V. Alternatives to the Proposed Project

V. ALTERNATIVES TO THE PROPOSED PROJECT

A. INTRODUCTION

The State CEQA Guidelines (Section 15126.6(a)) require an EIR to: (1) describe a range of reasonable alternatives to the proposed project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project; and (2) evaluate the comparative merits of the Alternatives.[178] The State CEQA Guidelines (Section 15126.6(b)) direct that the analysis of alternatives be limited to alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly.

The selection and discussion of the Alternatives is intended to foster meaningful public participation and informed decision-making. An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote or speculative. The State CEQA Guidelines (Section 15126.6(e)) also require the analysis of a "No Project" alternative and the identification of the "Environmentally Superior Alternative." If the environmentally superior alternative is the No Project alternative, then the EIR is required to identify an environmentally superior alternative among the other alternatives.

In addition, the State CEQA Guidelines (Section 15126.6(c)) require an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Accordingly, several alternatives to the proposed Project that might avoid or substantially lessen the Project's impacts were considered. Of the Alternatives that were considered, four were selected for analysis.

B. BASIC OBJECTIVES OF THE PROPOSED PROJECT

Section II, Project Description, sets forth the following as the basic objectives for the proposed Project:

[178] *The CEQA guidelines regarding the consideration and discussion of alternatives to a proposed project, as summarized here, are found in Section 15126.6 of the State CEQA Guidelines.*

- Achieve productive reuse of a large brownfield site by approving a Project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project site.

- Promote the economic well being of the Redevelopment Project Area by encouraging the diversification and development of its economic base, and assist in creating both short and long term employment opportunities for the residents of the Redevelopment Project Area and the City.

- Maximize shopping and entertainment opportunities to serve the population and maintain a sustainable balance of residential and non-residential uses by approving a mixed use Project that includes entertainment, retail shopping, restaurants, and residential units.

- Provide a diversity of both short term and long term employment opportunities for local residents by approving a Project that will generate substantial construction work opportunities and long-term jobs in the commercial and hospitality industries.

- Improve the housing stock, including affordable housing, by approving a Project that includes a substantial residential component with rental and for sale units.

- Provide a signature/gateway Project that contributes to the creation of a vibrant urban core for the City, taking advantage of the site's proximity to the San Diego Freeway.

C. ALTERNATIVES SELECTED FOR THE ANALYSIS

As required by the CEQA Guidelines, this section of the Draft EIR describes several reasonable alternatives to the Project, and evaluates the environmental impacts associated with each alternative. This section focuses on alternatives that might potentially avoid or reduce the significant adverse impacts of the Project. Four alternative project scenarios, including an alternative use, a reduced density, and an alternative location scenario, have been developed and analyzed to compare the relative impacts of these alternatives to the Project. The analysis of alternatives begins with the "No Project" Alternative. Based on comparative evaluations, estimations are made as to the environmental impacts of each alternative in contrast to those of the Project, and whether each alternative could attain the Applicant's basic Project objectives. The Alternatives to the Project are summarized in Table 74 on page 540, and are as follows:

Table 74

Alternatives Land Use Comparison

Type of Development	Proposed Project	Alternative 1 No Project—No Development	Alternative 2 Development per General Plan	Alternative 3 Reduced Project (25 Percent Reduction)	Alternative 4 Alternative Site
Residential	1,550 units	0 units	0 units	1,162 units	1,550 units
Neighborhood Commercial	130,000 sq.ft.	0 sq.ft.	81,245 sq.ft.	97,500 sq.ft.	130,000 sq.ft.
Restaurant	81,125sq.ft.	0 sq.ft.	60,060 sq.ft.	60,844 sq.ft.	81,125 sq.ft.
Hotel	300 rooms	0 sq.ft.	0 sq.ft.	225 rooms	300 rooms
	200,000 sq.ft.			150,000 sq.ft.	200,000 sq.ft.
Commercial Recreation/ Entertainment	214,000 sq.ft.	0 sq.ft.	0 sq.ft.	160,500 sq.ft.	214,000 sq.ft.
Regional Commercial	1,370,000 sq.ft.	0 sq.ft.	856,220 sq.ft.	1,027,500sq.ft.	1,370,000 sq.ft.
Light Industrial	0 sq.ft.	0 sq.ft.	997,600 sq.ft.	0 sq.ft.	0 sq.ft.
Total Non-residential Floor Area	1,995,125 sq.ft.	0 sq.ft.	1,995,125 sq.ft.	1,496,344 sq.ft.	1,995,125 sq.ft.

Source: PCR Services Corporation

Alternative 1: No Project

The No Project alternative assumes that the Project would not be developed and that the property would remain in its existing physical condition. Although some pressure for, and interest in, reuse of the site exists, no project would be approved in the foreseeable future. Under Alternative 1, the parcel north of Del Amo Boulevard would remain vacant and existing fill and debris would not be removed. Remediation of the existing brownfield portion of the Project site south of Del Amo Boulevard, including the capping of existing waste materials at the former landfill site, would not occur. The evaluation of the No Project alternative addresses the requirements of Section 15126.6 (3)(1) of the CEQA Guidelines.

Alternative 2: Mixed-Use Business Park

Under Alternative 2, the Project would be developed with uses that are in keeping with the Mixed-Use-Business Park designation for the Project site set forth in the City's 2004 General Plan Update. This land use category is intended to provide for the least intensive industrial uses, as well as commercial development. The land use category is envisioned to provide for a variety of businesses and professional offices, services and associated business as well as retail activities in an attractive environment. In lieu of a Specific Plan, development would be subject to the requirements of the ML zone and the site's existing Design Overlay and Organic Refuse Landfill Overlay designations. The total floor area would be equivalent to the commercial floor area

proposed by the Project (i.e., 1,995,125 square feet). It is assumed that commercial and light industrial/business park floor area would be equally divided. The overall FAR would be approximately 0.27, which would occur in a series of single-story buildings. Remediation of the former landfill site, including capping of waste materials and coverage of the former landfill site by impervious concrete foundations, parking lots, and streets would be the same as under the Project. A comparison between Alternative 2's mix of land uses and other Project alternatives is presented in Table 74.

Alternative 3: Reduced Project

The Reduced Density Alternative, Alternative 3, assumes that the scale of the Project would be reduced through a 25 percent reduction in all proposed land uses (i.e., residential units and commercial floor area). The proportionate mix of commercial and residential uses would be the same as under the Project; however, maximum development would consist of 1,162 residential units and commercial floor area would consist of 1,496,343 square feet. The reduction in development under Alternative 3 could be achieved through fewer structures (smaller building footprint) or reduced building heights. The former landfill site would be capped and completely covered by impermeable foundation pads, parking lots, and streets, as was the case with the Project. A comparison between Alternative 3's mix of land uses and other Project alternatives is contained in Table 74.

Alternative 4: Alternative Location

Alternative 4 assumes that the Project would be moved to another location and no development would occur at the Project site. The purpose of the evaluation of an Alternative Site is to ascertain if changing the location of a project to another site would reduce or eliminate any potentially significant environmental impacts that may be unique to the Project's location, and whether relocation could potentially eliminate potential Project impacts. For the purposes of this analysis, it is assumed that Alternative 4 would be constructed according to the Project's intensity under a Specific Plan comparable to that prepared for the Project. Specific criteria in determining the acceptability of an alternative site are location within the same jurisdiction and adequate size to accommodate the scope of the Project. In accordance with these criteria, the Shell refinery site and tank farm located approximately one mile east of the proposed Project site is selected for the purposes of analyzing Project development at an alternative location. The Alternative Location site is an approximate 280-acre parcel, located between Del Amo Boulevard and Dominguez Street, just west of Wilmington Avenue. The evaluation of this Alternative complies with the requirements of CEQA Section 15126.6(f)(2). A comparison between Alternative 4 and other Project alternatives is contained in Table 74.

D. ALTERNATIVES CONSIDERED BUT REJECTED

The State CEQA Guidelines, Section 15126.6(c) state that an EIR shall consider a reasonable range of alternatives to the proposed project and that the EIR should briefly describe the rationale for selecting the Alternatives to be discussed. As described in CEQA Guidelines Section 15126.6(c), the reasons for rejecting alternatives from detailed consideration include the following: (i) failure to meet most of the basic project objectives; (ii) infeasibility; or (iii) inability to avoid significant environmental impacts.

Per CEQA Guidelines Section 15126.6(c), the analysis of alternatives started with an identification of alternatives to the Project that had the potential to reduce or eliminate the Project's significant environmental impacts. The Alternatives identified were then evaluated in terms of the three CEQA criteria identified above to determine those alternatives that would be analyzed further within the Draft EIR and those alternatives that would be rejected from further review. Two alternatives that were identified but subsequently rejected from further analysis include: (a) the use of the Project site as a public park; and (b) the development of the Project site with heavy industrial uses. The use of the Project site as a public park and recreational facility was rejected as infeasible, since the majority of the Project site must be capped and covered by a 100 percent impermeable surface prior to any type of development or occupation. Such an impermeable ground surface could not be feasibly re-vegetated or landscaped to meet the requirements of a public park. If the impermeable cover were not installed, use of the Project site would be infeasible since future users would be potentially exposed to underlying contaminated wastes, in excess of state and federal standards.

Development of the Project site for heavy industrial uses was also rejected as infeasible, since the City has an abundance of industrial land. Furthermore, this Alternative land use would not accommodate the City's forecasted population growth or meet the City's need to diversify its land use mix to provide both housing and services in the form of residential and commercial land uses.

E. ANALYSIS METHODOLOGY

Each of the four alternatives is evaluated in sequence below. Each alternative is evaluated in less detail than the Project, as presented in Section IV, Environmental Impact Analysis, of the Draft EIR, but in sufficient detail to determine whether environmental impacts of the Alternative after mitigation would be greater, similar, or less than the corresponding impacts of the Project, and in sufficient detail to determine whether Project objectives are substantially attained. To determine the comparative impacts, the process described below has been followed:

- An evaluation of the environmental impacts anticipated for each alternative in comparison to the proposed Project, including the ability of each alternative to avoid or substantially lessen any significant environmental impacts associated with the proposed Project. Where the impacts of the Alternative and the proposed Project would be roughly equivalent, the comparative impact is said to be "similar";

- If applicable, a description of the impacts of each alternative that are not impacts of the proposed Project; and

- A statement of whether each alternative is feasible and meets the basic objectives of the proposed Project.

F. EVALUATION OF THE ALTERNATIVES

1. Alternative 1: No Project

a. Introduction

This section presents an environmental analysis of a No Project alternative, in which the Project would not be developed and the property would remain in its existing physical condition. Although some pressure for and interest in reuse of the site exists, no development of the Project site would be approved in the foreseeable future. Under Alternative 1, the parcel north of Del Amo Boulevard would remain vacant and existing fill and debris would not be removed. Remediation of the existing brownfield portion of the Project site south of Del Amo Boulevard, including capping of existing waste materials at the former landfill site, would not occur. A comparison between Alternative 1 and the Project is presented in Table 75 on page 544. A summary of comparative impacts is presented at the end of the Alternatives analysis in Table 83 on page 596.

b. Analysis of Alternative

(1) Land Use

Under the No Project Alternative, the Project site would not be developed, and the currently proposed program for remediating the site would not be implemented. This would result in no changes to the existing land use relationships. The site would remain available for another Project at some future time. Site remediation would be postponed subject to development of an alternative implementation mechanism.

Table 75

Comparison of Alternative 1 Components: No Project

Land Use	Proposed Project	No Project	Numerical Difference	Percent Change
Residential	1,550 units	0 units	-1,550 units	-100
Neighborhood Commercial	130,000 sq.ft.	0 sq.ft.	-130,000 sq.ft.	-100
Restaurant	81,125 sq.ft.	0 sq.ft.	-81,125 sq.ft.	-100
Hotel	300 rooms	0 sq.ft.	-300 rooms	-100
	200,000 sq.ft.		-200,000 sq.ft.	
Commercial Recreation/ Entertainment	214,000 sq.ft.	0 sq.ft.	-214,000 sq.ft.	-100
Regional Commercial	1,370,000 sq. ft.	0 sq.ft.	-1,370,000 sq.ft.	-100
Total Non-Residential	1,995,125 sq.ft.	0 sq.ft.	-1,995,125 sq.ft.	-100

Source: PCR Services Corporation, August 2005

(a) Compatibility with Land Use Plans, Polices and Regulations

No development at this time would have no direct effect on the regulatory framework. At the same time it would not support the following: (1) remediation and productive reuse of a brownfield site; (2) enhancing the City's economic base; (3) the addition of new employment opportunities and new housing units in the City; and most notably (4) the development of a signature project that would maximize the advantages of the site's location and provide an enhanced urban center within the central portion of the City. As this Alternative would not achieve these results, it would not implement the existing land use plans, policies and regulations intended to prevent an impact to the environment. However, it would not preclude their future implementation and therefore would not cause a significant impact. The Proposed Project's impacts regarding the regulatory framework would also be less than significant. Impacts on the regulatory framework would be greater.

(b) Existing Land Use Patterns

This Alternative would have no impact on the existing land use relationships in the Project vicinity, and impact would be less than with the proposed Project. The No Project Alternative, as is the case with the proposed Project, would not result in the division, disruption or isolation of an existing established community or neighborhood. Thus, the impacts of Alternative 1 with regard to the land use relationships would be less than significant, as is the case with the proposed Project.

(c) Sustainability of Existing Retail Uses

With no development, this Alternative would not adversely affect the viability of retail uses within the market area, nor contribute to long-term physical disrepair to such buildings. Therefore, the impacts on the sustainability of existing uses would be less than under the proposed Project. As is the case with the proposed Project, impacts on the sustainability of existing retail uses would be less than significant.

(2) Visual Resources

(a) Aesthetic Character

(i) Construction

The No Project alternative would include no construction activities, and therefore no construction impacts on the aesthetic character of the Project area. Impacts would be less than with the proposed Project. However, the Project's construction activities would have a less than significant impact due to the limited off-site views of activities, the common appearance of construction activities in an urban setting, and the lack of contrast of construction activities with any off-site valued resources. The Project's less than significant aesthetic impact associated with Project construction would be less under the No Project alternative.

(ii) Operation

Under the No Project alternative, existing aesthetic conditions on the Project site would not change. This would preclude both potential enhancement of the somewhat degraded appearance of the site, and also avoid all of the impacts associated with the proposed Project. In particular, the No Project alternative would avoid the Project's significant and unavoidable impact on the valued resource associated with the Project site's large expanse of undeveloped land. Other avoided impacts of the proposed Project are less than significant. The Project would be less than significant in relation to existing off-site buildings, unless on-site building heights along the southern/southwestern edge were developed within the range allowed by the Specific Plan, but substantially taller than buildings shown in the Conceptual Plan or if signage on the eastern/I-405 Project edge were not consistent with the Conceptual Plan. The Project includes mitigation measures to reduce these potentially significant impacts to less than significant levels. The Project would also have a less than significant impact on aesthetics due to Project induced vacancies at off-site locations that could cause a degraded appearance to vacant buildings. This less than significant impact of the Project would also be avoided. Therefore, the aesthetic character impact of the No Project Alternative would be less than under the Project.

(b) View Resources

The No Project alternative would not change any of the views over or into the Project site. The Project site is in a degraded state, and is not considered a view resource. Views over the Project site are limited due to intervening development, the flat terrain in the surrounding areas, and the relative height of the berm comprising the Project site. In addition, the Project vicinity does not contain notable features that would be considered view resources. Since no view resources are identified on the Project site or in the area, the impact of the Project in relation to view resources would be less than significant. Although the Project would have less than significant view impacts, the No Project alternative would cause no change or impact of any type on existing views. Therefore, the impact of the No Project alternative on view resources would be less than under the Project.

(c) Shade/Shadow

Under the No Project alternative, no buildings would be developed and no shade impacts would occur. In comparison, the Project's shade/shadow impacts would be less than significant, with the maximum off-site shading on nearby residential development occurring during winter mornings and not exceeding the three-hour significance threshold. However, since the No Project alternative would cause no shading impacts of any type, the impact of the No Project alternative on shade/shadow would be less than under the Project.

(d) Artificial Light

The Project site is currently vacant and generates no artificial light. Under the No Project alternative, no buildings, parking lots, or signs would be developed that would generate artificial light. The Project would add new lighting and, although such lighting would be typical of ambient urban lighting, existing light levels would increase. Although the Project's artificial light impacts would be reduced to less than significance through light control methods, shielding, limitation of pole heights, and implementation of the City's light intensity regulations, under the No Project alternative, no lighting impacts of any type would occur. Therefore, the impact of the No Project alternative relative to artificial lighting would be less than under the Project.

(3) Traffic, Circulation, and Parking

Under the No Project alternative, no traffic associated with development of the Project site would occur. The No Project alternative would reduce the Project's potentially significant impact on 10 study intersections to less than significant levels. However, future traffic under the No Project alternative would continue to increase due to the development of the identified related

projects and regional growth. In 2010 without the Project, six of the 27 study intersections are anticipated to operate at LOS E or F during the A.M. or P.M., or both, peak hours.

Under the No Project alternative, intersection improvements at Del Amo Boulevard/Stamps Drive and Lenardo Drive/Main Street would not go forward. In addition, the intersection of Lenardo Drive with the I-405/Avalon Boulevard interchange would not be needed or developed. No new parking would be required or provided.

(4) Hazards and Hazardous Materials

Under the No Project alternative, the condition of the Project site would not change. The 157-acre landfill underlying Development Districts 1 and 2 would remain uncapped. The No Project alternative would not likely result in the implementation of the Remedial Action Plans (RAPs) for the Upper and Lower Operable Units of the former landfill site, which have been approved by the Department of Toxic Substances Control (DTSC). The remediation would not occur since the current property owner does not have the funds to implement the RAPs. While the State has pursued other responsible parties and created a remediation fund from the proceeds of lawsuits against those parties, the fund is not sufficient to complete the remediation. The No Project alternative would not generate the additional funds that are necessary to implement the remediation. As such, the No Project alternative would not result in the remediation of the site. As has occurred over the years, periodic maintenance may be necessary to address landfill related conditions, such as potential emission of methane gas. The groundwater contamination in the Upper Operable Unit would not be remediated and could continue to migrate. Because of the lack of implementation of the Upper Operable Unit RAP, the No Project alternative could result in hazards that would not occur with the Project. With regard to the development of District 3, development north of Del Amo would not occur under the No Project alternative. The recommended additional Phase II activities of deeper soil-vapor sampling would not occur to further evaluate potential vapor intrusion into the soil. Overall, potential hazards would be greater under the No Project alternative compared with the Project primarily due to the lack of implementation of the approved RAPs.

(5) Geology/Soils

Under the No Project alternative, the condition of the Project site, including the presence of existing stockpiles of unconsolidated fill in the parcels north and south of Del Amo Boulevard would not change. No construction or site preparation, including importation of fill materials or the removal and re-compaction of existing fill and stockpiled soils would occur. Although unconsolidated fill materials would remain on the parcels north and south of Del Amo Boulevard, the No Project alternative would avoid the construction and occupation of any portion of the Project site. No structures would be constructed and no residents, employees,

visitors, or other occupants would be exposed to potential ground shaking or settlement as a result of an earthquake event. As such, Alternative 1 would avoid the Project's geological impacts, which are concluded to be less than significant with the implementation of existing building code regulations and adherence to the recommendations of required geological and geotechnical reports prepared by a California Certified Engineering Geologist and a California Registered Civil Engineer. Since the No Project alternative would avoid the Project's less than significant geological impacts, geological impacts are considered to be less under this Alternative.

(6) Surface Water Quality

Under the No Project alternative, the parcels north and south of Del Amo Boulevard would not be developed. No impervious cap or building pads would be installed over the waste materials in the brownfield site south of Del Amo Boulevard and, as such, exposure of potentially contaminated soils to surface water runoff would continue. The existing SWPPP and water monitoring program would continue to be implemented. The existing SWPPP and monitoring program indicate that no surface water contaminants, with the exception of TSS which are reduced to acceptable levels with the implementation of existing BMPs, exceed the State's specified limits. The Project site north of Del Amo Boulevard has been identified as having historic levels of VOCs in the soils; however, recent tests at 5-feet below ground level (bgl) indicate no exceedance of state standards. Contamination of surface water runoff, which would be generally exposed to the upper soil levels, would be considered less than significant. However, soils at the Project site would continue to be exposed to surface water and the potential for erosion and turbidity of surface water at the Project site would continue. Under this Alternative, no construction or occupation of the Project site would occur, and the Project's less than significant water quality impacts associated with grading and operation would not occur. Since no construction or occupation of the Project site would occur, water quality impacts associated with grading, which exposes soils to surface water, and operation, which exposes vehicle waste to surface water, would occur. However, since soils would continue to be exposed to surface water over the entire site, and no further evaluation of potential vapor intrusion into the soil north of Del Amo Boulevard would occur, the overall impact of the No Project alternative would be greater than under the Project.

(7) Air Quality

This Alternative would include no new development, and therefore would not generate air pollutants. Impacts would be less than significant, whereas the Project would have a significant impact on Air Quality.

(8) Noise

No development would occur within the Project site under this Alternative. Consequently, it would not generate any new or increased sources of noise on the Project site or within the surrounding vicinity. Impacts would be less than significant, whereas the Project would have a significant impact on Noise.

(9) Public Services

(a) Fire Services

(i) Construction

Under the No Project Alternative, no development would occur. In comparison, Project construction activities have the potential to increase demand for fire services due to the occasional exposure of combustible sawdust, wood, plastics, etc, to such heat sources as machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions. Construction activities requiring street or sidewalk closure or detouring also have the potential to impede or interfere with emergency services. Although Project design features, existing OSHA and fire code regulations, and mitigation measures would reduce such impacts to less than significant levels, since no construction activities of any type would occur under the No Project alternative, the No Project alternative would avoid the Project's less than significant impact on fire services. Therefore, the impact of the No Project alternative relative to fire services would be less than under the proposed Project.

(ii) Operation

Under the No Project Alternative, no development would occur. No increase in the existing demand on fire services would occur and no County Fire Department Developer Fees or increase in direct assessments in property taxes would be collected. The Project would reduce potential impacts associated with increased demand on fire services to less than significance through adherence to fire code regulations; installation of fire suppression equipment, including sprinklers; and incorporation of recommended mitigation measures Although the Project, with mitigation, would have a less than significant impact on fire services, since the No Project alternative would not increase demand on fire services, the No Project alternative would have less impact on fire services than the proposed Project.

(b) Police Services

The No Project alternative would not change the existing use of the Project site, as such the site would remain undeveloped therefore, the demand for police protection services would be the same as under existing conditions. In comparison, the residential component of the proposed Project would generate a greater demand for police protection services due to the 24-hour occupancy of the Project site and the permanent increase in the on-site residential population. The commercial component of the proposed Project would generate a greater demand for police protection services due to increased traffic, employees, and patrons. The Project's demand for police services associated with the approximately 6,969 new residents and approximately two million square feet of commercial development may exceed the existing capability of the Sheriff's Department and response times. Thus, proposed Project impacts relative to police services would be potentially significant. Impacts would be reduced through the implementation of mitigation measures. However, since the No Project alternative would entail no increase in population or demand for police services compared to existing conditions, impacts relative to police services would be less under the No Project alternative.

(c) Schools

As the No Project alternative would not generate any school-age children, there would be no change in the demand for schools relative to existing conditions. The Project would generate approximately 489 students, including 213 elementary school students, 119 middle school students, and 157 high school students. The Los Angeles Unified School District (LAUSD) schools that would potentially serve the Project site, are all currently operating below capacity. However, based upon the estimated number of Project-generated students, the increased enrollment attributable to the proposed Project would exceed existing school capacities at Carson Elementary School and Carson Senior High School and, thus, would result in a potentially significant impact on these schools. However, these impacts would be mitigated to less than significant levels via the payment of school fees at the time of building permit issuance. Since the No Project alternative would not generate any school-age children or cause an increase in demand for schools, compared to existing conditions, impacts relative to schools would be less under the No Project alternative than under the Project.

(d) Parks and Recreation

The No Project alternative would not change the existing use of the Project site and thus, not cause any increased demand for parks and recreational services compared to existing conditions. The Project would generate a greater demand for parks and recreational services due to a permanent increase in residential population of 6,969 residents. As the Project would not meet the City's current requirements for the provision of parks and open space, the Project would

result in potentially significant impacts associated with parks and recreation. However, a mitigation measure is recommended that reduces this Project impact to a less than significant level. As the No Project alternative would not generate population or cause an increase in demand for open space or parks and recreational facilities, compared to existing conditions, impacts relative to parks and recreation would be less under the No Project alternative than under the Project.

(e) Libraries

The No Project alternative would not change the existing use of the Project site, or cause any increased demand for library services compared to existing conditions. The proposed Project, in comparison, would generate a greater demand for library services due to a permanent increase in residential population of 6,969 residents. However, implementation of the identified mitigation measure would reduce the impact of the Project relative to libraries to a less than significant level. However, since the No Project alternative would generate no new population or cause an increase in demand for library services, compared to existing conditions, impacts relative to libraries would be less under the No Project alternative than under the Project.

(10) Utilities/Service Systems

(a) Water Services

With no change in the existing use of the Project site under the No Project alternative, there would be no additional demand for water. Uses associated with the proposed Project, including residential, hotel, restaurant, and other commercial uses and landscaping, would generate a demand for domestic water and, as such, would generate a greater impact on water services than under the No Project alternative. The Project would have a less than significant impact on water services. Although the proposed Project's impact on water supply would be less than significant, since the No Project alternative would have no water demand, the impact of the No Project alternative on water services would be less than under the proposed Project.

(b) Wastewater Services

With no change in the existing use of the Project site under the No Project alternative, there would be no demand for wastewater conveyance or treatment. The Project's residential and commercial uses would require wastewater services and, as such, would generate a greater impact on these services than under the No Project alternative. Although the proposed Project's impact on wastewater services would be less than significant, since the No Project alternative would generate no wastewater, the impact of the No Project alternative on wastewater services would be less.

(c) Solid Waste

The No Project alternative would not change the existing use of the Project site, or cause any increased demand for solid waste services compared to existing conditions. The proposed Project, by comparison, would generate a greater demand for solid waste services due to a permanent increase in residential population of 6,969 residents and nearly two million square feet of commercial development. However, implementation of mitigation measures would reduce the impact of the Project relative to solid waste to a less than significant level. However, since the No Project alternative would not construct commercial square footage or generate new population, it would not cause an increase in demand for services. Therefore, impacts relative to solid waste would be less under the No Project alternative than under the Project.

c. Relationship of No Project Alternative to the Project Objectives

The No Project alternative would not meet the basic objective of the Project to achieve a productive reuse of a large brownfield site, since it would not generate the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project Site. The No Project alternative would also not promote the economic well being of the Redevelopment Project Area or the City, since it would not contribute to the diversification and development of the economic base of either the Redevelopment Area or the City. The No Project alternative would not meet the Project's objective to maximize shopping and entertainment opportunities or to maintain a sustainable balance of residential and non-residential uses. The No Project alternative would not meet the Project objective to provide a diversity of both short-term and long-term employment opportunities for local residents, since it would not generate construction jobs or permanent employment in the commercial and hospitality industries. The No Project alternative would also not meet the basic objective of the Project to contribute to the City's stock of rental and for sale housing units and affordable housing. In addition, the No Project alternative would not meet the objective of the Project to provide a signature/gateway development that contributes to the creation of a vibrant urban core for the City, while taking advantage of the site's proximity to the San Diego Freeway. While the No Project alternative would avoid the Project's significant and unavoidable impacts associated with visual resources, traffic, public transportation, air quality, and construction noise, the No Project alternative would have less environmental benefit than the Project in relation to site remediation and improvement in groundwater and surface water quality and would, therefore, have a greater impact than the Project in relation to hazards and surface water quality.

2. Alternative 2: Mixed-Use Business Park

a. Introduction

This section presents an environmental analysis of an alternative project that would feature a different mix of uses than that proposed under the Project. Alternative 2 would be developed on the same sites as the proposed Project, with uses that are in keeping with the "Mixed-Use - Business Park" land use designation set forth in the City of Carson's 2004 General Plan update. Development under this Alternative would include a mix of light industrial/business park uses and regional and neighborhood-serving commercial uses, including restaurants. The total floor area would be equivalent to the floor area of the Project's commercial component. It is further assumed that the floor area would be equally divided between commercial and light industrial/business park development. The overall FAR under this Alternative would be approximately 0.27, which would occur in a series of single-story buildings. Remediation of the former landfill site, including capping of waste materials and coverage of the former landfill site by impervious concrete foundations, parking lots, and streets would be the same as under the Project. In the following analyses, conclusions regarding impacts are based on impacts after mitigation. A comparison between Alternative 2's mix of land uses and the Project is presented in Table 76 on page 554. A summary of comparative impacts is presented at the end of the Alternatives analysis in Table 83 on page 596.

b. Analysis of Alternative

(1) Land Use

Development under Alternative 2 would result in both an implementation approach and a mix of uses that vary from the proposed Project. The Alternative would be implemented through traditional zoning, and existing City regulations in contrast to the Specific Plan of the proposed Project. The development program would include a mix of light industrial/business park and commercial uses. The General Plan designation anticipates a large amount of business-park development that would be encouraged by the City as a light industrial use with less environmental impact than more traditional light industrial uses, e.g., a variety of businesses and professional offices, services and associated businesses. However, the actual development would be subject to the interests of the development community. Commercial interests would likely compete successfully for development sites on the eastern portion of the Project site, due to the advantage of freeway visibility.

Table 76

Comparison Of Alternative 2 Components: Mixed-use Business Park

Land Use	Proposed Project	Alternative 2	Numerical Difference	Percent Change
Residential	1,550 units	0 units	-1,550 units	-100
Neighborhood Commercial	130,000 sq.ft.	81,245 sq.ft.	-48,755 sq. ft.	-37.5
Restaurant	81,125 sq.ft.	60,060 sq.ft.	-21,065 sq.ft.	-26.0
Hotel	300 rooms 200,000 sq.ft.	0 sq.ft.	300 rooms	-100
Commercial Recreation/ Entertainment	214,000 sq.ft.	0 sq.ft.	-214,000 sq.ft.	-100
Regional Commercial	1,370,000 sq.ft.	856,220 sq.ft.	-513,780 sq.ft.	-37.5
Light Industrial/Business Park	0 sq.ft.	997,600 sq.ft.	+997,600 sq.ft.	+100
Total Non-Residential	1,995,125 sq.ft.	1,995,125 sq.ft.	0	0

Source: PCR Services Corporation, August 2005

(a) Compatibility with Land Use Plans, Polices and Regulations

Alternative 2 would be fully consistent with the General Plan, Mixed Use – Business Park designation. It would most likely be implemented through a rezoning action by the City, which would zone the entire site Mixed-Use Business Park, a new zone, as anticipated at the time that the 2004 General Plan update was completed. The rezoning would allow more flexibility than the existing zoning in the placement of uses, and would accommodate the full range of uses allowed under the General Plan designation.

While the Alternative, by definition, would be consistent with the existing regulations, that absolute consistency would not necessarily be considered of less impact, than the development standards under the proposed Specific Plan. For example, the proposed Specific Plan includes numerous regulations that are more protective of the environment than the existing regulations, and it is specific to the proposed Project site, in contrast to the more generic zoning regulations.

Implementation of Alternative 2 could support the City policies that call for the remediation and productive reuse of a brownfield site, although a smaller project may not be able to generate sufficient revenues to support implementation of the RAP. Alternative 2 would support development of the City's economic base, and the addition of new employment opportunities. However, Alternative 2 would not contribute to City policies that encourage the development of new housing units in the City. While this Alternative would support

development of the central portion of the City, with new commercial activity in the vicinity of the South Bay Pavilion, it may have a lesser potential to create a signature project that maximizes the advantages of the site's location or so fully transform the site to a centralized urban center. In summary, this Alternative is more consistent with existing regulations than the proposed Project, but does not promote certain policies that would occur with the development of the proposed Project. Therefore, impacts of Alternative 2 on the regulatory framework would be considered greater than those of the proposed Project. Impacts under Alternative 2 and the proposed Project would both be less than significant.

(b) Existing Land Use Patterns

The land uses that would occur under Alternative 2 would blend with existing development patterns providing uses that are akin to those to the west and east of the Project site. As with the proposed Project, the uses would not be akin to the residential uses to the south and southwest. However, as with the proposed Project, the uses under Alternative 2 would lie in a distinct area, and would be buffered from those residential uses. As is the case with the proposed Project, development under Alternative 2 would not result in the division, disruption or isolation of an existing established community or neighborhood. Impacts with regard to land use relationships would be less than significant in both cases.

(c) Sustainability of Existing Retail Uses

Alternative 2's reduction in retail activity by approximately 50% would substantially reduce potential market effects on existing retail development, and the sustainability of such development. Therefore, the Alternative's forecasted short-term negative effect upon existing retail uses within the market area served by the proposed Project would be reduced or avoided. However, the Proposed Project's adverse affect would be alleviated in the mid-term (i.e., by 2020) as the local market grows and matures. Impacts on the sustainability of existing retail uses under Alternative 2 would be less than those of the proposed Project, but in both cases such impacts would be less than significant.

(2) Visual Resources

(a) Aesthetic Character

(i) Construction

Alternative 2 would require a similar scope of construction activities, as under the Project, although the heights of cranes may be reduced due to the relatively lower height of the overall development. As with the Project, impacts associated with construction activities would

be less than significant due to the limited off-site views of activities, the common appearance of construction activities in an urban setting, and the lack of contrast of construction activities with any off-site valued resources. Therefore, construction impacts would be similar and less than significant under both Alternative 2 and the proposed Project.

(ii) Operation

The form of the development under Alternative 2 would vary from that of the proposed Project, but would still give the Project site a largely developed appearance. There would be fewer buildings, and none of the potentially taller buildings of the Project; i.e. the mid-rise residential, theater and hotel uses. While the variation in site appearance would be different, the variation would not necessarily be considered better or worse than that of the Project. It would, like the Project, be an expected development for the area, and blend into the urban setting. The commercial building heights along the southern and southwestern edges of the site, across from the existing residential neighborhoods, would be similar to those of the Project, as mitigated; with a reduction in building heights in the area immediately east of Main Street. Likewise the face along the I-405 freeway would be similar with fewer retail uses. Alternative 2 would have less impact than the Project in relation to contrast created by signage. Impacts relative to the aesthetic environment along Main Street would also be similar to that of the Project. Alternative 2 would reduce the amount of retail activity that would compete with existing development, and possibly reduce the vacancies that could occur under the proposed Project that could affect the aesthetic appearance of off-site locations. However, such changes in the appearance of off-site locations would be less than significant with the Project as well as Alternative 2. Since Alternative 2 would likely involve the development of the entire site, it would generate the same significant and unavoidable impact on a valued resource associated with the Project site's large expanse of undeveloped land, as would the Project. Alternative 2 would have incrementally less impact than the Project in relation to contrasting building heights, but would not reduce the Project's significant and unavoidable impact.

(b) View Resources

The Project site is generally degraded and is not considered a view resource. Views over the Project site are limited due to intervening development, the flat terrain in the surrounding areas, and the relative height of the berm comprising the Project site. In addition, the Project vicinity does not contain notable features that would be considered view resources. To the extent views from some locations might be affected, (e.g., the public roadways of Main Street and Del Amo Boulevard, or some nearby private residences) impacts would occur due to "first floor" development and would not be greater due to the Project's taller buildings. Since no view resources are identified on the Project site or in the area, and since view impacts are similar regardless of building heights, view impacts associated with Alternative 2 and the Project would

be similar. The impact of Alternative 2 on view resources, as with the Project, would be less than significant.

(c) Shade/Shadow

Under Alternative 2, buildings would be one- and two-stories, typical of regional commercial and industrial/business park uses. Since overall building heights would be less than under the Project, shade/shadow lengths would be incrementally less. However, the Project's shade/shadow impacts would be less than significant. Further, with the implementation of a mitigation measure that requires greater setbacks for taller buildings along the southern and southwestern Project edges, shading impacts on the sensitive, residential uses across the Torrance Lateral from the Project site would be similar under the Project and Alternative 2. As with the Project, Alternative 2 would generate less than significant shade/shadow impacts.

(d) Artificial Light

Alternative 2 would add new lighting associated with illuminated signage, parking lot and walkway security lights, architectural lighting, streetlights, and light emanating from building interiors. With the elimination of taller buildings and the hotel, theater, and residential uses associated with the Project, light levels would be incrementally less under Alternative 2. With the elimination of potential lighting from residential units during the evening hours, and higher levels of security lighting associated with the theater and hotel, which are actively used during the evenings, as well as signage associated with these uses, artificial lighting impacts would be reduced. As with the Project, Alternative 2 would reduce the impact of artificial lighting through light control methods, shielding, limitation of pole heights, and implementation of the City's light intensity regulations. With the implementation of required lighting regulations, the impacts of both the Project and Alternative 2 would be less than significant. However, since Alternative 2 would generate incrementally less artificial light, the impact of Alternative 2 would be less than under the Project.

(3) Traffic, Circulation, and Parking

Under Alternative 2, development would be divided between industrial and commercial uses, including neighborhood, regional and restaurant uses. Trips generated by the commercial uses would occur in the same proportion as those forecasted to occur under the proposed Project. Alternative 2 is projected to generate approximately 2,020 trips during the morning peak hour, about 3,920 trips during the afternoon peak hour, and approximately 42,880 daily trips. Compared to the proposed Project, Alternative 2 is projected to generate approximately 19 percent fewer trips during the morning peak hour, 32 percent fewer trips during the afternoon peak hour, and 36 percent fewer trips on a daily basis.

Since Alternative 2 would generate fewer trips than the Project, it would have a less overall impact on the study intersections. Alternative 2 would reduce the Project's potentially significant impact on Intersection No. 23, Figueroa Street & Carson Street, to a less than significant level. However, it is forecasted that significant impacts would continue to occur at the following nine intersections:

- Intersection No. 5: Vermont Avenue & Del Amo Boulevard;
- Intersection No. 6: Hamilton Avenue & Del Amo Boulevard;
- Intersection No. 7: Figueroa Street & Del Amo Boulevard;
- Intersection No. 8: Main Street & Del Amo Boulevard;
- Intersection No. 11: Hamilton Avenue & I-110 southbound ramps;
- Intersection No. 12: Figueroa Street & I-110 northbound ramps;
- Intersection No. 22: Vermont Avenue & Carson Street;
- Intersection No. 24: Main Street & Carson Street; and
- Intersection No. 25: Avalon Boulevard & Carson Street.

Although Alternative 2 would result in significant impacts at these locations, the magnitude of the impacts would be less than the under the Project. Mitigation measures similar to those of the Project would be implemented to reduce potential impacts. Residual significant impacts could still occur. Trip generation and impact analysis is contained in the traffic technical study, Draft EIR Appendix D.

Alternative 2 would also reduce total trips on the regional freeway system. However, none of the projected significant impacts on freeway segments would be reduced to less than significant levels under this Alternative. Similarly, the Project's significant impact on public transportation would also occur under Alternative 2, although to a lesser magnitude than under the proposed Project.

Access improvements under Alternative 2 would be the same as under the proposed Project and would include intersection improvements at Del Amo Boulevard/Stamps Drive, Lenardo Drive/Main Street, and Lenardo Drive and the I-405/Avalon Boulevard interchange.

As with the Project, parking would be provided in accordance with the City of Carson Development Standards. Parking for the commercial component would be provided at the same ratio as under the Project. No significant parking impacts are anticipated.

(4) Hazards and Hazardous Materials

As with the Project, the Upper Operable Unit and Lower Operable Unit RAPs would be implemented under the Mixed-Use Business Park Alternative. The landfill cap and gas and groundwater extraction systems would be installed. As with the Project, all buildings in Development Districts 1 and 2 would be developed with a protective system. With the implementation of the RAPs, the impacts with regard to hazards would be the same as with the Project. With regard to Development District 3, the recommended additional Phase II activities to further evaluate potential vapor intrusion and worker health and safety concerns by completing deeper soil-vapor sampling would occur. In addition, any buildings within Development District 3 would comply with applicable regulations that may require vapor migration and monitoring measures. Therefore, as with the Project, the Mixed-Use Business Park Alternative would result in less than significant hazards impacts since the RAPs would be implemented and all development would be consistent with applicable regulations. The impacts of the Mixed-Use Business Park Alternative would be the same as the Project with regard to hazards.

(5) Geology/Soils

Grading, including volume of graded soils, importation of fill materials, and the re-compaction of existing fill and stockpiled soils on the parcel south of Del Amo Boulevard, would be similar under both Alternative 2 and the Project. Grading and site preparation, including the export of debris materials and compaction of existing fill materials on the parcel north of Del Amo Boulevard would also be similar, since mass grading would be required for site preparation. Exposure of employees, visitors, and other occupants of Alternative 2's commercial and industrial buildings to potential ground shaking or settlement would be similar to the exposure of occupants of the Project's commercial buildings, since the overall floor area would be similar. However, since no residential uses would be developed on the parcel north of Del Amo Boulevard, the exposure of the Project's additional residential occupants would not occur. Therefore, the total exposure of on-site persons to groundshaking would be less under Alternative 2 than under the Project. Project impacts are concluded to be less than significant with the implementation of existing building code regulations and adherence to the recommendations of required geological and geotechnical reports prepared by a California Certified Engineering Geologist and a California Registered Civil Engineer. The same geological and geotechnical mitigation measures would apply to the development of Alternative 2 and, as such, geological hazards, including the exposure of persons or structures to

groundshaking or settlement, would be less than significant and similar under both Alternative 2 and the proposed Project. Although no significant geological impacts are anticipated, Alternative 2 would cause incrementally less exposure of persons and structures to groundshaking and would, therefore, have incrementally less geological impact.

(6) Surface Water Quality

With the development of the Project site under Alternative 2, the parcel south of Del Amo Boulevard would be 100 percent impermeable, since an impervious cap and building pads would be installed over the entire site, in accordance with DTSC requirements. The impermeable surface would prevent contact between surface water runoff and the underlying contaminated refuse. Mass grading of the entire site would be similar to the Project. The Project site north of Del Amo Boulevard would have a combination of permeable and impermeable areas. Grading and site coverage would be similar to the Project. SWPPP and SUSMP permits to prevent surface water contamination during the construction and operation phases of Alternative 2 would be required. With the implementation of the BMPs that would be required by these permits, water quality impacts under this Alternative, including contact of surface water and exposed soils during construction and operation, would be reduced to less than significant levels. Mitigation measures requiring further investigation of the 11-acre parcel would be the same as under the Project. Due to the adequate capacity of adjacent and nearby storm drain facilities, no off-site flooding resulting in erosion is anticipated. Since the Project is concluded to result in less than significant impacts, with the implementation of the mitigation measures, water quality impacts would be the same under both Alternative 2 and the Project.

(7) Air Quality

The amount of site preparation under this Alternative compared to the proposed Project[179] would remain the same since the remediation of the former landfill site, including the capping of waste materials and coverage of the former landfill site by impervious concrete foundation, parking lots, and streets would be the same as under the Project. Construction activities would be less than the proposed Project due to the decreased amount of building floor area to be constructed. However, pollutant emissions and fugitive dust from site preparation and construction activities would be similar on a daily basis, as the duration and not the intensity of these activities could decrease compared to the proposed Project. As a result, overall construction emissions generated with the Alternative would be less than those of the proposed Project over the construction period. However, impacts during maximum conditions, those used for measuring significance, would be similar to those of the proposed Project and would be

[179] *All calculations used in this analysis are presented in Appendix F, Air Quality Technical Appendices, of this EIR.*

significant for regional construction emissions. Localized pollutant construction impacts would also be similar to the proposed Project as both the intensity and duration of excavation and grading would be similar, and would also be significant.

The number of daily trips generated by this Alternative would be 36 percent less than the proposed Project, resulting in proportionate decreases in mobile air quality emissions. The total contributions to regional emissions under this Alternative would remain significant, as is the case with the proposed Project. Although this Alternative would result in significant regional air quality impacts, the magnitude of the impacts would be less than the proposed Project's impact.

Localized impacts are determined mainly by the peak hour intersection traffic volumes. Compared to the proposed Project, this Alternative is forecasted to generate approximately 19 percent fewer trips during the morning peak hour and 32 percent fewer trips during the afternoon peak hour. Since the localized CO hotspot analysis for the proposed Project did not result in any significant impacts, this Alternative would likewise not have any localized impacts due to fewer trips generated.

With respect to potential air toxic impacts, this Alternative would avoid locating sensitive receptors near a freeway and, thus, would avoid the significant unavoidable impact that would occur as a result of the proposed Project. In summary, impacts under this Alternative would be less than with the Project, but as with the Project would be significant for both construction and operations air quality impacts.

(8) Noise

The amount of site preparation under this Alternative compared to the proposed Project[180] would remain the same since remediation of the former landfill site, including capping of waste materials and coverage of the former landfill site by impervious concrete foundation, parking lots, and streets would be the same as under the Project. Construction activities would be less than the proposed Project due to the decreased amount of building floor area to be constructed. However, construction noise levels would be similar on a daily basis, as the duration and not the intensity of these activities could decrease compared to the proposed Project. The overall construction noise impacts generated with the Alternative would be less than those of the proposed Project over the construction period. However, the types, duration, and levels of noise experienced both within the Project site and the immediate vicinity would be similar to the proposed Project and would likewise be significant.

[180] *All calculations used in this analysis are presented in Appendix F, Air Quality Technical Appendices, of this EIR.*

This Alternative would allow more office and industrial uses and none of the residential uses that are included as part of the proposed Project. The types and number of noise sources within the development area would be similar to the proposed Project and, consequently, are not considered significant with compliance with the provisions of the City's Noise Ordinance. An expected reduction of 36 percent in traffic volumes associated with this Alternative would yield a slight reduction in comparison to Project traffic noise. As with the Project, this Alternative would result in a less than significant roadway noise impact.

(9) Public Services

(a) Fire Services

(i) Construction

Under Alternative 2, the scope of construction would be less than under the Project as there would be no residential component. As with the Project, construction activities would have the potential to increase demand for fire services due to the occasional exposure of combustible sawdust, wood, plastics, etc, to such heat sources as machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions. Construction activities requiring street or sidewalk closure or detouring have the potential to impede or interfere with emergency services. As with the Project, Alternative 2 would adhere to existing OSHA and fire code regulations and would incorporate design features and mitigation measures to reduce potentially significant construction impacts to less than significant levels. Access impacts would be reduced to less than significance through the implementation of a Worksite Traffic Control Plan that requires coordination of any street and sidewalk closures and detours with the City and emergency services. With mitigation, both Alternative 2 and the proposed Project would have a less than significant impact on fire services and emergency access. With less construction, impacts on fire services would be less than under the Project.

(ii) Operation

With the development of the Project site, Alternative 2 would increase demand on existing fire services. Alternative 2 would have less floor area than the Project, since it would not include a hotel, theater, or residential uses, all of which increase demand on fire services. The Project's residential component would be occupied during all hours of the day, and hotel and theater uses would feature high-occupancy activities during the evening hours. In addition, multi-story structures have the potential to increase demand on fire services, and the Project is likely to include multi-story residential and hotel development. On the other hand, Alternative 2 would incorporate industrial park uses, which would increase demand on hazmat-related services, due to the handling of the hazardous materials that are required in many types of light

manufacturing and research and development facilities. Both Alternative 2 and the proposed Project would reduce potential impacts associated with increased demand on fire services to less than significance through adherence to fire code regulations; installation of fire suppression equipment, including sprinklers; and incorporation of recommended mitigation measures. Although both Alternative 2 and the proposed Project, with mitigation, would have a less than significant impact on fire services, since Alternative 2 would not include a residential population, multi-story buildings, or theater and hotel uses, fire demand would be incrementally less under this Alternative. However, Alternative 2 would have greater hazmat-related impacts, and therefore impacts on fire services would be similar to those of the proposed Project.

(b) Police Services

Alternative 2, as with the Project, would generate a greater demand for police protection services than under existing conditions, due to site development. The demand for services associated with Alternative 2 would be less than that associated with the proposed Project, since this Alternative would not include a residential component. Impacts relative to police services would be reduced through the implementation of mitigation measures. However, since Alternative 2 would not have a residential population, impacts relative to police services would be less under Alternative 2.

(c) Schools

Alternative 2 would not generate any school-age children due to residential development, but would generate students as a result of on-site employment. Thus, there would be an increase in the demand for schools relative to existing conditions. The Project would generate approximately 489 students, including 213 elementary school students, 119 middle school students, and 157 high school students. The Los Angeles Unified School District (LAUSD) schools that would potentially serve the Project site, are all currently operating below capacity. However, based upon the estimated number of Project-generated students, the increased enrollment attributable to the proposed Project would exceed existing school capacities at Carson Elementary School and Carson Senior High School and, thus, would result in a potentially significant impact on these schools which would be fully mitigated via the payment of school fees. As Alternative 2 would not generate any school-age children due to residential development, impacts relative to schools would be less under Alternative 2 than under the Project.

(d) Parks and Recreation

The analysis of Project impacts on parks and recreation is based on the additional demand that would be created by the Project's residential population that would locate within the service

areas of the existing parks. Since Alternative 2 includes no residential development, it would not add to the demand for park space. Its impacts would be less than those of the Project. As was the case with the Project as mitigated, impacts would be less than significant.

(e) Libraries

The analysis of Project impacts on libraries is based on the additional demand that would be created by the Project's residential population that would locate within the service area of existing libraries. Since Alternative 2 includes no residential development, it would not add to the demand for library services. Its impacts would be less than those of the Project. As was the case with the Project as mitigated, impacts would be less than significant.

(10) Utilities/Service Systems

(a) Water Services

Under Alternative 2, water would be required for industrial/business park uses and neighborhood/regional commercial uses, including restaurants. No residential or hotel uses would be developed. Water demand for the construction phase of Alternative 2 would be less than under the proposed Project. Water generation and consumption rates for Alternative 2's operational phase is shown in Table 77 on page 565. As shown in Table 77, the operational phase of Alternative 2 would result in an approximate demand of 486,279 gallons of domestic water per day and 177.4 million gallons per year. Compared to the Project's demand of 795,470 gallons per day and 290.5 million gallons per year, Alternative 2 would reduce water consumption by approximately 39 percent during the operational phase. Fire flow requirements would be the same as for the Project's commercial component and, as with the Project, is anticipated to be adequate. Demand on water services would be less than significant under both the Project and Alternative 2. Although impact on water services would be less than significant under both the Project and Alternative 2, Alternative 2 would generate incrementally less demand on the water supply during operation. Therefore, Alternative 2 would have less impact on water services than the Project.

(b) Wastewater Services

Under Alternative 2, the proposed development would generate a demand for wastewater conveyance and treatment. Since the mix of land use would not include residential or hotel uses, wastewater generation rates, shown in Table 78 on page 566, would be different under this Alternative. As shown in Table 78, Alternative 2 would generate approximately 440,771 gallons of wastewater per day and 160.9 million gallons per year. Compared to the Project's 721,113

Table 77

Water Consumption for Alternative 2: Mixed Use Business Park

Land Use	**Size** (sq. ft.)	**Water Consumption**	
		Average Daily Water Consumption (gallons per day)[a]	**Annual Water Consumption** (million gal/yr)[b]
Residential	0	0	0
Neighborhood Commercial	81,245	26,675	25.4
Restaurant	60,060	66,038	24.1
Hotel	0	0	0
Commercial Recreation/ Entertainment	0	0	0
Regional Commercial	856,220	174,094	47.8
Light Industrial /Business Park [c]	997,600	219,472	80.1
Total	1,995,125	486,279	177.4

[a] *Water consumption was calculated by reducing the water consumption totals of the Project alternative by the same percentage as each land use is reduced for Alternative 2 (i.e. the Project alternative's neighborhood commercial water use is reduced by 37.5%, Restaurant water use by 26%, and Regional Commercial water use by 37.5%.*

[b] *Annual water consumption assumes 365 days of operation a year.*

[c] *Water consumption for Light Industrial use was calculated by using a wastewater generation factor of 200 gallons per day/1,000 sq. ft. obtained from the County Sanitation Districts of Los Angeles County and adding 10% to account for water consumption.*

Source: PCR Services Corporation, September 2005.

gallons of wastewater per day and 263.3 million gallons per year, Alternative 2 would reduce wastewater conveyance and treatment demand by approximately 39 percent. Existing conveyance systems in Main Street and Del Amo Boulevard would be adequate to serve either the Project or Alternative 2. As with the Project, Alternative 2 would not be permitted prior to the determination of the District's treatment capacity and payment of fees to mitigate potential impacts. Demand on wastewater services would be less than significant under both the Project and Alternative 2. Although impact on wastewater services would be less than significant under both the Project and Alternative 2, Alternative 2 would generate incrementally less wastewater during operation. Therefore, Alternative 2 would have less impact on wastewater than the Project.

(c) Solid Waste

Alternative 2 would develop the site with 1,995,125 square feet of restaurant, commercial and light industrial uses. Solid waste impacts resulting from the construction and operation of Alternative 2 are anticipated to be similar to those of the commercial component of the Project.

Table 78

Wastewater Generation for Alternative 2: Mixed Use Business Park

		Water Consumption	
Land Use	**Size** (sq. ft.)	**Average Daily Wastewater Generation** (gallons per day)[a]	**Annual Wastewater Generation** (million gal/yr)[b]
Residential	0	0	0
Neighborhood Commercial	81,245	24,011	8.8
Restaurant	60,060	60,060	21.9
Hotel	0	0	0
Commercial Recreation/ Entertainment	0	0	0
Regional Commercial	856,220	157,180	57.4
Light Industrial /Business Park [c]	997,600	199,520	72.8
Total	1,995,125	440,771	160.9

[a] *Wastewater Generation was calculated by reducing the wastewater generation totals of the Project alternative by the same percentage as each land use is reduced for Alternative 2 (i.e. the Project alternative's neighborhood commercial wastewater generation is reduced by 37.5%, Restaurant wastewater generation by 26%, and Regional Commercial wastewater generation by 37.5%. Refer to Table 76 for a comparison of Alternatives.*

[b] *Annual wastewater generation assumes 365 days of operation a year.*

[c] *Wastewater generation for Light Industrial use was calculated by using a wastewater generation factor of 200 gallons per day/1,000 sq. ft. obtained from the County Sanitation Districts of Los Angeles County.*

Source: PCR Services Corporation, September 2005.

However, the Project would generate a greater demand for services due to construction and operation of the residential component. Implementation of mitigation measures would reduce the impact of the Project relative to solid waste to a less than significant level. However, since Alternative 2 would not generate new population, it would not cause an increase in demand for services to the same degree as the proposed Project. Therefore, impacts relative to solid waste would be less under the Alternative 2 than under the Project.

c. Relationship of Alternative 2 to the Project Objectives

Alternative 2 could potentially meet the basic objective of the Project to achieve productive reuse of a large brownfield site by developing a Project capable of generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project Site, although the proportional financial burden would be greater than the Project and may make remediation infeasible. Alternative 2 would also promote the economic well being of the Redevelopment Area; however, since a large component of Alternative 2 would be industrial, as is a large percentage of the City's economic base, Alternative 2 would not meet the objective

to diversify the economic base of the Redevelopment Area and the City, to the same extent as the Project. Alternative 2 would meet the Project objective to maximize shopping opportunities, but would not meet the Project's objective to provide entertainment or recreation uses. Alternative 2 would meet the objective to provide a diversity of both short-term and long-term employment opportunities for local residents by generating substantial construction work opportunities and long-term jobs in the commercial and industrial uses, although it would not meet the objective to provide hotel-related employment. Alternative 2, depending on its design, could meet the objective of the Project to provide a signature/gateway development that contributes to the creation of a vibrant urban core for the City. However, since Alternative 2 would have fewer commercial uses and no hotels or residential uses, it would not provide the same level of urban focal point, level of pedestrian traffic, or vibrancy as the Project. Alternative 2 would also not meet the Project objective to contribute to the City's stock of rental and for sale housing units and affordable housing. Since Alternative 2 would not include residential uses, it would not meet the Project's objective to maintain a sustainable balance of residential and non-residential uses. Alternative 2 would incrementally reduce unavoidable and significant impacts associated with visual resources, traffic, public transit, and air quality during Project operation but, with the exception of air toxins, Alternative 2 would not reduce these impacts to less than significant levels. As with the Project, visual resources, construction noise and air quality impacts would continue to be significant.

3. Alternative 3: Reduced Project

a. Introduction

This section presents an environmental analysis of a Reduced Density Alternative that would be developed on the same site as the proposed Project. Alternative 3 assumes that the scale of the Project would be reduced through a 25 percent, across-the-board reduction in residential units and commercial floor area. The mix of commercial and residential uses would be the same as under the Project; however, maximum development would be reduced to 1,162 residential units and commercial floor area would be reduced to 1,496,343 square feet. The reduction in commercial space under Alternative 3 could be achieved through fewer structures (smaller building footprint) or reduced building heights. The former landfill site would be capped and completely covered by impermeable foundation pads, parking lots, and streets, as was the case with the Project. The purpose of the analysis of Alternative 3 is to determine the potential for the Reduced Density alternative to reduce any of the Project's potentially significant environmental effects. Table 79 on page 568 compares the components of Alternative 3 with the proposed Project. A summary of comparative impacts is presented at the end of the Alternatives analysis in Table 83 on page 596.

Table 79

Comparison of Alternative 3 Components: Reduced Intensity

Land Use	Proposed Project	Alternative 3	Numerical Difference	Percent Change
Residential	1,550 units	1,162 units	-388 units	-25
Neighborhood Commercial	130,000 sq.ft.	81,245 sq.ft.	-48,755 sq. ft.	-25
Restaurant	81,125 sq.ft.	60,844 sq.ft.	-20,281 sq.ft.	-25
Hotel	300 rooms	225 sq.ft.	-75 rooms	-25
	200,000 sq.ft.	150,000 sq.ft.	-50,000 sq.ft.	
Commercial Recreation/ Entertainment	214,000 sq.ft.	160,500 sq.ft.	-53,500 sq.ft.	-25
Regional Commercial	1,370,000 sq.ft.	1,027,500 sq.ft.	-342,500 sq.ft.	-25
Total Non-Residential	1,995,125 sq.ft.	1,496,344 sq.ft.	498,781 sq.ft.	-25

Source: PCR Services Corporation, August 2005

b. Analysis of Alternative

(1) Land Use

Development under Alternative 3 would be implemented through a Specific Plan that would be similar to that of the proposed Project, with similar development guidelines and standards. The development program would also be similar by providing a mixed-use Project with residential and commercial development in similar proportions to that of the proposed Project. The 25% reduction in development intensity would result is less building mass on the Project site, either though reduced building heights and/or less building area.

(a) Compatibility with Land Use Plans, Polices and Regulations

As the implementation mechanism (i.e., specific plan) and general site and type of development would be similar to the proposed Project, the relationship of the Alternative to the regulatory framework would also be similar. Further, Alternative 3 could implement policies regarding the remediation and productive reuse of a brownfield site, although a smaller project may not be able to generate sufficient revenues to support implementation of the RAP. Alternative 3 would enhance the City's economic base, the addition of new employment opportunities, and new housing units in the City. The development of the Alternative would create a signature project that would maximize the advantages of the site's location and provide an enhanced urban center within the central portion of the City. However, its substance as a signature project would be diminished. Fewer employment opportunities would be created and fewer housing units would be constructed. Notwithstanding, the Project's development program would be compatible with the existing land use plans, policies or regulations intended to prevent

an impact to the environment. Impacts regarding the regulatory framework would be similar, and as was the case with the proposed Project, impacts would be less than significant.

(b) Existing Land Use Patterns

While reduced in overall intensity, the development program for Alternative 3 would occupy the same site, with the same development uses as the proposed Project. Therefore, its affects on the relationship to existing uses would be substantially the same as those of the proposed Project. As was the case with the proposed Project, Alternative 3 would not disrupt important linkages between existing districts surrounding the Project site. Further, the Alternative's proposed uses would not place uses of a nature or proximity that would alter the character of the existing land uses surrounding the Project site. As such, Alternative 3 would not result in the division, disruption or isolation of an existing established community or neighborhood; and as with the proposed Project, impacts would be less than significant.

(c) Sustainability of Existing Retail Uses

Alternative 3 would reduce the amount of retail activity by approximately 25 percent, thereby reducing potential market effects on existing retail development and the sustainability of such development. Therefore, the proposed Project's forecasted short-term negative effect upon existing retail uses within the market area served by the proposed Project would be reduced or avoided altogether under Alternative 3. However, the Proposed Project's adverse affect would be alleviated in the mid-term (i.e., by 2020) as the local market grows and matures. Impacts on the sustainability of existing uses under Alternative 3 would be less than those of the proposed Project, but in both cases such impacts would be less than significant.

(2) Visual Resources

(a) Aesthetic Character

(i) Construction

Alternative 3 would require a similar scope of construction activities, as would the Project, although the heights of cranes may be reduced due to the option of Alternative 3 to reduce building heights. As with the Project, construction activities would cause less than significant impacts due to the limited off-site views of construction activities, the common appearance of construction activities in an urban setting, and the lack of contrast of construction activities with any off-site valued resources. Therefore, construction impacts would be similar under both Alternative 3 and the proposed Project.

(ii) Operation

Under Alternative 3, the Project site would be entirely developed with uses similar to those of the Project. The reduction in the amount of development would result in less massing of buildings. Such reduction would result in fewer commercial buildings and/or a reduction of their building heights on the Project site. There would also be a reduction in the number of residential buildings, and/or a reduction in their heights. The reductions in massing would not substantially change the overall appearance of site development. The site would still appear as a mixed-use development amongst a variety of urban land uses within an urban setting. For example, District 2 would still look like a major shopping center, albeit one with fewer or smaller buildings. The site appearance along all of the Project edges in District 2 would be similar to those of the Project; i.e., along the southern/southwestern, residential edge, and the I-405 Freeway. Building massing on an individual building basis could be the same, while the overall massing of the Project would be reduced. Further, potentially significant impacts from taller buildings opposite residential development and signage could be mitigated through the same mitigation measures as the Project. In Districts 1 and 3, the additional open space that could occur would have a small affect on the appearance of the residential development. The additional open space and/or lower buildings could also result in some additional articulation of development; but the overall appearance would be that of a typical low- to mid-rise housing development. Therefore, the contrast with existing development would be similar to that of the proposed Project. As Alternative 3 would likely involve the development of the entire site, it would generate the same significant and unavoidable impact on a valued resource associated with the Project site's large expanse of undeveloped land, as would the proposed Project. Alternative 3 would reduce the amount of retail activity that would compete with existing development, and possibly cause vacancies that could affect the aesthetic appearance at off-site locations. However, such changes in the appearance of off-site locations was concluded to be less than significant with the Project. Although Alternative 3 could have incrementally less impact on the aesthetic character of the area than the Project, Alternative 3 would not reduce the Project's significant and unavoidable aesthetic impact, and the variations in on-site appearance that could occur under this Alternative would not be substantial. Therefore, the overall impact of Alternative 3 in relation to the aesthetic character of the Project area would be substantially the same as under the Project.

(b) View Resources

The Project site is generally degraded and is not considered a view resource. Views over the Project site are limited due to intervening development, the flat terrain in the surrounding areas, and the relative height of the berm along most of the perimeter of the Project site. In addition, the Project vicinity does not contain notable features that would be considered view resources. To the extent views from some locations might be affected, (e.g., the public roadways of Main Street and Del Amo Boulevard, or some nearby private residences) impacts would occur due to "first floor" development and would not be greater due the Project's taller buildings.

Since no view resources are identified on the Project site or in the area, and since view impacts are similar regardless of building heights, view impacts associated with Alternative 3 and the Project would be similar. The impact of Alternative 3 on view resources, as with the Project, would be less than significant.

(c) Shade/Shadow

Under Alternative 3, the 25 percent across-the-board reduction in development may be reflected as either a reduction in building height or building density. Since overall building height or density would be less than under the Project, overall shade/shadow impacts would be incrementally less. However, building heights along the along the southern/southwestern edges of the Project site, opposite the shade-sensitive residential neighborhood, could be the same as with the proposed Project. The Project shade/shadow impacts would be less than significant. While Alternative 3 would cause incrementally less shading than the Project, the impact of Alternative 3 on shade/shadow is substantially similar to the Project's, since the greatest potential impacts adjacent to off-site sensitive uses could be similar.

(d) Artificial Light

Alternative 3 would add new lighting associated with illuminated signage, parking lot and walkway security lights, architectural lighting, streetlights, and light emanating from commercial and residential building interiors. Under Alternative 3, the 25 percent reduction in development may be reflected as either a reduction in building height or building density. Since overall building height or density would be less than under the Project, lighting from building interiors would be incrementally less than under the Project. Security and parking lot lighting, streetlights, and building identification signage, would be similar to the Project. As with the Project, Alternative 3 would reduce the impact of artificial lighting through light control methods, shielding, limitation of pole heights, and implementation of the City's light intensity regulations. With the implementation of these lighting requirements, the impact of both the Project and Alternative 3 would be less than significant. However, since Alternative 3 would generate incrementally less artificial light, the impact of Alternative 3 would be less than under the Project.

(3) Traffic, Circulation, and Parking

Since Alternative 3 would have the same mix of land uses as the Project, the 25 percent reduction in the Project would result in an approximate 25 percent reduction in trips. Alternative 3 is projected to generate about 1,930 trips during the A.M. peak hour, about 4,460 trips during the P.M. peak hour, and approximately 53,700 daily trips. In keeping with this reduction,

Alternative 3 is projected to generate approximately 23 percent fewer trips during the A.M. peak hour, 23 percent fewer trips during the P.M. peak hour, and 22 percent fewer daily trips.

Although the number of trips under Alternative 3 would be reduced, the Project's significant impacts on ten study intersections would not be reduced to less than significant levels. As with the Project, significant impacts before mitigation would continue to occur at the following ten intersections:

- Intersection No. 5: Vermont Avenue & Del Amo Boulevard;
- Intersection No. 6: Hamilton Avenue & Del Amo Boulevard;
- Intersection No. 7: Figueroa Street & Del Amo Boulevard;
- Intersection No. 8: Main Street & Del Amo Boulevard;
- Intersection No. 11: Hamilton Avenue & I-110 southbound ramps;
- Intersection No. 12: Figueroa Street & I-110 northbound ramps;
- Intersection No. 22: Vermont Avenue & Carson Street;
- Intersection No. 23: Figueroa Street & Carson Street;
- Intersection No. 24: Main Street & Carson Street; and
- Intersection No. 25: Avalon Boulevard & Carson Street.

Since Alternative 3 would generate fewer trips than the Project, the magnitude of its impacts on the 27 study intersections would be proportionately less than under the Project. Mitigation measures similar to those of the Project would be implemented to reduce potential impacts. Residual significant impacts could still occur. Trip generation and impact analysis for Alternative 3 is contained in the traffic technical study, Draft EIR Appendix D.

Alternative 3 would also reduce total trips on the regional freeway system. However, none of the projected significant impacts on freeway segments would be reduced to less than significant levels under this Alternative. Similarly, the Project's significant impact on public transportation would continue to occur, although to a lesser magnitude than under the proposed Project.

Access improvements to the Project site under Alternative 3 would be the same as under the Project and would include intersection improvements at Del Amo Boulevard/Stamps Drive, Lenardo Drive/Main Street, and Lenardo Drive and the I-405/Avalon Boulevard interchange.

Parking, which would be provided in accordance with the City of Carson Development Standards, would be 25 percent less than under the Project, due to the proportionate reduction of land uses. With a 25 percent reduction in development, it is estimated that 7,782 parking spaces would be required for the commercial component of Alternative 3. Compared to the ULI shared parking model, peak demand for the commercial component would be approximately 6,252 spaces. Under the Carson Development Standards, 2,429 parking spaces would be required for the residential component. Based on ULI demand factors, peak demand for the residential uses is estimated to be approximately 2,091 parking spaces. Since the required parking under the City's Development Standards would exceed the peak demand, no significant parking impacts are anticipated.

(4) Hazards and Hazardous Materials

As with the Project, the Lower Operable Unit and Upper Operable Unit RAPs would be implemented under the Reduced Project Alternative. The landfill cap as well as the landfill gas and groundwater extraction systems would be installed. As with the Project, all buildings in Development Districts 1 and 2 would be developed with a protective system. With the implementation of the RAPs, the impacts with regard to hazards would be the same as with the Project. With regard to Development District 3, the recommended additional Phase II activities to further evaluate potential vapor intrusion and worker health and safety concerns by completing deeper soil-vapor sampling would occur. In addition, any buildings within Development District 3 would comply with applicable regulations that may require vapor migration and monitoring measures. Therefore, as with the Project, the Reduced Project alternative would result in less than significant hazards impacts since the RAPs would be implemented and all development would be consistent with applicable regulations. The Reduced Project would be the same as the Project with regard to hazards.

(5) Geology/Soils

Grading, including the volume of graded soils, importation of fill materials and the removal and re-compaction of existing fill and stockpiled soils, would be similar under both Alternative 3 and the Project since the mass grading required for site preparation would be similar under both Alternative 3 and the proposed Project. Although occupancy would be incrementally less under Alternative 3, the exposure of residents, employees, and visitors to potential ground shaking or settlement as a result of an earthquake event would be substantially similar to the Project, although 25 percent fewer persons and structures (floor area/ number of

units) would be exposed to potential groundshaking or settlement. Project impacts are concluded to be less than significant with the implementation of existing building code regulations and adherence to the recommendations of required geological and geotechnical reports prepared by a California Certified Engineering Geologist and a California Registered Civil Engineer. The same mitigation measures would apply to the development of Alternative 3 and, as such, geological hazards associated with Alternative 3 would also be less than significant. Although no significant geological impacts are anticipated, Alternative 3 would cause incrementally less exposure of persons and structures to groundshaking and would, therefore, have incrementally less geological impact.

(6) Surface Water Quality

With the development of Alternative 3, the Project site south of Del Amo Boulevard would be 100 percent impermeable, as under the Project, since an impervious cap and building pads would be installed over the entire site, in accordance with DTSC requirements. The impermeable surface would prevent contact between surface water runoff and the underlying contaminated refuse. The Project site north of Del Amo Boulevard would have a combination of permeable and impermeable areas. If the area north of Del Amo Boulevard were developed with fewer structures (no reduction in height), the site would have greater exposed surface and slightly less potential runoff than under the Project; and if development in this area occurred with reduced building heights, site coverage, exposure of soils, and runoff would be the same as under the Project. If greater open space (natural soils) occurred in the area north of Del Amo Boulevard, it would reduce runoff, and it would have greater potential than the Project to expose soils to surface water runoff. As with the Project, SWPPP and SUSMP permits to prevent surface water contamination during the construction and operation phases of Alternative 3 would be required. With the implementation of BMPs required by these permits, water quality impacts under this Alternative, including contact of surface water and exposed soils during construction and operation, would be reduced to less than significant levels. Mitigation measures requiring further investigation of the 11-acre parcel would be the same as under the Project. Due to the adequate capacity of adjacent and nearby storm drain facilities, no off-site flooding resulting in erosion is anticipated. With the implementation of mitigation measures, surface water quality under both Alternative 3 and the proposed Project would be less than significant and substantially the same.

(7) Air Quality

The amount of site preparation under Alternative 3 compared to the proposed Project[181] would remain the same since the remediation of the former landfill site, including capping of waste materials and coverage of the former landfill site by impervious concrete foundations, parking lots, and streets would be the same as under the Project. Under this Alternative, the proposed Project would be reduced through a 25 percent reduction in residential units and commercial floor area. As a result, construction activities would be proportionally reduced by approximately the same amount. However, pollutant emissions and fugitive dust from site preparation and construction activities would be similar on a daily basis, as the duration and not the intensity of these activities could decrease compared to the proposed Project. The construction emissions generated by Alternative 3 would be less than those of the proposed Project over the construction period. However, impacts during maximum conditions, those used for measuring significance, would be similar to those of the proposed Project and would be significant under Alternative 3 for regional construction emissions. Localized pollutant construction impacts would also be similar to the proposed Project as both the intensity and duration of excavation and grading would be similar, and would also be significant.

With the proposed reductions in several Project uses, the operational impacts associated with road traffic from this Alternative would be reduced by approximately 23 percent, with a commensurate decrease in air emissions. Impacts from stationary uses would be reduced by 25 percent, however impacts from these uses comprise a very small portion of the overall operations emissions. The reductions would not be sufficient to avoid the significant regional air quality impacts associated with the proposed Project. Since the localized CO hotspot analysis for the proposed Project did not result in any significant impacts, this Alternative would likewise not have any localized impacts due to fewer trips generated.

With respect to potential air toxic impacts, this Alternative would also include a residential component near the I-405 freeway. Thus, as with the proposed Project, this Alternative would result in significant unavoidable air quality impact related to air toxics.

(8) Noise

Because the type of construction associated with Alternative 3 would be similar to the proposed Project, daily construction-related noise levels experienced both within the Project site and the immediate vicinity would be similar to the proposed Project and are considered

[181] *All calculations used in this analysis are presented in Appendix F, Air Quality Technical Appendices, of this EIR.*

significant. However, there would be fewer days of construction activity associated with this Alternative since it reduces the amount of developed uses by 25 percent.

A reduction in land use intensity would also result in a slight reduction in noise levels associated with operational on-site equipment and activity. The on-site equipment and activity noise levels associated with the Project are not considered significant and would be less so with this Alternative. An expected reduction of 23 percent in traffic volumes associated with this Alternative would yield a slight reduction in comparison to Project traffic noise. As with the proposed Project this Alternative would result in a less than significant roadway noise impact.

(9) Public Services

(a) Fire Services

(i) Construction

Under Alternative 3, the scope of construction would be incrementally less than under the Project, due to a 25 percent decrease in total development. As with the Project, construction activities would have the potential to increase demand for fire services due to the occasional exposure of combustible sawdust, wood, plastics, etc, to such heat sources as machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions. Construction activities requiring street or sidewalk closure or detouring have the potential to impede or interfere with emergency services. As with the Project, Alternative 3 would adhere to existing OSHA and fire code regulations and would incorporate design features and mitigation measures to reduce potentially significant construction impacts to less than significant levels. Access impacts would be reduced to less than significance through the implementation of a Worksite Traffic Control Plan that requires coordination of any street and sidewalk closures and detours with the City and emergency services. With mitigation, both Alternative 3 and the proposed Project would have a less than significant impact on fire services and emergency access. However since the scope of construction activities would be incrementally reduced under Alternative 3, impact on fire services would be less under this Alternative.

(ii) Operation

Under Alternative 3 the scope of development of the Project site would be incrementally decreased. As outlined previously, this reduction may include reduced building heights or decreased density. With reduced building heights or density, and proportionately less residential population and occupancy, Alternative 3 would have incrementally less demand on fire services than the Project. Both Alternative 3 and the proposed Project would reduce potential impacts associated with fire service demand to less than significant levels through adherence to fire code

regulations; installation of fire suppression systems and equipment, including sprinklers; and incorporation of recommended mitigation measures. Although both Alternatives, with mitigation, would have a less than significant impact on fire services, since Alternative 3 would have incrementally less demand, the impact on fire services would be less under Alternative 3 than under the proposed Project.

(b) Police Services

Alternative 3, as with the Project, would generate a greater demand for police protection services than under existing conditions, due to the permanent increase in residential population and commercial development. The demand for services associated with Alternative 3 would be incrementally less, since this Alternative would have fewer residents and less commercial floor area than the Project. As both Alternative 3 and the proposed Project would develop a currently undeveloped site, impacts to police services would be potentially significant under either scenario. However, impacts to police services would be reduced through the implementation of required mitigation measures. Since Alternative 3 would have fewer residential units, and less commercial floor area, impacts relative to police services would be less than under the Project.

(c) Schools

Both the Project and Alternative 3 would generate school-age children and potentially impact Los Angeles Unified School (LAUSD) facilities. The Project would generate approximately 489 students, including 213 elementary school students, 119 middle school students, and 157 high school students. In contrast, Alternative 3 would generate approximately 367 students, including 160 elementary school students, 89 middle school students, and 118 high school students. Though Alternative 3 would have fewer residential units and less commercial floor area, resulting in the generation of fewer students, impacts to schools would nonetheless be potentially significant. However, as with the Project, Alternative 3 would fully mitigate any impacts on schools through the payment of the requisite school facility development fees current at the time building permits are issued, pursuant to the provisions of Government Code Section 65995. With the levy of mandatory school fees, any potential impacts on schools would be reduced to less than significant levels under both scenarios.

(d) Parks and Recreation

As with the Project, Alternative 3 would generate a demand for parks and recreational services due to a permanent increase in residential population. However, with a 25 percent reduction in residential development, there would be a 25 percent reduction in the demand for park space. In order to meet the minimum land dedication requirements per adopted City policies and regulations, this Alternative would need to provide 9.6 acres of land for park space,

or its equivalent in on-site improvements, and/or the payment of in-lieu fees. This compares to the 12.8 acres that would be required with implementation of the Project. Alternative 3 would also be required to provide for private and common open space within its residential component based on the City's requirements. As requirements for park and open space are measured on a per capita basis, Alternative 3 would create less demand for park space, and at the same time be required to provide less park space than the Project. Therefore, net impacts would be similar to those of the Project, and as with the Project would be less than significant.

(e) Libraries

Both the Project and Alternative 3 would generate a demand for library services due to a permanent increase in residential population. According to the County Library guidelines, the proposed Project would generate the need for 3,485 square feet of library facility space, 19,165 library collection items, 17 reader seats, 14 meeting room seats, 7 public access computers, and 14 standard size parking spaces. Alternative 3 would generate 25 percent fewer residents, and thus, require the provision of 2,614 square feet of space, 14,374 collection items, 13 reader seats, 11 meeting room seats, 5 public access computers, and 11 parking spaces. Since Alternative 3 would generate less of a population increase, impacts relative to libraries would be incrementally less under Alternative 3. However, impacts would still be considered potentially significant because the Carson Regional Library is operating at a level beyond the established library planning guidelines. As was the case with the Project, the impact would be reduced to a less than significant level through the payment of fees.

(10) Utilities/Service Systems

(a) Water Services

Although reduced in scale, Alternative 3 would require water for the same mix of residential, commercial, hotel, and restaurant uses, as would the Project. Water demand for the construction phase of Alternative 3 would be the same as under the proposed Project as the site area that would require watering during site preparation activities is the same. Demand for water during the operations phase would be proportionately reduced. Water consumption for Alternative 3's operational phase is shown in Table 80 on page 579. As shown in Table 80, the operational phase would result in an approximate demand of 596,603 gallons of domestic water per day and 217.6 million gallons per year. Compared to the Project's demand of 795,470 gallons per day and 290.5 million gallons per year, Alternative 3 would reduce water consumption by approximately 25 percent during the operational phase. Fire flow requirements would be the same as for the Project due to the similarity of structure types. Although impacts on water services would be less than significant under both the Project and Alternative 3,

Table 80

Water Consumption for Alternative 3: Reduced Project Alternative

Land Use	Size	Daily Water Consumption [a] (gallons per day)	Annual Water Consumption [b] (million gal/year)
Residential	1,162 units	236,250	86.2
Neighborhood Commercial	97,500 sq. ft.	32,010	11.7
Restaurant	60,844 sq. ft.	66,930	24.4
Hotel	225 rooms 150,000 sq. ft.	31,050	11.3
Commercial Recreation/ Entertainment	160,500 sq. ft.	21,450	7.8
Regional Commercial	1,027,500 sq. ft.	208,913	76.3
Total	1,496,344 sq. ft.	596,603	217.8

[a] *The water consumption was calculated by reducing the Project alternative's water use totals by 25% for each land use, because Alternative 3 land uses represent an overall reduction by 25% from the Project alternative.*

[b] *Annual water consumption assumes 365 days of operation a year.*

Source: PCR Services Corporation, September 2005.

Alternative 3 would generate incrementally less demand during operations. Therefore, Alternative 3 would have less impact on water services than the Project.

(b) Sewer Services

Under Alternative 3, the proposed development would generate a demand for wastewater conveyance and treatment. However, the generation of wastewater would be proportionately reduced with the 25% reduction in site development. As shown in Table 81 on page 580, Alternative 3 would generate approximately 540,835 gallons of wastewater per day and 197.4 million gallons per year. Compared to the Project's 721,113 gallons of wastewater per day and 263.3 million gallons per year, Alternative 3 would reduce wastewater conveyance and treatment demand by approximately 25 percent. Existing conveyance systems in Main Street and Del Amo Boulevard would be adequate to serve either the Project or Alternative 3. As with the Project, Alternative 3 would not be permitted prior to the determination of the District's treatment capacity and payment of fees to mitigate potential impacts. Demand on wastewater services would be less than significant under both the Project and Alternative 3. Although impact on wastewater services would be less than significant, Alternative 3 would generate incrementally less wastewater during operation. Therefore, Alternative 3 would have less impact on wastewater services than the Project.

Table 81

Wastewater Generation for Alternative 3: Reduced Project Alternative

Land Use	Size	Daily Wastewater Generation [a] (gallons per day)	Annual Wastewater Generation [b] (million gal/year)
Residential	1,162 units	214,988	78.5
Neighborhood Commercial	97,500 sq. ft.	28,815	10.5
Restaurant	60,844 sq. ft.	60,844	22.2
Hotel	225 rooms 150,000 sq. ft.	28,125	10.3
Commercial Recreation/ Entertainment	160,500 sq. ft.	19,438	7.1
Regional Commercial	1,027,500 sq. ft.	188,625	68.8
Total	1,496,344 sq. ft.	540,835	197.4

[a] *The wastewater generation was calculated by reducing the Project alternative's wastewater totals by 25%, because Alternative 3 land uses represent an overall 25% reduction from the Project alternative.*

[b] *Annual wastewater generation assumes 365 days of operation a year.*

Source: PCR Services Corporation, September 2005.

(c) Solid Waste

As Alternative 3 consists of 25 percent less development than the proposed Project, solid waste impacts resulting from the construction and operation of Alternative 3 would be reduced accordingly. Alternative 3 would thus require the disposal of roughly 4,667 tons of construction debris in total and approximately 7,548 tons per year during operation, compared to the Project's 6,222 tons of debris generated during construction and roughly 10,064 tons per year of solid waste generated during operation. Thus, the Project would generate and require the disposal of greater amounts of solid waste. Implementation of mitigation measures would reduce the impact of the Project relative to solid waste to a less than significant level. However, since Alternative 3 would require the disposal of 25 percent less waste at landfill facilities, it would cause less of an increase in the demand for solid waste services. Therefore, Alternative 3 would have less impact on solid waste than the Project.

c. Relationship of Alternative 3 to the Project Objectives

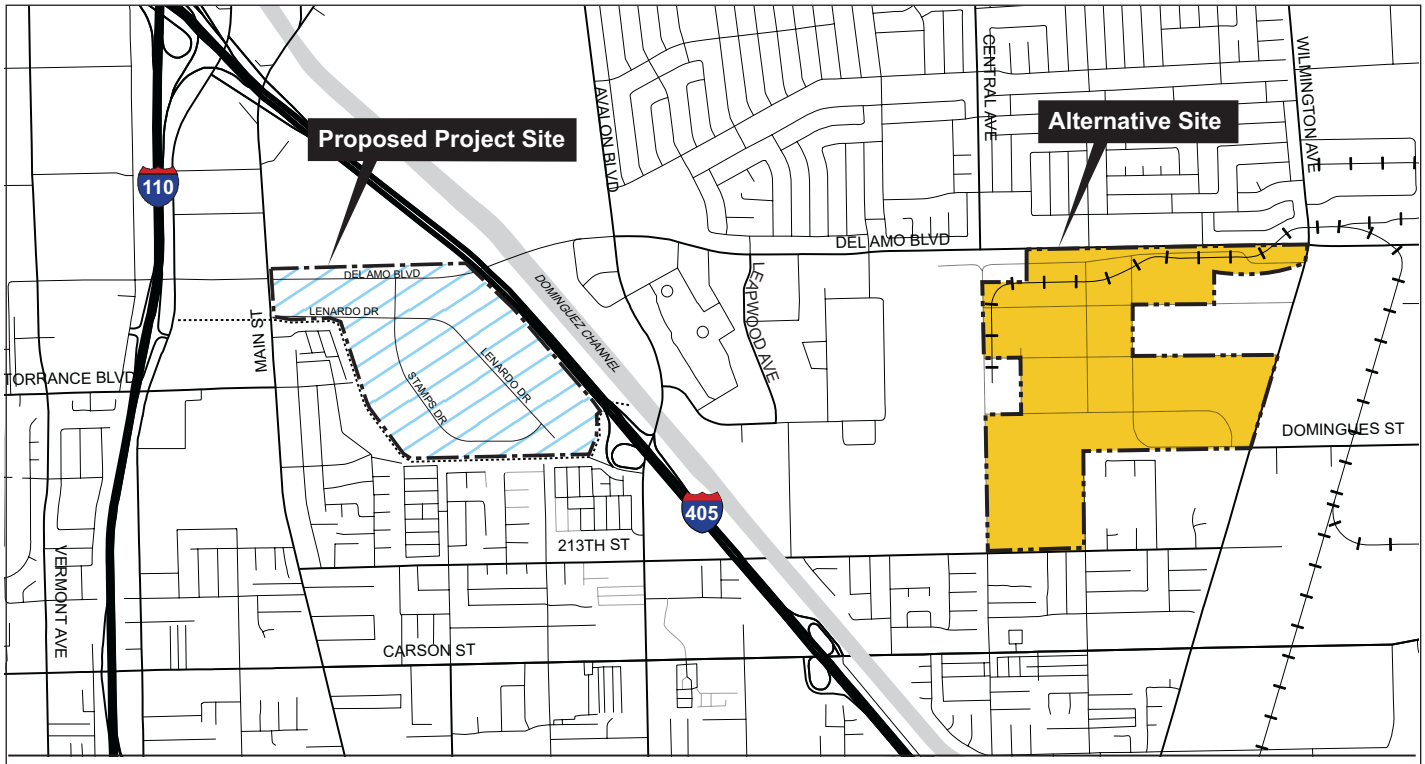
Alternative 3 could meet the Project's basic objectives with regard to the reuse of a large brownfield site by generating the revenue necessary to pay for, and effectuate remediation of, the environmental conditions on the Project Site, although the proportional financial burden would be greater than the Project and may make remediation infeasible. Alternative 3 would also promote the economic well being of the Redevelopment Project Area by diversifying and

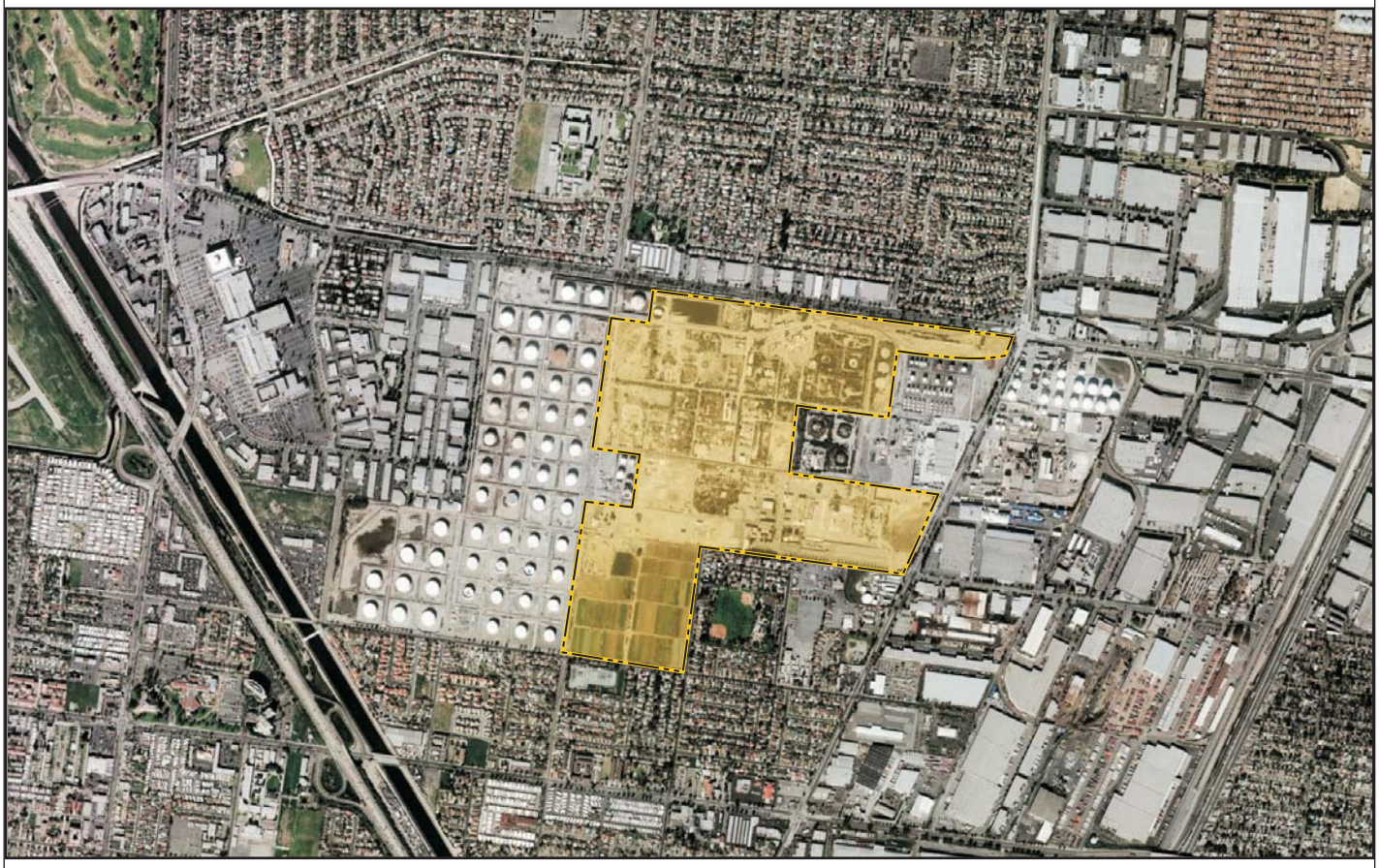
increasing the area's economic base and would assist in creating both short and long term employment opportunities. However, since Alternative 3 would have 25 percent fewer residential units and commercial floor area, it would not meet the objective to maximize work opportunities and shopping and entertainment opportunities to the same extent as the Project. In providing a mix of regional and neighborhood commercial uses, hotel, restaurants, and residential uses, Alternative 3 would most likely meet the objective of the Project to provide a signature/gateway development that contributes to the creation of a vibrant urban core for the City. However, since Alternative 3 would reduce all uses by 25 percent, it would not provide the same level of pedestrian traffic or vibrancy as the Project. Alternative 3 would contribute to the City's stock of rental housing and for sale units, including affordable housing, although not to the same extent as the Project. Alternative 3 would incrementally reduce unavoidable and significant impacts associated with traffic, public transit, and air quality during Project operation, but would not reduce these impacts to less than significant levels. As with the Project, visual resources, construction noise, and air quality impacts would continue to be significant.

4. Alternative Four – Alternative Site Alternative

a. Introduction

This section presents an environmental analysis of developing the proposed Project at an alternative location. Alternative 4 assumes that the Project would not be developed at the proposed Project site and that existing site conditions would remain unchanged. Remediation of the existing brownfield portion of the Project site south of Del Amo Boulevard, including capping of existing waste materials at the former landfill site, would not occur. The purpose of the evaluation of an alternative location is to ascertain if moving a project to another site would reduce or eliminate any potentially significant environmental impacts that may be unique to the Project's location, and whether relocation could potentially eliminate potential Project impacts. Alternative 4 would be constructed according to the Project's design and intensity under a similar Specific Plan. Specific criteria in determining the acceptability of an alternative site are location within the same jurisdiction and adequate size to accommodate the scope of the Project. In accordance with these criteria, the Shell refinery site located approximately 1 mile east of the proposed Project site has been selected for the evaluation of an alternative location. The location and setting of the Alternative Site is illustrated in Figure 42 on page 582. Table 82 on page 583 compares the components of Alternative 4 with the proposed Project. A summary of comparative impacts is presented in Table 83 on page 596.





Aerial view of alternative site

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Figure 42
Location and Setting of the Alternative Site

Source: PCR Services Corporation, 2005

Table 82

Comparison Of Alternative 4 Components: Alternative Location

Land Use	Proposed Project	Alternative 3	Numerical Difference	Percent Change
Residential	1,550 units	1,550 units	0	0
Neighborhood Commercial	130,000 sq.ft.	130,000 sq.ft.	0	0
Restaurant	81,125 sq.ft.	81,125 sq.ft.	0	0
Hotel	300 rooms	300 rooms	0	0
	200,000 sq.ft.	200,000 sq.ft.		
Commercial Recreation/ Entertainment	214,000 sq.ft.	214,000 sq.ft.	0	0
Regional Commercial	1,370,000 sq.ft.	1,370,000 sq.ft.	0	0
Total Non-Residential	1,995,125 sq.ft.	1,995,125 sq.ft.	0	0

Source: PCR Services Corporation, August 2005

b. Analysis of Alternative

(1) Land Use

Development of the Project at the Alternative Site would leave the proposed Project site undeveloped and subject to the impacts described for Alternative 1, No Project, as presented above. At the same time, placing the development at the Alternative Site would put to productive use a former industrial site that, like the proposed Project, is located in Redevelopment Project Area No. One.

The Alternative Site was once the location of the Shell Oil Refinery facility which ceased operation in 1983. The site is mostly vacant and underutilized. It currently contains remnants of the former operations with entrance ways, gates, on-site driveways, and former ancillary facilities. There is small scale agricultural activity in the southwest corner of the site. The surrounding areas include a mix of residential neighborhoods, commercial uses, and industrial uses. There are existing tank farm facilities that are still in use in areas immediately adjacent to the Alternative Site.

The Alternative Site's General Plan designations are mostly Business Park and Light Industrial, with small pockets of Heavy Industrial designations interspersed. The existing zoning is Heavy Industrial.

(a) Compatibility with Land Use Plans, Policies and Regulations

Development under Alternative 4 would be implemented through a Specific Plan that would be similar to that of the proposed Project, with similar development guidelines and

standards. The development program would also be the same. However, it should be noted that development of an appropriate site plan at the Alternative Site poses challenges that are not inherent at the Project site. The Alternative Site has a more industrial nature, and is less defined as a coherent, distinct development area. Further, it lacks the Project site's buffering from existing residential development due to the presence of the Torrance Lateral and the site's elevation atop the existing berms.

Development of the Alternative Site with commercial and residential development would meet numerous goals and policies of the City's Redevelopment and General Plans. It would cause remediation and productive reuse of a blighted site; enhance the City's economic base; and add new employment opportunities and housing units in the City. Also, development of the Alternative Site would contribute to the centrality of the City as a place for shopping and entertainment, but in ways that are less advantageous than at the Project site. Furthermore, the Alternative Site is not as conducive to the creation of a signature project. It lacks the Project site's visual and entry features along the I-405 Freeway and the visual connections between the site and the South Bay Pavilion. The Project site's current General Plan designations, Mixed Use Business Park, versus Business Park, Light Industrial and Heavy Industrial designations at the Alternative Site, reflect the Project site's advantages for mixed-use development, and the establishment of regional commercial uses along the I-405 Freeway. Therefore, the land use impacts of development at the Alternative Site would be considered greater than at the Project Site. Notwithstanding, the development program would be compatible with the existing land use plans, policies or regulations intended to prevent an impact to the environment. While impacts regarding the regulatory framework would be greater than with the proposed Project, impacts would be less than significant.

(b) Existing Land Use Patterns

Development at the Alternative Site would provide a mixed use community placed amidst the larger developed urban setting. However, the development could contrast notably with surrounding uses. Careful site design would be needed to avoid potential incompatibility between on-site residential/commercial uses and existing off-site industrial uses. Further, design consideration would be needed to protect residential areas north, south and southeast of the Alternative Site from potential development conflicts. Setbacks and buffering would be required. While design solutions are available, impacts regarding land use patterns at the Alternative Site would be considered greater than at the Project site, because of (1) the immediacy of the existing industrial uses; and (2) lack of buffering allowed by the Project site's raised elevation and surrounding berms, as well as separation from most residential units by the Torrance Lateral.

However, development at the Alternative Site would not result in the division, disruption or isolation of an existing established community or neighborhood. The existing land use pattern is one in which existing development to the north, south, east and west contains differing uses that are tied to separate distinct districts. Development on the Alternative Site would not disrupt existing linkages. Therefore, impacts with regard to land use relationships would be less than significant, as is the case with the proposed Project.

(c) Sustainability of Existing Retail Uses

Alternative 4 would include the same amount of retail activity as the proposed Project and would therefore have similar market effects on existing retail development and the sustainability of such development. Therefore, the same forecasted short-term negative effect upon existing retail uses within the market area identified for the Project would occur with the Alternative. However, as with the Proposed Project, the adverse affect would be alleviated in the mid-term (i.e., by 2020) as the local market grows and matures. Impacts on the sustainability of existing uses under Alternative 4 would be similar to those of the proposed Project, and would be less than significant.

(2) Visual Resources

(a) Aesthetic Character

(i) Construction

Alternative 4 would require a similar scope of construction activities, to those of the Project. The Alternate Site is, like the Project site, located within a larger urban setting. Construction activities at the Alternative Site would be apparent from Del Amo Boulevard and Wilmington Avenue as well as local neighborhood streets and adjacent residential neighborhoods. The Alternate Site is less noticeable than the Project site, which is subject to expansive views from Del Amo Boulevard, the I-405 Freeway, and adjacent residential development. At the same time, the Alternate Site does not sit atop a berm in a manner that reduces construction impacts, and does not include a buffer area next to its adjacent residential development (such as the Torrance Lateral). Therefore, net construction impacts on aesthetics would be similar. As was the case with the Project, construction impacts on aesthetics would be typical of that occurring within an urban area, and would not alter unique view resources or views of such resources. Therefore, impacts would be less than significant under both Alternative 4 and the proposed Project.

(ii) Operation

Under Alternative 4, the Project site would remain undeveloped and the Project's significant impact on a valued resource associated with the Project site's large expanse of undeveloped land and open space would be avoided at the Project site. The Alternative Site, although having an open space aspect, contains remnants of the former refinery use and is not characterized by the same expansiveness as the Project site. However, its development would still substantially alter the character of the area, with a large amount of building mass replacing an open area within the urban setting. The Alternative Site is not buffered from adjacent residential uses by a drainage channel or freeway, as is the Project site, and is closer to existing low-rise residential uses and surrounding neighborhoods than the Project. However, as the Alternative Site is larger than needed to accommodate all of the development, additional buffer space could be added to reduce visual impact; but careful design and/or mitigation measures would be required.

As was the case with the Project, Alternative 2 would include design measures to avoid significant contrast with surrounding development, but could not avoid a substantial impact by converting undeveloped area within the urban setting to a substantially developed appearance. Therefore, impacts of Alternative 2 on aesthetic character would be similar to those of the Project and would be significant.

(b) View Resources

As with the Project site, the Alternative Site is in a partially degraded condition, with some remaining elements of the original refinery use. Although visible from surrounding streets and neighborhoods, the Alternative Site is not considered a view resource. Views over the Alternative Site, as is the case with the Project site, are limited due to intervening development and the flat terrain in the surrounding areas. In addition, the area around the Alternative Site does not contain notable features that would be considered view resources that would be potentially impacted by development of the Alternative Site. Since no view resources are identified on the Alternative Site or immediately surrounding area, the impact of Alternative 4 in relation to view resources would be less than significant. Therefore, the view impact of the Project and Alternative 4 would be substantially the same.

(c) Shade/Shadow

Alternative 4 would be developed to the same density and height as the proposed Project and would have the same length and breadth of shading. The Alternative Site is located closer to existing residential uses. Due to the reduction in setback between the Project and residential uses, compared to the Project, shadowing from the Alternative Site could, depending on Project

design, be greater than under the proposed Project. However, a site design could be developed that would avoid significant shading impacts. Alternative 4 would have shade/shadow impacts that are similar to the Project, and less than significant.

(d) Artificial Light

As with development at the Project site, Alternative 4 would add new lighting associated with illuminated signage, parking lot and walkway security lights, architectural lighting, streetlights, and light emanating from commercial and residential building interiors. As with the Project, artificial light impacts would be reduced to less than significance through light control methods, shielding, limitation of pole heights, and implementation of the City's light intensity regulations. Therefore, Alternative 4 would have impact relative to artificial lighting that is similar to that of the Project, and less than significant.

(3) Traffic, Circulation, and Parking

Under Alternative 4, the Project would be developed in a manner similar to the proposed Project, although relocated to the Shell refinery site. The Shell refinery is located approximately one mile east of the proposed Project site and is bounded by Vera Street on the west, Wilmington Avenue on the east, Del Amo Boulevard on the north, and 213th Street on the south. Primary regional access to the site is via the San Diego (I-405), Artesia (SR-91) and Harbor (I-110) Freeways. The distance from the Alternative 4 site to the closest freeway on- and off-ramps is farther than the access available to the proposed Project site.

Alternative 4 is expected to generate the same number of trips as the Project and, thus, would result in approximately 2,508 trips during the morning peak hour, 5,772 trips during the evening peak hour and 68,951 daily trips. Therefore, Alternative 4 is estimated to result in the same level of traffic at key intersections within the Project's study area, and would not reduce any of the Project's estimated significant impacts on intersections to less than significant levels. In addition, Alternative 4 would potentially impact a greater number of intersections than the Project since the Alternative Site is located farther from the freeway system.

The Alternative Site would have a greater number of access points from the adjacent streets than the Project since physical constraints to through roadways, which occur at the Project site, including the I-405 right-of-way and the Torrance Lateral Channel, would not occur. With a greater number of access points, access to the Alternative Site would operate at a better level of service than for the Project. Under this Alternative, improvements to the intersection of Lenardo Drive with the I-405 interchange would not occur.

Due to the similar magnitude of development, Alternative 4 would not reduce any of the projected significant impacts on the freeway system to less than significant levels. Similarly, the Project's significant impact on public transportation would continue to occur at the same magnitude as under the Project and would not be reduced to less than significant levels.

Parking would be provided in accordance with the City of Carson Development Standards and, as with the Project, no significant parking impacts are anticipated.

Therefore, there are some traffic related impacts that would vary more or less at each site. However, on-net the impacts would be similar.

(4) Hazards/Hazardous Materials

Implementation of the DTSC approved RAPs for the Upper Operable Unit and Lower Operable Unit of the 157-acre landfill site (Development Districts 1 and 2) would not likely occur under the Alternative Site scenario. As with the No Project alternative, the remediation would not occur since the current property owner does not have the funds to implement the RAPs at the Project site. While the State has pursued other responsible parties and created a remediation fund from the proceeds of lawsuits against those parties, the fund is not sufficient to complete the remediation. If the development were to occur at the Alternative Site, the additional funds that are necessary to implement the remediation would not be generated. As has occurred over the years, periodic maintenance may be necessary to address landfill related conditions, such as the potential of emission of methane gas. Because of the lack of implementation of the Upper Operable Unit RAP, development at the Alternative Site could result in hazards that would not occur with the Project. Development of District 3 would not occur under the Alternative Site scenario. The recommended additional Phase II activities of deeper soil-vapor sampling would not occur to further evaluate potential vapor intrusion.

The Final EIR for the 1996 Sixth Amendment to Project Area No. 1 indicates that the Alternative Site is located within the Wilmington oil field and there are active, idle, and abandoned oil wells within and adjacent to the area. In addition, there are other oil and gas related facilities, existing and abandoned, such as pipelines, sumps, and oil and gas treatment facilities in the area. The wells and associated facilities could impact future development under the Alternative Site scenario. However, the Final EIR for the 1996 Sixth Amendment to Project Area No. 1 contained mitigation measures with regards to hazards that would apply to any future development at the Alternative Site. The mitigation measures require that the area be thoroughly assessed for the possible presence of contaminated materials and that if necessary, remediation be implemented prior to development. In addition, the Final EIR contained a mitigation measure that if development were to occur over or near a plugged or abandoned oil or gas well, the well may need to be re-abandoned and the surrounding area remediated. Regardless, development of

the Alternative Site would occur in accordance with applicable regulations regarding hazards and risks. Therefore, as with the Project, development at the Alternative Site would result in less than significant hazards impacts. However, as indicated previously, this Alternative would not likely result in the construction of a landfill cap or gas and groundwater extraction facilities at the Project site. The lack of remediation at the Project site and the continuation of an uncapped landfill would be disadvantageous. At the same time, remediation of soil and groundwater would occur at the Alternative site and impacts would be similar.

(5) Geology/Soils

Development of the Alternative Site would require similar construction and site preparation, including mass grading for building foundations and, possibly, site remediation. Since similar structures would be constructed at the same scale as under the Project, the exposure of new residents, employees, and visitors to potential ground shaking as a result of an earthquake would be similar under both the Project and Alternative 4. However, settlement potential at the Project site would be greater due to the presence of waste debris in the underlying soils. The Project is concluded to be less than significant with the implementation of existing building code regulations and adherence to the recommendations of required geological and geotechnical reports prepared by a California Certified Engineering Geologist and a California Registered Civil Engineer. The development of Alternative 4 would implement similar building code requirements and, as such, impacts associated with geology and soils would also be less than significant at the Alternative Site. However, since the geological setting at the Alternative Site is less complex in relation to underlying earth materials and fill, potential geological impacts associated with settling would be incrementally less under this Alternative.

(6) Surface Water Quality

The Shell Refinery site has been exposed to hydrocarbon contamination and, as with the Project site, is undergoing long-term remediation. Under Alternative 4, large areas of currently impervious land at the Alternative Site would be paved and surface water runoff would be redirected to the existing storm drain system in Wilmington Avenue. Exposure of soils during construction and increases in traffic and urban pollutants during operation would potentially impact surface water quality. However, after completion, the debris level would be lower than under existing conditions. Construction and operation of Alternative 4 would require the implementation of BMPs under SWPPP and SUSMP permits, as would the development of the Project site. Since existing potential contamination, which would be reduced to less than significant levels with the implementation of BMPs, would be similar at both the Project site and alternative site, no environmental advantage in regard to surface water quality would be achieved through the relocation of the Project to the Alternative Site. In addition, the City of Carson Master Plan of Drainage (September 1987) indicated the need for additional drainage capacity in

the existing storm drain system in Wilmington Avenue. If development of the Alternative Site caused the existing storm system to overflow, flooding would increase the exposure of surface water to off-site contamination, thereby impacting surface water quality. Due to potentially inadequate storm drain capacity at the Alternative Site, development of the Alternative Site would have a greater surface water quality impact than development of the Project site.

(7) Air Quality

The amount of site preparation and construction that would be required at the Alternate Site would be similar to that of the Project site. Although the amount of excavation and soil movement would be less than the proposed Project as it would not require implementation of the RAP. Regardless, overall regional construction emissions would be similar to the proposed Project and would likewise be significant for criteria pollutants. Sensitive receptors are located adjacent to the Alternate Site along the northern and southern site boundaries. They include residential uses near Del Amo Boulevard to the north and along 213th street to the south. Localized pollutant construction impacts would also be similar to the proposed Project as the daily intensity of excavation and grading would be similar, and would also be significant.

The number of daily trips generated by this Alternative would be the same as the proposed Project, resulting in similar increases in mobile air quality emissions. The total contribution to regional emissions under this Alternative would be significant, as was the case with the proposed Project. The increase in traffic associated with this Alternative would contribute to a proportionate increase in localized emissions of carbon monoxide similar to the proposed Project. However, such emissions were below the significance threshold for localized carbon monoxide for the proposed Project. Applying the incremental increase in carbon monoxide concentrations attributable to the proposed Project to locations around the Alternate Site would likely result in less than significant localized air quality impacts at these locations as well.

With respect to potential air toxic impacts, this Alternative would avoid locating sensitive receptors near a freeway and, thus, would avoid the significant unavoidable impact that would occur as a result of the proposed Project.

(8) Noise

Noise conditions present at the Alternate Site are similar to those at the Project site. Relatively low noise levels occur in the interior of the Alternate Site away from existing noise sources. However, in comparison to the Project site, the Alternate Site is located farther away from the I-405 freeway. With the Alternate Site placed farther away from the freeway, on-site noise levels may be lower than the Project. Sensitive noise receptors are located within the

vicinity of the Alternate Site and include residential uses near Del Amo Boulevard to the north and along 213th street to the south.

Construction noise at the Alternate Site would be similar to construction noise expected at the Project site. Site preparation at either location would involve the use of heavy-duty construction equipment required in association with grading, installation of the required infrastructure and construction of the buildings. It is expected that this could result in noise events at or exceeding 85 dBA at the nearest sensitive receptor. Construction noise would be of short-term duration and mitigation measures are planned to reduce both the timing and duration of this noise. However, construction noise would be significant and would be comparable to the Project. Alternative 4 would not require Deep Dynamic Compaction and therefore would not have the related noise and vibration impacts associated with that Project component.

Operational noise impacts from this Alternative would be similar to the operations noise impacts expected as part of the Project. Traffic-related noise associated with operation should be similar in areas proximal to sensitive receptors that occur near the Alternate Site. As with the Project this Alternative would likely result in a less than significant roadway noise impact.

(9) Public Services

(a) Fire Services

(i) Construction

As Alternative 4 would involve the same type of development and floor area as the Project, the scope and duration of construction activities would be similar. As with the Project, construction activities would have the potential to increase demand for fire services due to the occasional exposure of combustible sawdust, wood, plastics, etc, to such heat sources as machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions. Construction activities requiring street or sidewalk closure or detouring have the potential to impede or interfere with emergency services. As with the Project, Alternative 4 would adhere to existing OSHA and fire code regulations and would incorporate design features and mitigation measures to reduce potentially significant construction impacts to less than significant levels. Both Alternative 4 and the proposed Project would have a less than significant and similar impact on fire services.

(ii) Operation

Alternative 4 would create a similar demand on fire services as the proposed Project, due to the same type of uses and scale of development. As with the Project, Alternative 4 would

reduce potential impacts associated with increased demand on fire services to less than significance through adherence to fire code regulations; installation of fire suppression equipment, including sprinklers; and the incorporation of recommended mitigation measures. However, the two locations vary in terms of available fire access. The Project site is adjoined by the I-405 Freeway on the east and by the Torrance Lateral Channel on the south and west. This configuration focuses the Project's access from Fire Station 36, for instance, to the intersection of Main Street/Leonardo Drive and Del Amo Boulevard/Stamps Drive. The Alternative Site would have greater accessibility to fire services since it is surrounded on all sides by public streets. Although both Alternative 4 and the proposed Project, with mitigation, would have a less than significant impact on fire services, the Alternative Site is better situated for fire access. Therefore, Alternative 2 would have less impact on fire services than the proposed Project.

(b) Police Services

As with the Project, Alternative 4 would generate a greater demand for police protection services than under existing conditions, due to the permanent increase in residential population and commercial development. As both Alternative 4 and the proposed Project would develop a currently undeveloped site, impacts to police services would be potentially significant. However, impacts to police services would be reduced to a less than significant level through the implementation of mitigation measures. Since the Alternative would generate the same permanent population increase and develop the same amount of commercial floor area, impacts relative to police services would be similar to the proposed Project under Alternative 4.

(c) Schools

Both the Project and Alternative 4 would generate approximately 489 students, including 213 elementary school students, 119 middle school students, and 157 high school students. As with the Project, Alternative 4 would fully mitigate any impacts on schools through the payment of the requisite school facility development fees current at the time building permits are issued, pursuant to the provisions of Government Code Section 65995. With the levy of mandatory school fees, any potential impacts on schools would be reduced to less than significant levels. Impacts on schools under Alternative 4 and the proposed Project would be similar.

(d) Parks and Recreation

As with the Project, Alternative 4 would generate a demand for parks and recreational services due to a permanent increase in residential population. As the residential population would be the same as with the Project, the demand for park space would be the same. Likewise, the Alternative would be required to provide park space pursuant to the same unit and per capita requirements as the Project. With the implementation of mitigation measures, Alternative 4's

impact on parks and recreation would be less than significant, as is the case with the proposed Project.

(e) Libraries

Alternative 4 would generate a demand for library services due to a permanent increase in residential population. As with the proposed Project, Alternative 4 would generate the need for 3,485 square feet of library facility space, 19,165 library collection items, 17 reader seats, 14 meeting room seats, 7 public access computers, and 14 standard size parking spaces. Therefore, library demand would be the similar under both the Project and Alternative 4. As was the case with the Project, impact fees would be implemented that would result in less than significant impacts.

(10) Utilities/Service Systems

(a) Water Services

Under Alternative 4, the magnitude and mix of residential, commercial, hotel, and restaurant uses would be the same as under the proposed Project. Landscaping areas would also be similar to the Project. Therefore, the demand for domestic water during both the construction and operational phase would be the same under both Alternative 4 and the proposed Project. The Alternative Site is served by existing water mains and no new infrastructure construction to provide adequate fire flow demand is anticipated. Although the development would occur in another location, the physical size of the construction site, and demand for potable water, would be the same as under the Project. Water for landscaping could be provided by a reclaimed water line running down Wilmington Avenue in front of the site. Demand on water services would be less than significant under both the Project and Alternative 4. Impacts would be similar.

(b) Sewer Services

Under Alternative 4, the magnitude and mix of residential, commercial, hotel, and restaurant uses would be the same as under the proposed Project. Therefore, wastewater generation would be approximately 721,113 gallons per day and 263.5 gallons per year under both Alternative 4 and the proposed Project. The area of the Alternative Site is served by existing wastewater mains and, as with the Project, no new off-site infrastructure construction is anticipated. Although Alternative 4 would be developed at another location, since wastewater generation would be the same as under the Project, development at the Alternative Site would not reduce the Project's wastewater demand on wastewater services. As with the Project, Alternative 4 would not be permitted prior to the determination of the District's treatment capacity and payment of fees to mitigate potential impacts. Demand on wastewater services

would be less than significant under both the Project and Alternative 4. Impact on wastewater services would be similar.

(c) Solid Waste

Solid waste generated by Alternative 4 would be the same to the Project, due to the similarity in the land use and size of both Alternatives. Both the Project and Alternative 4 would generate and require the disposal of roughly 6,222 tons of debris during construction and 10,064 tons of debris annually during operation. Since Alternative 4 and the Project would generate similar volumes of solid waste, solid impacts under Alternative 4 would be the same as the proposed Project.

c. Relationship of Alternative 4 to the Project Objectives

Alternative 4 would, like the Project, put to productive use a blighted, underutilized site within Redevelopment Project Area No. One. In so doing it would contribute to the economic well being of the Redevelopment area and the City. Alternative 4 would also meet the objective to generate substantial construction work opportunities and long-term jobs in the commercial and hospitality industries. Alternative 4 would contribute to the creation of a vibrant urban core for the City; however, since this location would not take advantage of the site's proximity to the San Diego Freeway, it would not have the same level of gateway appeal as the Project site. Alternative 4 would meet the Project objective to contribute to the City's housing stock of rental and for sale units, including affordable housing. Alternative 4 would not avoid the Project's significant and unavoidable impacts associated with visual quality, traffic, public transit, air quality, and construction noise. Alternative 4 would cause the remediation of soils and groundwater at the Alternative site, and would have impacts similar to the Project in relation to hazards.

G. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines require the identification of an environmentally superior alternative to the proposed Project and, if the environmentally superior alternative is the "No Project alternative," the identification of an environmentally superior alternative from among the remaining alternatives.[182] An environmentally superior alternative is an alternative to the proposed Project that would reduce and/or eliminate the significant, unavoidable environmental impacts associated with a project without creating other significant impacts and without substantially reducing and/or eliminating the environmental benefits attributable to the Project.

[182] *CEQA Guidelines, Section 15126.6(e)(2).*

Selection of an environmentally superior alternative is based on an evaluation of the extent to which the Alternatives reduce or eliminate the significant impacts associated with the Project, and on a comparison of the remaining environmental impacts of each alternative. The relative environmental characteristics are comparatively summarized in Table 83 on page 596. This table presents the conclusions from each of the analyzed alternatives. The table indicates whether each alternative's environmental impacts would be "similar," "greater" or "less" than those of the Project, as determined in the prior evaluations of each alternative.

The environmentally superior alternative (excluding the No Project alternative) is determined through a review of the Comparison of Impacts table, and reviewing the number of impact areas in which an alternative is determined to have "less" relative impact in relation to the Project. As shown on Table 83, the No Project alternative (Alternative 1) would be the environmentally superior alternative, since this Alternative would have less impact than the other evaluated alternatives. However, the No Project alternative would not provide for the remediation of soils or groundwater at the Project's brownfield site and, as such, would be less environmentally beneficial than the Project in relation to hazards and surface water quality.

CEQA requires that when the No Project alternative is the environmentally superior alternative, another alternative needs to be selected as environmentally superior.

In accordance with this procedure, the 25 percent Reduced Project alternative (Alternative 3) would be the environmentally superior alternative. Although the Reduced Project alternative would not meet all of the basic objectives of the Project to maximize the development potential of the Project site; review of the relative environmental superiority or inferiority of each alternative and determination of an environmentally superior alternative is not based on the extent to which the Alternative projects achieve the basic objectives of the Project. The 25 percent Reduced Project alternative would, nonetheless, partially achieve most of the Project's objectives.

Table 83

Comparison of Impacts
Proposed Project and Project Alternatives

		Alternative 1	Alternative 2	Alternative 3	Alternative 4
	Proposed Project	**No Project**	**Alternative Use – Mixed Use Business Park**	**Reduced Density – 25 percent Reduction**	**Alternative Location – Shell Refinery Site**
Land Use					
	Regulatory Framework	Less than Significant	Greater (Less than Significant)	Greater (Less than Significant)	Similar (Less than Significant)
	Land Use Patterns	Less than Significant	Similar (Less than Significant	Similar (Less than Significant)	Similar (Less than Significant)
	Sustainability	Less than Significant	Similar (Less than Significant	Less (Less than Significant)	Less (Less than Significant)
Visual Resources					
Aesthetic Character	Significant & Unavoidable	Less (No Impact)	Similar (Significant & Unavoidable)	Similar (Significant & Unavoidable)	Similar (Significant & Unavoidable)
Views	Less than Significant	Less (No Impact)	Similar (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)
Shade/Shadow	Less than Significant	Less (No Impact)	Less (Less than Significant)	Similar (Less than Significant)	Similar (Less than Significant)
Artificial Light	Less than Significant	Less (No Impact)	Less (Less than Significant with Mitigation)	Less (Less than Significant with Mitigation)	Greater (Less than Significant with Mitigation)
Traffic/Circulation					
Traffic	Significant & Unavoidable	Less (No Impact)	Less (Significant & Unavoidable)	Less (Significant & Unavoidable)	Similar (Significant & Unavoidable)
Access	Less than Significant with Mitigation	Less (No Impact)	Less (Less than Significant with Mitigation)	Less (Less than Significant with Mitigation)	Similar (Significant & Unavoidable)
Public Transit	Significant & Unavoidable	Less (No Impact)	Less (Significant & Unavoidable)	Less (Significant & Unavoidable)	Similar (Significant & Unavoidable)
Parking	Less than Significant	Less (No Impact)	Less (Less than Significant)	Less (Less than Significant)	Similar (Significant & Unavoidable)

Table 83 (Continued)

Comparison of Impacts
Proposed Project and Project Alternatives

		Alternative 1	Alternative 2	Alternative 3	Alternative 4
	Proposed Project	**No Project**	**Alternative Use – Mixed Use Business Park**	**Reduced Density – 25 percent Reduction**	**Alternative Location – Shell Refinery Site**
Hazards/Hazardous Materials	Less than Significant	Greater (Significant)	Similar (Less than Significant)	Similar (Less than Significant)	Similar (Significant)
Geology/Soils	Less than Significant with Mitigation	Less (No Impact)	Similar (Less than Significant with Mitigation)	Less (Less than Significant)	Less (Less than Significant)
Surface Water Quality	Less than Significant	Greater (Significant)	Similar (Less than Significant)	Similar (Less than Significant)	Greater (Less than Significant)
Air Quality	Significant & Unavoidable	Less (No Impact)	Less (Significant & Unavoidable)	Less (Significant & Unavoidable)	Similar (Significant & Unavoidable)
Noise	Significant & Unavoidable	Less (No Impact)	Less (Significant & Unavoidable)	Less (Significant & Unavoidable)	Similar (Significant & Unavoidable)
Public Services					
Fire Services	Less than Significant with Mitigation	Less (No Impact)	Similar (Less than Significant with Mitigation)	Less (Less than Significant with Mitigation)	Less (Less than Significant with Mitigation)
Police Services	Less than Significant with Mitigation	Less (No Impact)	Less (Less than Significant with Mitigation)	Less (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)
Schools	Less than Significant with Mitigation	Less (No Impact)	Less (Less than Significant with Mitigation)	Less (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)
Parks & Recreation	Less than Significant with Mitigation	Less (No Impact)	No Impact	Less (Less than Significant with Mitigation)	Less (Less than Significant with Mitigation)
Libraries	Less than Significant with Mitigation	Less (No Impact)	No Impact	Less (Less than Significant with Mitigation)	Similar (Less than Significant with Mitigation)

Table 83 (Continued)

Comparison of Impacts
Proposed Project and Project Alternatives

	Proposed Project	Alternative 1 No Project	Alternative 2 Alternative Use – Mixed Use Business Park	Alternative 3 Reduced Density – 25 percent Reduction	Alternative 4 Alternative Location – Shell Refinery Site
Utilities/Services Systems					
Water Services	Less than Significant	Less (Less than Significant)	Less (Less than Significant)	Less (Less than Significant)	Similar (Less than Significant)
Sewer Services	Less than Significant	Less (Less than Significant)	Less (Less than Significant)	Less (Less than Significant)	Similar (Less than Significant)
Solid Waste	Less than Significant	Less (Less than Significant)	Less (Less than Significant)	Less (Less than Significant)	Similar (Less than Significant)

Source: PCR Services Corporation, September 2005.