwater beneath the site (perched aquifer, no drinking water). Several sources of groundwater pollution in the area are being studied and remediated under the supervision of the Regional Water Quality Control Board (Board) and the State of California Health and Welfare Agency, Department of Health Services, Toxic Substance Control Program, now known as the State of California Environmental Protection Agency, Department of Toxic Substance Control (Department). There are a number of State Bond Expenditure Plan sites within one half mile of the GERC site including the Gardena Valley 1 and 2 Landfill, the Cal Compact Landfill and the Del Amo site. The Gardena Valley 1 and 2 site is located close to the GERC site just north of the strip commercial buildings (e.g. REI Inc.) located on the north side of Torrance Boulevard across from the GERC site.

Approximately 180 cubic yards of lead contaminated soil were removed from the site in October 1986. Several areas were excavated and excavated soil was treated by bioremediation, mainly in the large tank farm area in 1986. These earlier efforts were judged to be incomplete by the Department and additional site investigation and cleanup effort was required by the Department. Additional information is contained in Consent Order 89/90-009, between the Golden Eagle Refining Company and the State of California Health and Welfare Agency, Department of Health Services, Toxic Substance Control Program (see Appendix F in Volume II of this EIR).

From 1985 to 1991 the site was vacant except for site investigation and limited site remediation and by 1991 the site appeared to a passerby as a large weedy area surrounded by a chain link fence. Depressions in the earth outlined former tank locations and remnants of asphalt paving could be seen. The landfill appeared as an unbroken 10 acre asphalt paved area with a small one story building at the northeast corner housing the landfill emission control system. Figure 4 gives the orientation of site photographs and site photos are shown in Figures 5-8 illustrating the appearance of the abandoned site prior to remediation.

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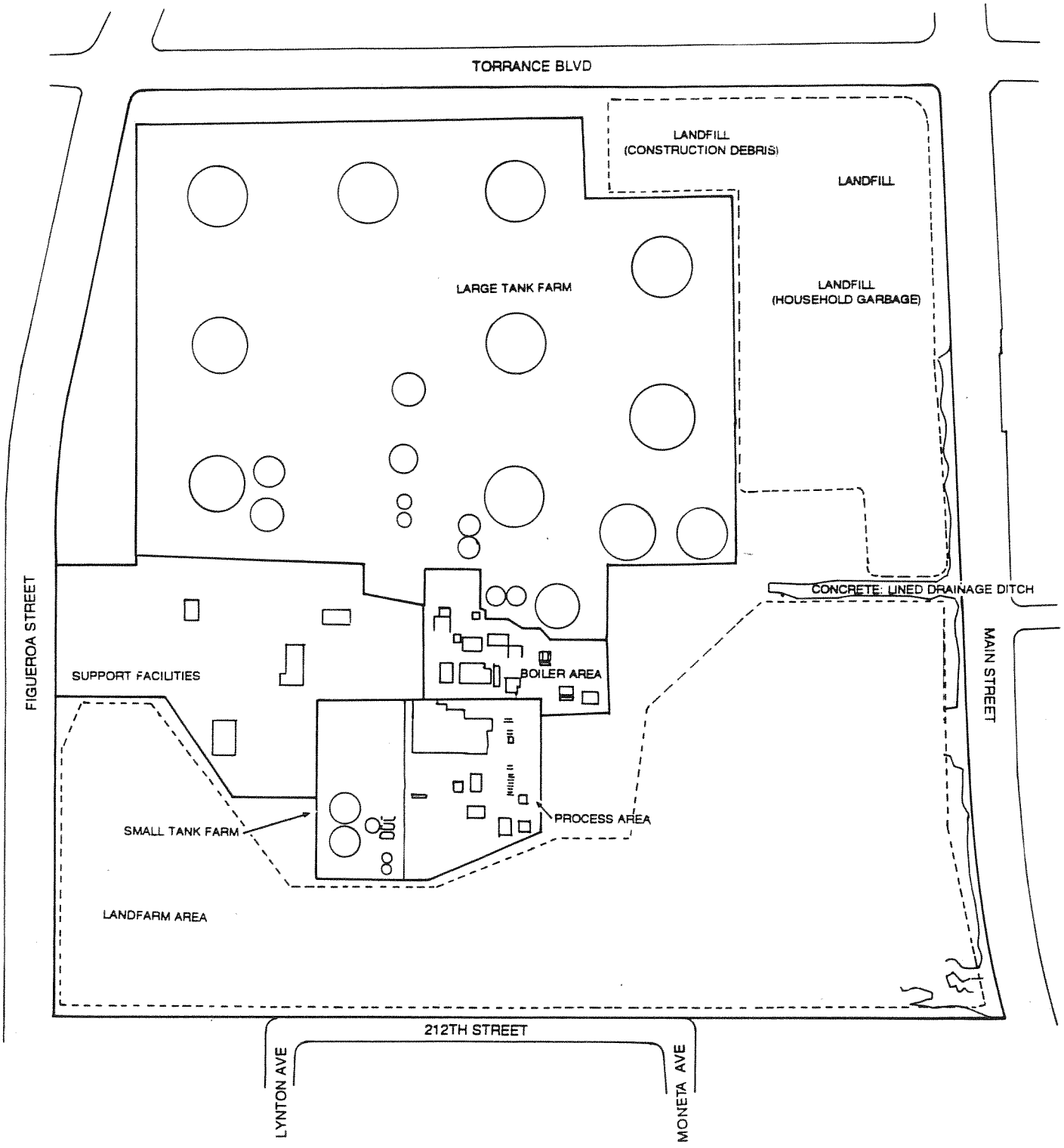
[3] Historical uses of the site from Draft Remedial Investigation (RI) report for Golden Eagle Refining Company, Inc., Carson, California, SCS Engineers, May 1990, Golden Eagle Refining Site Fact Sheet No. 1, Department of Toxic Substance Control February 1990, and Revised Remedial Investigation Soils and Groundwater Investigation Plan, Earth Technology Corporation, November 12, 1991.

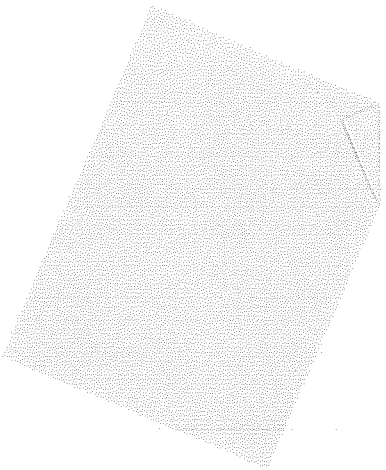
REFINERY LAND USES



SCALE: 1"=133.7'

THE PLANNING CENTER

Golden Eagle Center Specific Plan EIR
Figure 3



As noted above, about 10 acres in the northeast portion of the site were used for a landfill for construction debris and household waste. An asphalt cap covers the Class III landfill, and a methane gas collection system is located at the northeast corner of the site. The gas collection system is designed to control release of methane emissions associated with past landfill activities, as required by the Board. The South Coast Air Quality Management District (SCAQMD) issued apermit for the gas collection system at the GERC site. Portions of the project site are located within 1,000 feet of buried organic material. A problem associated with locating next to a landfill is the generation of methane gas. Methane gas may migrate off-site to adjacent areas including the proposed project site. This gas could accumulate underground in enclosed spaces in buildings, potentially creating odors, toxic gases, fire or explosions. For this reason, the Los Angeles County Uniform Building Code requires that landfill gas monitoring and protection measures be implemented in any structures located within 1,000 feet of an organic refuse landfill. Protection from migrating landfill gases typically consists of design and installation of impermeable membranes sandwiched between layers of sand beneath new structures. Gas monitoring probes may be required above and below the membrane. There is already an active gas collection system at the GERC site. At some sites the use of positive pressure air curtains to block migrating subsurface gases may be allowed.

2.2.2 Ongoing Cleanup

On February 25, 1985 the Board's Los Angeles Region issued Order No. 85-17 to GERC requiring a site assessment to detect and characterize the unsaturated zone and groundwater contamination under the former refinery site. GERC satisfactorily completed the site assessment to comply with Board Order 85-17 in February 1987. Site investigations of possible hazardous waste contamination were conducted and preliminary assessments indicated the presence of soil and groundwater contamination. Contaminants included organic volatile chemicals, semi-volatile organic chemicals and heavy metals, and were indicative of spills from refinery operations, although there may also be off-site sources for some of the site's groundwater contamination. The volatile organic chemicals were detected in the upper level aquifers that are not used as sources of drinking water.

In February 1987 the GERC site was listed on the California Expenditure Plan for the Hazardous Substance Cleanup Bond Act of 1984, commonly referred to as the California Superfund list or the Bond Expenditure List (BEP), this list is now referred to as the Action List by the Department. Also in 1987 the Board issued Order No. 87-12 requiring a groundwater monitoring program (with thirteen wells) for the site and the capping of the landfill site. In March 1990 GERC entered into Consent Order 89/90-009 with the Department. This order required GERC to