



## EXECUTIVE SUMMARY



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## A. INTRODUCTION

In accordance with CEQA Guidelines § 15123, this Chapter of the EIR provides a brief description of the project; identification of significant effects associated with the project and proposed mitigation measures or alternatives that will reduce or avoid those effects; areas of controversy known to the lead agency; and issues to be resolved including the choice among alternatives and whether and how to mitigate the significant effects.

## B. PROJECT LOCATION

The proposed project site is located between the San Gabriel River and the Los Cerritos Channel at the southwest corner of Pacific Coast Highway (PCH) and 2<sup>nd</sup> Street in the City of Long Beach. The project site is roughly bounded by 2<sup>nd</sup> Street to the north, a retail center to the south, PCH to the east, and Marina Drive to the west. The site is located approximately five miles east of downtown Long Beach and approximately one mile south of the I-405 Freeway.

## C. PROPOSED PROJECT

### 1. Proposed Project Components

The proposed project is a mixed-use development with retail, residential, hotel, restaurant, and entertainment uses. Specifically, the development would include up to 191,475 square feet of retail uses, 325 residential units, a 100-room hotel with 3,510 square feet of meeting space and 4,368 square feet of restaurant space, 21,092 square feet of non-hotel restaurant space, a 99-seat theater, a 4,175-square-foot marine/science learning center, and associated landscaping and open space. Buildings would generally range from two to six stories in height, with one residential tower reaching a maximum of 12 stories (approximately 150 feet with rooftop structural components and emergency helipad). On-site parking would be provided via structured parking including one subterranean parking level roughly covering the boundaries of the project site, as well as one at-grade level and one above-grade level, both of which would be limited to the southern end of the project site, for a total of 1,440 on-site parking spaces.

### 2. Project Design Features

The applicant has incorporated a number of project design features (PDFs) and procedures into the proposed project that would serve to avoid or reduce impacts. The PDFs, which also include certain regulatory requirements applicable to the project, are categorized by issue area and presented in Section II, Project Description, of this EIR.

## D. PROJECT BACKGROUND

The City of Long Beach has the primary responsibility for carrying out or approving the project and is therefore, the Lead Agency with principle responsibility for preparing documents required by the California

Environmental Quality Act (CEQA). To date, several steps of the public environmental review process have been completed. A Notice of Preparation (NOP) for a Draft Environmental Impact Report (EIR) regarding the Second+PCH project was circulated by the City of Long Beach in October 2009, based on an Initial Study which determined that implementation of the project could result in potentially significant impacts to the environment. Copies of the NOP and public agency comments received during the 30-day public comment period for the NOP are provided in Appendix A. In addition, in accordance with Public Resources Code Section 21083.9, a public scoping meeting was held for the project on October 7, 2009 to obtain input as to the scope and content of the environmental information about the proposed project that should be explored in the EIR.

Subsequent to the initial scoping process described above, a Draft EIR was prepared for the proposed project and circulated for a 45-day public review period starting April 21, 2010 and ending June 4, 2010, and comments were received from the public and various agencies. However, following the close of the public review period, changes to the project were proposed by the applicant in order to reduce significant traffic impacts identified in the Draft EIR. Due to these changes, as well as the need to revise and supplement project-specific technical reports related to the EIR, the City elected to revise and recirculate the Draft EIR. As such, this Recirculated Draft EIR (RDEIR) has been prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), and the *CEQA Guidelines* (California Code of Regulations, Title 14, Section 15000 et seq.).

## **E. SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS**

Unavoidable significant impacts can occur as a result of project impacts, cumulative impacts, and as a secondary effect from the implementation of a mitigation measure. Based on the analysis contained in Chapter IV, *Environmental Impact Analysis*, the project will result in the following significant and unavoidable environmental impacts:

**Air Quality/Global Climate Change:** Short-term construction activities associated with the implementation of the proposed project would result in temporary significant unavoidable impacts relative to local and regional construction pollutant emissions, even with the implementation of applicable mitigation measures. For instance, project construction would exceed the regional thresholds for NO<sub>x</sub>. Further, even with incorporation of mitigation measures, the project would remain in exceedance of the SCAQMD localized construction threshold for PM<sub>10</sub>. Construction of the project would result in a less than significant impact with respect to all other criteria pollutants. However, given the exceedance of air pollutant emissions thresholds, a significant unavoidable impact regarding AQMP consistency would also occur.

With respect to operational impacts, the project would not result in a significant and unavoidable impact with respect to localized emissions thresholds. Regarding regional emissions thresholds, even with mitigation, regional operational emissions would still exceed the SCAQMD daily emission thresholds for VOCs, NO<sub>x</sub>, CO, and PM<sub>10</sub>. Therefore, operation of the project would have a significant and unavoidable impact on long-term regional air quality, which is also considered a significant cumulative impact. Similarly, even with incorporation of applicable mitigation measures, GHG emissions and related global climate change impacts would remain significant and unavoidable.

**Traffic and Circulation:** Regarding temporary construction impacts, two of the nine key study intersections will be temporarily impacted during the site grading/excavation construction phase of the proposed project. These two locations consist of the intersections of Pacific Coast Highway (PCH)/2<sup>nd</sup> Street and Studebaker Road/2<sup>nd</sup> Street. With implementation of a Construction Traffic Management Plan, the temporary construction traffic impact at the intersection of PCH/2<sup>nd</sup> Street is eliminated. For the intersection of Studebaker Road/2<sup>nd</sup> Street, no physical mitigation measures are feasible; any additional turn lanes will require widening and additional right-of-way. Hence the temporary construction impact at this key intersection would be considered significant and unavoidable.

Regarding operational impacts, two methodologies were employed in the analysis of traffic impacts; the Intersection Capacity Utilization (ICU) method and the Highway Capacity Manual 2000 (HCM) method. Utilizing the ICU methodology, traffic associated with the proposed project and related projects will significantly impact six (6) of the twenty-five (25) key study intersections in the Year 2015, when compared to the LOS standards and significant impact criteria specified in this report. These intersections are as follows:

- No. 6 – PCH at 7<sup>th</sup> Street
- No. 8 – Studebaker Road at SR-22 Westbound Ramps
- No. 14 – Bay Shore Avenue at 2<sup>nd</sup> Street
- No. 17 – PCH at 2<sup>nd</sup> Street
- No. 18 – Shopkeeper Road at 2<sup>nd</sup> Street
- No. 19 – Studebaker Road at 2<sup>nd</sup> Street

The remaining fifteen (15) key study intersections are forecast to continue to operate at an acceptable LOS with the addition of project-generated traffic in the Year 2015. Implementation of the project's TDM Plan, recommended mitigation measures, and the project-sponsored shuttle service reduces the impact of the project at the six impacted key study intersections. For the remaining two key study intersections (PCH/2<sup>nd</sup> Street and Studebaker Road/2<sup>nd</sup> Street), implementation of improvements would reduce the impact of the project at these two intersections. Nevertheless, additional capacity-enhancing improvements at these two key study intersections beyond those identified in this EIR do not appear feasible given right-of-way constraints or other physical limitations. As a result, the project's Year 2015 traffic impacts at the following intersections would remain significant and unavoidable:

- No. 17 – PCH at 2<sup>nd</sup> Street
- No. 19 – Studebaker Road at 2<sup>nd</sup> Street

Utilizing the HCM methodology, two of the thirteen (includes Project Driveway B) State-controlled study intersections are forecast to operate at an unacceptable LOS during the A.M., P.M. and/or Saturday Midday peak hours with the addition of project traffic in the Year 2015. These intersections are as follows:

- No. 17 – PCH at 2<sup>nd</sup> Street
- No. 25 – Seal Beach at PCH

The implementation of recommended improvements at the two adverse intersections result in an acceptable LOS, except for the intersection of PCH/2<sup>nd</sup> Street, which will continue to operate at unacceptable LOS E during the Saturday Midday peak hour. While implementation of improvements reduces the impact of the project, the project's Year 2015 traffic impacts at the intersection of PCH/2<sup>nd</sup> Street will remain significant and unavoidable.

It is important to note that based on the results of the ICU methodology, the intersection of Seal Beach Boulevard/PCH is not operating at an unacceptable LOS with the project in the Year 2015. The intersection only operates at an unacceptable LOS based on the HCM methodology. The remaining State-controlled key study intersections (including Project Driveway B) are forecast to continue to operate at an acceptable LOS, with the addition of project generated traffic in the Year 2015.

In conclusion, for the purposes of the analysis provided in this EIR, full implementation of the proposed project would result in significant unavoidable traffic impacts at the following two intersections:

- No. 17 – PCH at 2<sup>nd</sup> Street
- No. 19 – Studebaker Road at 2<sup>nd</sup> Street

**Land Use:** While the proposed project would conform with the vast majority of City plans and policies, it would not be consistent with certain statements in the Land Use Element (Urban Design Component), the Local Coastal Program (LCP) Element (an Element of the General Plan that incorporates the policies of the Coastal Act), and the Southeast Area Development Improvement Plan (SEADIP) that relate to proposed scale/heights and residential uses. In addition, the project would conflict with the Transportation Element of the General Plan since the project would result in a significant and unavoidable impact at two intersections. Accordingly, the applicant has requested a series of entitlements to permit the project. If the City of Long Beach approves the requested entitlements, then the project would thereafter be considered consistent with applicable land use plans and policies.

While the project is in conflict with certain statements in the Land Use Element Urban Design Component due to the scale of a 12-story structure, and would also conflict with the SEADIP 35-foot building height restriction, the height of the structure and the massing of development on the site would not result in related significant physical impacts associated with incompatible land use, such as shade/shadow effects, light spill-over effects, or obstruction or degradation of important public scenic views. However, the project would result in traffic and air quality impacts that relate to the intensity of development on the site and are significant and unavoidable. Therefore, because the inconsistency of the project with statements suggesting lower scale and intensity development for site also translates to physical impacts on the environment, land use impacts in this regard are considered significant. Furthermore, while mitigation measures are provided in Sections IV.B, *Air Quality/Global Climate Change*, and IV.L, *Traffic and Circulation*, of this EIR, impacts on traffic and air quality cannot be mitigated to a level of less than significant. Therefore, the inconsistency with the SEADIP and associated physical impacts on the environment associated with the project would result in a significant unavoidable land use impact.

With regard to cumulative analyses contained in Chapter IV, *Environmental Impact Analysis*, the project will contribute to significant cumulative impacts associated with regional construction and operational air pollutant emissions, global climate change, and local and CMP intersection traffic impacts.

## F. AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Potential areas of controversy and issues to be resolved by the decision-makers include those areas where an unavoidable significant impact has been projected as well as issue areas where concerns have been raised, primarily through the Notice of Preparation process, indicating a level of controversy. For the Second+PCH project, the areas of unavoidable significant impacts are presented above. Issues raised during the NOP comment period, as well as the section of the EIR where each issue is addressed, are as follows:

- Effects of proposed building heights, including visual impacts and street-level views, effects on bird flyways, and conflicts with zoning regulations (refer to Section IV.A, *Aesthetics and Views*, Section IV.C, *Biological Resources*, and Section IV.H, *Land Use*, of this Draft EIR);
- Proposed density relative to SEADIP limits (refer to Section IV.H, *Land Use*, of this Draft EIR);
- Project-related traffic impacts at local intersections, particularly at 2<sup>nd</sup> Street and PCH (refer to Section IV.L, *Traffic and Circulation*, of this Draft EIR);
- Type and amount of open space provided for proposed uses (refer to Chapter II, *Project Description*, of this Draft EIR);
- Impacts to the Los Cerritos Wetlands and associated wildlife and habitat (refer to Section IV.C, *Biological Resources*, of this Draft EIR);
- Adequacy of on-site parking provided to support proposed uses, and potential effects on adjacent Alamitos Bay Marina parking lot (refer to Section IV.L, *Traffic and Circulation*, of this Draft EIR);
- Impacts to public services and utilities/infrastructure (refer to Section IV.K, *Public Services*, and Section IV.M, *Public Utilities*, of this Draft EIR);
- Necessary approvals and entitlements associated with the proposed project (refer to Section IV.H, *Land Use*, of this Draft EIR);
- Construction-related air quality impacts (refer to Section IV.B, *Air Quality/Global Climate Change*, of this Draft EIR);
- Project-related construction and operational noise and vibration effects (refer to Section IV.I, *Noise*, of this Draft EIR);
- Light pollution impacts of the proposed project, as well as shade and shadow effects on nearby uses from proposed structures (refer to Section IV.A, *Aesthetics and Views*, of this Draft EIR);
- Consistency with the California Coastal Act, including preservation of coastal access and loss of visitor-serving uses (refer to Section IV.H, *Land Use*, of this Draft EIR);
- Range of project alternatives to the proposed project (refer to Chapter V, *Alternatives*, of this Draft EIR);
- Compatibility of the proposed project with surrounding uses, including the Alamitos Bay Marina (refer to Section IV.A, *Aesthetics and Views*, Section IV.B, *Air Quality/Global Climate Change*, Section IV.H, *Land Use*, and Section IV.I, *Noise*, of this Draft EIR);
- Impacts to marine life, including indirect impacts such as adverse water quality effects (refer to Section IV.C, *Biological Resources*, and Section IV.G, *Hydrology and Water Quality*, of this Draft EIR);

- Traffic system impacts to cities surrounding the City of Long Beach (refer to Section IV.L, *Traffic and Circulation*, of this Draft EIR);
- Consideration of related projects in the evaluation of cumulative traffic impacts (refer to Section IV.L, *Traffic and Circulation*, of this Draft EIR);
- Provision and encouragement of alternative transportation, including bicycle infrastructure (refer to Section IV.K.4, *Parks and Recreation*, and Section IV.L, *Traffic and Circulation*, of this Draft EIR);
- Public agency coordination and input on the proposed project (refer to Chapter I, *Introduction*, Chapter II, *Project Description*, Section IV.B, *Air Quality/Global Climate Change*, Section IV.D, *Cultural Resources*, Section IV.F, *Hazards and Hazardous Materials*, Section IV.H, *Land Use*, Section IV.K, *Public Services*, Section IV.L, *Traffic and Circulation*, and Section IV.M, *Public Utilities*, of this Draft EIR);
- Employment associated with the proposed project (refer to Section IV.J, *Population and Housing*, of this Draft EIR);
- Sea level rise and global warming (refer to Section IV.B, *Air Quality/Global Climate Change*, of this Draft EIR);
- Seismic hazards, including liquefaction (refer to Section IV.E, *Geology and Soils*, of this Draft EIR);
- Scale of visual simulations of the proposed development and appropriateness of viewpoints (refer to Section IV.A, *Aesthetics and Views*, of this Draft EIR);
- Interference of proposed structures with radio transmissions or telecommunications (refer to Chapter VII, *Other Environmental Considerations*, of this Draft EIR); and
- Wind effects to sailing vessels in the Alamitos Bay Marina (refer to Chapter VII, *Other Environmental Considerations*, of this Draft EIR).

## G. ALTERNATIVES

The *CEQA Guidelines* require an EIR to “describe the range of reasonable alternatives to the project, or to the location of the project, which will feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” The *CEQA Guidelines* direct that selection of alternatives be guided by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.

As described in detail in Chapter V, *Alternatives*, of this EIR, six alternatives to the project were identified, which include a No Project/No Development Alternative, a No Project/Existing Zoning Alternative, and four Reduced Intensity Alternatives (Reduced Intensity Alternative A, Reduced Intensity Alternative B, Reduced Intensity Alternative C, and Reduced Intensity Alternative D). Based on an analysis of these alternatives, an environmentally superior alternative is identified. The six identified alternatives, as well as the identified environmentally superior alternative, are summarized below.

### 1. No Project/No Development Alternative

Under the No Project/No Development Alternative, no physical changes to the project site would occur, and the existing on-site uses would continue to operate as they currently do. No improvements to the site would be performed, but the existing soil and groundwater remediation program associated with the former on-site 76 gas station would continue to be implemented under oversight of the Los Angeles RWQCB.

## **2. No Project/Existing Zoning Alternative**

The No Project/Existing Zoning Alternative would consist of redevelopment of the project site with uses allowable under the current SEADIP zoning requirements. For the purposes of this Alternatives analysis, this development scenario is assumed to allow for the development of commercial uses on 70 percent of the site area with a maximum building height of 35 feet. As such, this Alternative would include development of up to approximately 323,000 square feet of building footprint at two stories in height, for a total development of approximately 646,000 square feet of commercial uses on-site, compared to the total development of 822,500 square feet under the proposed project. Under this development scenario, uses are assumed to include retail, restaurant, or office uses, with parking to be provided on-site via subterranean parking levels. Per existing SEADIP standards, 30 percent of the site would be improved as usable open space, which would not include any portion of building footprint, streets, sidewalks adjacent to streets, or parking lots. No project-related amenities, such as the proposed Marine Science Learning Center or CSULB Repertory Theater, would be provided under this Alternative, but the existing soil and groundwater remediation program associated with the former on-site 76 gas station would continue to be implemented under oversight of the Los Angeles RWQCB.

## **3. Reduced Intensity Alternative A**

Alternative 3, Reduced Intensity Alternative A, would consist of redevelopment of the project site with a similar mix of land uses as the proposed project, but reduced in terms of commercial/retail and residential development intensity (20- and 15-percent, respectively), and this Alternative would not include the theater use that is included in the proposed project. Hotel, hotel restaurant, hotel meeting space, and marine science center uses, as well as public open space and maximum building heights, would be the same as under the proposed project, though non-hotel restaurant uses would be reduced by approximately five percent. Accordingly, this Alternative would include up to 275 residential units, 155,000 square feet of commercial/retail uses, 100 hotel rooms, 4,368 square feet of hotel restaurant space, 20,000 square feet of restaurant uses, a 4,175-square-foot science center, 3,510 square feet of hotel meeting space, 219,134 square feet of public open space, and building heights would generally range from three to six stories in height (i.e., up to 82 feet) with one residential tower reaching a maximum height of 12 stories (150 feet). Under this Alternative, project-related open space, landscaping, and bicycle and pedestrian facilities would be provided to serve the development, as is the case under the proposed project. As with the proposed project, the existing soil and groundwater remediation program associated with the former on-site 76 gas station would continue to be implemented under oversight of the Los Angeles RWQCB.

## **4. Reduced Intensity Alternative B**

Reduced Intensity Alternative B would involve the development of a similar mix of land uses on the project site as the proposed project, but reduced in terms of commercial/retail and residential development intensity (35- and 33-percent, respectively), and this Alternative would not include the theater use that is included in the proposed project. Hotel, hotel restaurant, hotel meeting space, and marine science center uses, as well as public open space, would be the same as under the proposed project, though non-hotel restaurant uses would be reduced by approximately five percent. However, under this Alternative, maximum building heights would be reduced by approximately 45 percent (i.e., from 12 to six stories, or from 150 feet to 82 feet). Accordingly, this Alternative would include up to 215 residential units, 125,000 square feet of commercial/retail uses, 100 hotel rooms, 4,368 square feet of hotel restaurant space, 20,000 square feet of restaurant uses, a 4,175-square-foot science center, 3,510 square feet of hotel meeting space,

219,134 square feet of public open space, and building heights would range from three stories to a maximum of six stories (i.e., up to 82 feet). Under this Alternative, project-related open space, landscaping, and bicycle and pedestrian facilities would be provided to serve the development, as is the case under the proposed project. As with the proposed project, the existing soil and groundwater remediation program associated with the former on-site 76 gas station would continue to be implemented under oversight of the Los Angeles RWQCB.

## **5. Reduced Intensity Alternative C**

Reduced Intensity Alternative C would involve the development of a similar mix of land uses on the project site as the proposed project, but reduced in terms of commercial/retail and residential development intensity (40- and 70-percent, respectively), and this Alternative would not include the theater use that is included in the proposed project. Hotel, hotel restaurant, hotel meeting space, non-hotel restaurant, and marine science center uses, as well as public open space, would all be the same as under the proposed project. However, under this Alternative, maximum building heights would be reduced by a minimum of 45 percent (i.e., from 12 stories to fewer than six stories, or from 150 feet to less than 82 feet). Accordingly, this Alternative would include up to 100 residential units, 115,000 square feet of commercial/retail uses, 100 hotel rooms, 4,368 square feet of hotel restaurant space, 21,092 square feet of restaurant uses, a 4,175-square-foot science center, 3,510 square feet of hotel meeting space, 219,134 square feet of public open space, and building heights would range from three stories to less than six stories (i.e., less than 82 feet). Under this Alternative, project-related open space, landscaping, and bicycle and pedestrian facilities would be provided to serve the development, as is the case under the proposed project. As with the proposed project, the existing soil and groundwater remediation program associated with the former on-site 76 gas station would continue to be implemented under oversight of the Los Angeles RWQCB.

## **6. Reduced Intensity Alternative D**

Reduced Intensity Alternative D would involve the development of a comparable mix of land uses on the project site as the proposed project, but would be reduced in terms of commercial/retail intensity (40-percent), would not include residential development, and would not include the theater use that is included in the proposed project. Hotel, hotel restaurant, hotel meeting space, non-hotel restaurant, and marine science center uses, as well as public open space, would all be the same as under the proposed project. However, under this Alternative, maximum building heights would be reduced by a minimum of 45 percent (i.e., from 12 stories to fewer than six stories, or from 150 feet to less than 82 feet). Accordingly, this Alternative would include no residential units, 115,000 square feet of commercial/retail uses, 100 hotel rooms, 4,368 square feet of hotel restaurant space, 21,092 square feet of restaurant uses, a 4,175-square-foot science center, 3,510 square feet of hotel meeting space, 219,134 square feet of public open space, and building heights would range from three stories to less than six stories (i.e., less than 82 feet). Under this Alternative, project-related open space, landscaping, and bicycle and pedestrian facilities would be provided to serve the development, as is the case under the proposed project. As with the proposed project, the existing soil and groundwater remediation program associated with the former on-site 76 gas station would continue to be implemented under oversight of the Los Angeles RWQCB.

## 7. Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA *Guidelines* indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. The CEQA *Guidelines* also state that should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. With respect to identifying an environmentally superior alternative among those analyzed in this EIR, the range of feasible alternatives to be considered includes Alternative 1, the No Project/No Development Alternative; Alternative 2, the No Project/Existing Zoning Alternative; Alternative 3, Reduced Intensity Alternative A; Alternative 4, Reduced Intensity Alternative B; Alternative 5, Reduced Intensity Alternative C; and Alternative 6, Reduced Intensity Alternative D.

Pursuant to Section 15126.6(c) of the CEQA *Guidelines*, the analysis below addresses the ability of the alternatives to “avoid or substantially lessen one or more of the significant effects” of the project. Of the Alternatives analyzed in the EIR, the No Project/No Development Alternative is considered the overall environmentally superior alternative as it would reduce all of the significant or potentially significant impacts occurring under the Second+PCH project, including impacts related to air quality/global climate change (local and regional construction air emissions, AQMP consistency, regional operational air emissions, global climate change), biological resources (conflicts with plans, policies, and regulations protecting biological resources), cultural resources (archeological, paleontological, and Native American [including human remains] resources), geology and soils (liquefaction and vibration-related subsidence), hazards and hazardous materials, land use plan consistency, construction and operational noise, police protection, and traffic impacts to surrounding local and CMP intersections to levels that are less than significant. However, as indicated above, this Alternative would not meet any of the project objectives established for the proposed project.

In accordance with the CEQA *Guidelines*' requirement to identify an environmentally superior alternative other than the No Project Alternative, a comparative evaluation of the remaining alternatives indicates that Reduced Intensity Alternative D would be environmentally superior. Relative to the proposed project, this Alternative would result in less impacts to aesthetics (light and glare), air quality/global climate change (construction and operational emissions, toxic air contaminants, AQMP consistency, and global climate change), biological resources (wildlife movement), geology and soils (seismic groundshaking and liquefaction/ground failure), hydrology and water quality (floodplains, construction groundwater quality, and operational surface and groundwater quality), , noise (construction noise and vibration, operational stationary source noise, on-site operational noise, off-site mobile-source noise, though mitigation would still be required to reduce impacts to less than significant), population and housing, police protection, fire protection, schools, libraries, traffic and circulation (intersections, CMP facilities [intersections], and parking capacity), water, wastewater (wastewater treatment capacity), and solid waste (landfill capacity). In addition, this Alternative would reduce the significant air quality impacts during construction and operation, and the significant traffic impacts to intersections, including a CMP intersection; however, construction-related and operational air quality/global climate change impacts, as well as land use and traffic impacts would remain significant under this Alternative. It should also be noted that impacts would be similar to the proposed project regarding aesthetics (scenic vistas/views, aesthetics/visual character, and shade/shadow), biological resources (sensitive species and conflicts with plans and policies protecting biological resources), cultural resources (archaeological, paleontological, Native American [including human remains], and historic resources, all of which except historic resources would still require mitigation to reduce impacts to a less

than significant level), geology and soils (soil erosion/loss of topsoil and landslides, lateral spreading, and collapse, which would still require mitigation), hazards and hazardous materials (which would still require mitigation to reduce impacts to a less than significant level), hydrology and water quality (flooding/drainage and construction surface water quality), land use (consistency with plans, policies, and regulations, although this impact would remain significant and unavoidable), noise (operational vibration), traffic and circulation (site circulation, emergency access, and conflicts with policies and programs related to alternative transportation), wastewater (wastewater treatment requirements), and solid waste (conflicts with solid waste regulations). However, this Alternative would not result in greater impacts in regards to any environmental issues. In addition, this Alternative would fully or partially achieve all of the project objectives, but not to the extent that the proposed project would. This is due to the fact that while this Alternative would provide for redevelopment of the project site with retail, restaurant, and hotel uses oriented toward the adjacent marina, with project architectural and landscaping features that would create an attractive development with access to various forms of transportation, and would also provide public amenities such as the Marine Science Learning Center and Coastal Cycling Center, this Alternative would not provide residential uses on-site and would not include the CSULB Repertory Theater. As such, this Alternative fails to meet a basic project objective, which is to provide residential uses on-site as part of the mixed-use project. Additionally, it is possible that this Alternative, while mixed-use in nature, would not provide an adequate amount of development to be economically viable, such that it would not meet the objective of creating a successful mixed-use project, and likewise would not contribute as much revenue to the City as the proposed project once developed. Furthermore, while this Alternative would define to some degree a southeastern gateway to the City, with building heights under six stories (or less than 82 feet), this Alternative would not meet the project objective of a welcoming, iconic and visible development to the same extent as the proposed project (which has building heights up to 150 feet).

## **H. SUMMARY OF ENVIRONMENTAL IMPACTS**

This section provides a summary of impacts, mitigation measures, and impacts after implementation of the mitigation measures associated with development of the Second+PCH project. The summary is provided by environmental issue area below in Table ES-1 on pages ES-11 through ES-52.

**Table ES-1**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<b>Aesthetics and Views</b>			
Would the project have a substantial adverse effect on a scenic vista?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project cast new shadows on off-site shadow-sensitive uses more than three hours between the hours of 9:00 A.M. and 3:00 P.M. Pacific Daylight Time (PDT), between early November and early March or more than four hours between the hours of	Less Than Significant	No mitigation measures are required.	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
9:00 A.M. and 5:00 P.M. Pacific Savings Time (PST) between early March and early November?			
<b>Air Quality/Global Climate Change</b>			
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant	Refer to Mitigation Measures B-1 to B-15.	Significant and Unavoidable
Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Potentially Significant	<p><b><u>Construction</u></b></p> <p><b>Mitigation Measure B-1:</b> General contractors shall ensure that all construction equipment be properly tuned and maintained at an off-site location; in accordance with manufacturer’s specifications. This mitigation measure would reduce all criteria pollutant emissions during construction.</p> <p><b>Mitigation Measure B-2:</b> General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions.</p> <p><b>Mitigation Measure B-3:</b> Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.</p> <p><b>Mitigation Measure B-4:</b> Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible.</p> <p><b>Mitigation Measure B-5:</b> All construction vehicles shall be prohibited from idling in excess of five minutes, both on- and off-site. Signs shall be posted limiting idling to five minutes.</p>	Significant and Unavoidable

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p><b>Mitigation Measure B-6:</b> The project applicant shall utilize coatings and solvents that are consistent with applicable SCAQMD rules and regulations, in particular Rule 1113 (Architectural Coatings).</p> <p><b>Mitigation Measure B-7:</b> Water exposed surfaces at least three times a day under calm conditions. Water as often as needed on windy days when winds are less than 25 miles per hour or during very dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site. This mitigation measure would reduce PM<sub>10</sub> and PM<sub>2.5</sub> emissions during construction.</p> <p><b>Mitigation Measure B-8:</b> All trucks hauling dirt, sand, soil or other loose materials off-site shall be covered or wetted or shall maintain at least two feet of freeboard (i.e., minimum vertical distance between the top of the material and the top of the truck). Wash mud-covered tires and under-carriages of trucks leaving construction sites. This mitigation measure would reduce PM<sub>10</sub> and PM<sub>2.5</sub> emissions during construction.</p> <p><b>Mitigation Measure B-9:</b> Sweep adjacent streets, as needed, to remove dirt dropped by construction vehicles or mud that would otherwise be carried off by trucks departing the site. This mitigation measure would reduce PM<sub>10</sub> and PM<sub>2.5</sub> emissions during construction.</p> <p><b>Mitigation Measure B-10:</b> Securely cover loads with a tight fitting tarp on any truck leaving the construction site. This mitigation measure would reduce PM<sub>10</sub> and PM<sub>2.5</sub> emissions during construction.</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p><b>Mitigation Measure B-11:</b> Building walls shall be watered prior to use of demolition equipment. This mitigation measure would reduce PM<sub>10</sub> and PM<sub>2.5</sub> emissions during construction.</p> <p><b>Mitigation Measure B-12:</b> All on-site construction equipment greater than 50 horsepower (hp) shall be designated as EPA Tier 3 certified engines or engine retrofits comparable to EPA Tier 3 certified engines. This mitigation measure would reduce NOx emissions during construction.</p> <p><b>Mitigation Measure B-13:</b> Diesel-fueled vehicles which will be on-site for 3 or more consecutive days shall be equipped with a diesel particulate filter (DPF) or other control device or technology capable of achieving comparable reductions in particulate matter (PM) emissions. The device or technology shall be properly maintained and operational at all times when on-site. This mitigation measure applies to on- and off-road vehicles, but excludes delivery or haul trucks which visit the site intermittently.</p> <p><b><u>Operation</u></b></p> <p><b>Mitigation Measure B-14:</b> The project applicant shall, as feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods. This mitigation measure would reduce all criteria pollutant emissions during operation.</p> <p><b>Mitigation Measure B-15:</b> The proposed project would provide preferred parking to low-emission and flex fuel vehicles. The project applicant shall also post information on mass transit and alternative transportation options offered in the vicinity of the proposed project.</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Potentially Significant	Refer to Mitigation Measures B-1 to B-15.	Significant and Unavoidable
Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant	Refer to Mitigation Measures B-1 to B-14.	Significant and Unavoidable
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment based on any applicable threshold of significance?	Potentially Significant	No mitigation measures are available that could reduce the significance of impacts.	Significant and Unavoidable
Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of green house gases?	Less Than Significant	No mitigation measures are required.	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<b>Biological Resources</b>			
<p>Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the CDFG or USFWS?</p>	<p>Less Than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant</p>
<p>Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, or regulations by the CDFG or USFWS?</p>	<p>Less Than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant</p>
<p>Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (possibly including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	<p>Less Than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<p>Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	<p>Less Than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant</p>
<p>Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?</p>	<p>Potentially Significant</p>	<p><b>Mitigation Measure C-1:</b> The developer or a designated representative shall ensure that impacts to migratory raptor and songbird species are avoided through one or more of the following methods: (1) vegetation removal activities shall be scheduled outside the nesting season for raptor and songbird species (nesting season typically occurs from February 15 to August 31) to avoid potential impacts to nesting species (this will ensure that no active nests will be disturbed and that habitat removal could proceed rapidly); and/or (2) Any construction activities that occur during the raptor and songbird nesting season shall require that all suitable habitat be thoroughly surveyed for the presence of nesting raptor and songbird species by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the qualified biologist to minimize impacts. The developer or designated representative shall submit proof of compliance with this measure to the City of Long Beach Department of Development Services prior to tree removal activities on-site.</p>	<p>Less Than Significant</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<b>Cultural Resources</b>			
<p>Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?</p>	<p>Potentially Significant</p>	<p><b>Mitigation Measure D-1:</b> An archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards (the “Archaeologist”) shall be retained by the Project Applicant and approved by the City to oversee and carryout the mitigation measures stipulated in this EIR.</p> <p><b>Mitigation Measure D-2:</b> A qualified archaeological monitor shall be selected by the Archaeologist, retained by the Project Applicant, and approved by the City to monitor ground-disturbing activities within the project site that include digging, grubbing, or excavation into native sediments that have not been previously disturbed for this project. Ground-disturbing activities do not include movement, redistribution, or compaction of sediments excavated during the project. The Archaeologist shall attend a pre-grade meeting and develop an appropriate monitoring program and schedule.</p> <p><b>Mitigation Measure D-3:</b> In the event that cultural resources are unearthed during ground-disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find so that the find can be evaluated. Work shall be allowed to continue outside of the vicinity of the find.</p> <p><b>Mitigation Measure D-4:</b> All cultural resources unearthed by project construction activities shall be evaluated by the Archaeologist. If the Archaeologist determines that the resources may be significant, the Archaeologist will notify the Project Applicant and the City and will develop an appropriate treatment plan for the resources. The Archaeologist shall consult with an appropriate Native American representative in determining appropriate</p>	<p>Less Than Significant</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature.</p> <p><b>Mitigation Measure D-5:</b> Treatment plans developed for any unearthed resources shall consider preservation of the resource or resources in place as a preferred option. Feasibility and means of preservation in place shall be determined through consultation between the Archaeologist, the Native American representative, the Project Applicant, and the City.</p> <p><b>Mitigation Measure D-6:</b> The Archaeologist shall prepare a final report to be reviewed and accepted by the City. The report shall be filed with the Project Applicant, the City, and the California Historic Resources Information System South Central Coastal Information Center. The report shall include a description of resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historic Resources and the National Register of Historic Places. The report shall also include all specialists' reports as appendices, if any. If the resources are found to be significant, a separate report including the results of the recovery and evaluation process shall be required. The City shall designate repositories in the event cultural resources are uncovered.</p>	
<p>Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</p>	<p>Potentially Significant</p>	<p><b>Mitigation Measure D-7:</b> A qualified paleontologist shall attend a pre-grade meeting and develop a paleontological monitoring program for excavations into older Quaternary deposits. A qualified paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry</p>	<p>Less Than Significant</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be based on the rate of excavation and grading activities, the materials being excavated, and the depth of excavation, and if found, the abundance and type of fossils encountered.</p> <p><b>Mitigation Measure D-8:</b> If a potential fossil is found, the paleontologist shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation and, if necessary, salvage.</p> <p><b>Mitigation Measure D-9:</b> At the paleontologist’s discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.</p> <p><b>Mitigation Measure D-10:</b> Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository.</p> <p><b>Mitigation Measure D-11:</b> Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository.</p> <p><b>Mitigation Measure D-12:</b> If fossils are found, following the completion of the above tasks, the paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Project Applicant to the lead agency, the Natural History Museum of</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
		Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.	
Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant	<b>Mitigation Measure D-13:</b> If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains. Preservation of the remains in place or project design alternatives shall be considered as possible courses of action by the Project Applicant, the City, and the Most Likely Descendent.	Less Than Significant
Would the project cause a Substantial Adverse Change in the Significance of a Historical Resource as Defined in § 15064.5?	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table ES-1 (Continued)

## Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<b>Geology and Soils</b>			
Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic groundshaking?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	Potentially Significant	<b>Mitigation Measure E-1: Liquefaction and Seismic-Related Ground Failure.</b> Proposed building foundations shall be constructed utilizing driven pre-cast piles or cast-in-place pile foundations that extend through the liquefiable zones into competent material, or an equivalent foundation system, for shoring and structural support in order to reduce the potential for adverse impacts related to liquefaction, differential settlement, ground lurching, and dewatering-related ground settlement. Alternatively, densification of the liquefiable soils using vibro-displacement stone columns or compaction grouting would mitigate the liquefaction hazard, and the new structures could then be supported on shallow foundation systems. The specific building foundation method(s) to be employed shall be determined by the project geotechnical engineer, and reviewed and approved by the City Engineer prior to issuance of building permits.	Less Than Significant
Would the project result in substantial soil erosion or the loss of topsoil?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of	Potentially Significant	<b>Mitigation Measure E-2: Ground Settlement.</b> If determined necessary by the project geotechnical engineer, removal and recompaction of compressible soils or in-situ ground modification shall be utilized, based on detailed	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<p>the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</p>		<p>design stage recommendations, in order to address potential ground settlement.</p> <p><b>Mitigation Measure E-3: Ground Settlement.</b> In order to address potential ground settlement during construction activities, the construction contractor shall limit the depth of construction dewatering, install sheet piles, and pump from within the excavation to reduce the impacts to groundwater levels outside the excavation, install monitoring wells to evaluate groundwater, monitor adjacent areas for indications of settlement, and/or protect to settlement-sensitive structures through ground improvement or foundation underpinning, as deemed appropriate by the project geotechnical engineer.</p> <p><b>Mitigation Measure E-4: Construction-Related Vibration.</b> Depending upon the specific technique to be employed to mitigate liquefaction hazards, and prior to initiation of construction, a Vibration Management Plan (VMP) shall be prepared by a qualified consultant hired by the applicant for review and approval by the City. The VMP shall address the potential for specifically proposed construction activities to cause vibration induced ground settlement on off-site properties. The performance standard for vibration management shall be to prevent vibration induced ground settlement on nearby properties that would result in structural damage or damage to other sensitive off-site improvements. More specifically, the performance standard shall ensure that construction of the project would not result in off-site ground settlement greater than ½-inch in non-building areas or greater than ¼-inch building areas. If it is determined that there would be no potential for significant settlement on off-site properties due to proposed construction techniques, no further requirements for</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
		mitigation would apply. In the event potential for significant settlement is identified, the VMP shall include mitigation requirements that will ensure that the performance standard to prevent significant off-site ground settlement is met. Mitigation techniques to reduce the impacts of vibration may include avoiding construction activities that involve vibration, limiting construction involving vibration to specified distances from off-site sensitive receptors, monitoring vibration and settlement during construction, and/or protecting sensitive improvements from excessive settlement by ground stabilization or foundation underpinning. Monitoring methods include installation of ground survey points around the outside of excavations to monitor settlement and/or placing monitoring points on nearby structures or surfaces to monitor performance of the structures. If monitored movement shows potential for the performance standard to be exceeded during the course of construction, all work potentially associated with vibration induced settlement shall stop and the City shall be immediately informed. Subsequently, the contractor's methods shall be reviewed and changes made, as appropriate, with alternative methods of settlement reduction identified for implementation by the contractor to the satisfaction of the City.	
<b>Hazards and Hazardous Materials</b>			
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant	No mitigation measures are required.	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<p>Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</p>	<p>Potentially Significant</p>	<p><b>Mitigation Measures To Be Implemented Prior To Construction</b></p> <p><b>Mitigation Measure F-1 – Soil Management Plan:</b> The developer shall prepare a project-specific Soil Management Plan (SMP) that will be reviewed and approved by the City of Long Beach prior to the start of construction. The SMP will function as an umbrella plan. It shall incorporate all of the requirements associated with the mitigation measure below, and will include, but not be limited to the findings and recommendations contained in the: (1) Geophysical Survey; (2) Soil Vapor Survey/Health Risk Screening, (3) Transportation Plan; and (4) Dust Monitoring Plan. The SMP will incorporate methodologies for detecting the various environmental concerns noted in relevant hazardous materials investigations during the construction phase of the project. The SMP shall include measures to address each environmental concern, if encountered, according to the applicable regulatory standards and the mitigation measures contained herein. In addition, the SMP shall require notification and reporting, according to agency protocols, of applicable local and State regulatory agencies, including the Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board (RWQCB), CalRecycle, California Department of Oil and Gas and Geothermal Resources, Long Beach Fire Department, and the City of Long Beach.</p> <p><b>Mitigation Measure F-2 – Asbestos and Lead-Based Paint Abatement:</b> Prior to demolition activities, a qualified contractor shall perform an asbestos and lead-based-paint-containing-materials survey. Thereafter, the qualified contractor shall also sufficiently abate the structures to be demolished on the site according to the applicable and current local, State, and federal guidelines.</p>	<p>Less Than Significant</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
		<p><b>Mitigation Measure F-3 – Geophysical Survey:</b> Prior to subsurface disturbance and demolition at the project site, the developer shall conduct a geophysical survey. The purpose of the geophysical survey is to locate subsurface features or anomalies, if any, that may pose an environmental concern or present a risk of upset at the site. The geophysical survey shall:</p> <ol style="list-style-type: none"> <li>1) Accurately locate and mark the oil pipeline located along the northeast border of the site.</li> <li>2) Search for, identify and mark the six abandoned oil wells and associated pipelines that are reportedly located at the project site due to historic use of the site for oil production and facilities.</li> <li>3) Detect the presence of other subsurface anomalies, if any, such as underground vaults/features, buried debris, historical dump sites, waste drums, or tanks.</li> </ol> <p>The geophysical survey will inform the site construction and remediation activities so as to remove or avoid subsurface hazardous materials or associated facilities. The results of the geophysical survey shall be included in the SMP, which shall be reviewed and approved by the City of Long Beach.</p> <p><b>Mitigation Measure F-4 – Soil Vapor Survey and Health Risk Screening:</b></p> <p>(A) Soil Vapor Survey: The developer shall conduct a systematic soil vapor survey of the project site prior to construction to investigate the possible presence of VOCs in site soils. The survey will be performed according to</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>the applicable standards of the DTSC and California Environmental Protection Agency (CalEPA). Soil borings shall be placed to a depth of at least five feet below the deepest excavation to occur during site construction and soil vapor samples shall be collected at five-to-ten-foot intervals. Soil samples shall also be collected at a five-foot interval from the soil borings to assess the soil for heavier petroleum hydrocarbons that may be present due to past oil field use of the site. The survey shall specifically include:</p> <ol style="list-style-type: none"> <li>1) an evaluation of methane and hydrogen sulfide concentrations (due to possible methane and hydrogen sulfide gases associated with historic oil fields use) to a depth of at least five feet below the deepest excavation to occur during site construction. These soil vapor borings shall be placed in the vicinity of any abandoned oil wells located during the geophysical survey; and</li> <li>2) additional soil vapor borings to test for VOCs on and in the vicinity of the land area where the former on-site gas station was located; and in locations where the off-site gas station may have impacted the site through lateral migration of soil vapors.</li> </ol> <p>(B) Health Risk Screening: Following completion of the soil vapor survey, a qualified environmental professional shall use the results of the survey to develop a health risk screening that assesses health and safety concerns associated with VOC levels at the site for construction workers and future site users. The health risk screening assessment will be performed according to the applicable standards of the DTSC and CalEPA. If the</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>health risk screening assessment indicates that elevated VOCs in soil pose a health risk to site users, then the developer will further define and implement additional measures, tailored to the extent of environmental contamination, that minimize soil vapor exposure to acceptable levels as established by the applicable regulatory agency, including DTSC. The potential mitigation measures could include, but not be limited to, the following:</p> <ol style="list-style-type: none"> <li>1) During Construction - VOC levels shall be monitored closely during construction in accordance with South Coast Air Quality Management District (SCAQMD) Rule 1166. This rule requires VOC monitoring of petroleum-impacted soils during construction activities. If VOC concentrations exceed threshold levels specified in the Rule, vapor suppression shall be required by amending soil with water or chemical foam. VOC-impacted soil shall be stockpiled and covered in accordance with the Rule. Rule 1166 compliance requirements shall be included in the SMP required by Mitigation Measure F-1 above.</li> <li>2) Post-Construction - In the unlikely event that elevated concentrations of VOC persist in site soils post-construction, vapor mitigation shall be performed to protect future site users. Post-construction long-term vapor mitigation measures selected shall be determined based on the remaining extent of VOC concentrations and the associated health risk, if any. Mitigation measures associated with post-construction VOC control could include the following:</li> </ol>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>i) Soil Vapor Extraction - post-construction vapor mitigation would include a soil vapor extraction (SVE) system to remove residual VOCs from the soil. The SVE system would be employed to remediate soil vapor to a level consider safe for uses proposed on the site.</li> <li>ii) Vapor Barrier/Sub-slab Depressurization – If the soil vapor survey indicates that extremely high VOCs are present at the site, post-construction, resulting in elevated human health risk, a vapor barrier and sub-slab depressurization system shall be designed and implemented for the proposed buildings to be constructed at the site.</li> </ul> <p><b>Mitigation Measure F-5 – Pre-Construction Removal Action:</b> The developer shall perform pre-construction removal to include sampling, as necessary to characterize waste, removal action, off-site disposal of characterized waste and confirmation sampling of removal areas. The specific area to undergo pre-construction removal action includes:</p> <ul style="list-style-type: none"> <li>1) Removal of Debris and Dirt from Satellite Enclosure: Debris and dirt located in a satellite enclosure on the southern portion of the site shall be removed prior to site construction. The mitigation shall include collection and laboratory analysis of representative soil samples from the debris and dirt to characterize the waste for off-site disposal purposes. Based on the laboratory analysis and waste characterization, the soil and debris shall be disposed of at an appropriate facility.</li> </ul>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p><b>Mitigation Measure F-6 – Construction De-Watering Permit:</b> From review of previous environmental reports regarding the project site, groundwater at the site has likely been impacted by petroleum hydrocarbons from one or more possible sources including the former gas station on the project site, the petroleum release from the gas station located across PCH from the site, and former oil field activities. Dewatering will be required during site construction. As such, the developer shall obtain a De-Water permit through the Regional Water Quality Control Board (RWQCB) to de-water and discharge water from the site. The developer will comply with all requirements of the de-watering permit. Petroleum impacted groundwater is subject to pre-treatment during de-watering activities to meet National Pollutant Discharge Elimination System (NPDES) Construction Dewatering permit limits. The construction activities shall conform to the NPDES requirements. The RWQCB requires the water to be tested for possible pollutants. The developer shall collect groundwater samples from existing site wells to determine pre-treatment system requirements for extracted groundwater. A water treatment system shall be designed and installed for treatment of extracted groundwater removed during dewatering activities so that such water complies with the applicable RWQCB and NPDES permit standards before disposal.</p> <p><b>Mitigation Measures To Be Implemented During Site Demolition and Construction</b></p> <p>The SMP required by Mitigation Measure F-1 would be implemented during site demolition and construction to address several environmental concerns noted in the site-specific hazardous materials studies included in Appendix F</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>of this EIR. Details of mitigation measures to be implemented during site demolition and construction include the following:</p> <p><b>Mitigation Measure F-7 – Oil Sumps and Mud Pits:</b> The previously identified oil sumps in the northern area of the site and the area of suspected mudpits and any known areas of dark stained soil noted in historical aerial photographs shall be added to site plans included in the SMP. These areas shall be excavated and the soil stockpiled on plastic sheeting at the site. The stockpiled soil shall be sampled and laboratory-analyzed in accordance with requirements outlined in the SMP and pursuant to the applicable DTSC guidelines. The stockpiled soil shall be characterized in accordance with the laboratory analysis and disposed of at a facility that is licensed to accept the soil based on established site action levels.</p> <p><b>Mitigation Measure F-8 – Construction Dewatering:</b> Construction dewatering requirements as outlined in the Construction Dewatering permit shall be included in the SMP. Construction dewatering shall be performed in accordance with the permit and SMP during site construction and demolition activities.</p> <p><b>Mitigation Measure F-9 – Construction Site Observer:</b> A qualified construction site observer shall be present at all times during site excavation activities to observe for areas of possible contamination including, but not limited to, the presence of underground anomalies such as underground structures, pipelines, buried debris, waste drums, tanks, stained soil or odorous soils. The SMP shall provide notification protocols and specific instructions regarding the actions to be taken (i.e., sampling, testing for contamination</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>levels, excavation and stockpiling, or halting construction for remediation) if subsurface anomalies are encountered during construction. Specific instructions shall include field monitoring to assess any safety concerns associated with the subsurface anomaly, environmental sampling, reporting requirements, removal and confirmatory sampling. Removal action of subsurface anomalies shall be documented by the construction site observer in the daily field log including documenting all actions taken in accordance with the SMP, including photo documentation.</p> <p><b>Mitigation Measure F-10 – Abandoned Oil Wells:</b> Mitigation measures associated with the six known on-site abandoned oil wells shall be provided in the SMP (required by Mitigation Measure F-1), including actions to perform in the event that an abandoned oil well is encountered during construction activities. A summary of these mitigation measures include the following:</p> <ol style="list-style-type: none"> <li>1) The developer shall submit the appropriate project application documents to DOGGR to comply with its Construction Site Review process. Thereafter, DOGGR will notify the applicant of required procedures, including re-abandonment permits and procedures, and possible methane mitigation measures.</li> <li>2) Known abandoned oil wells shall be uncovered during construction without disturbing the casing.</li> <li>3) A DOGGR inspector shall be notified to inspect the well and provide, if necessary, re-abandonment measures.</li> <li>4) The well shall be re-abandoned by a licensed</li> </ol>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>contractor in accordance with current regulatory requirements of DOGGR.</p> <p>5) The construction site observer shall be on the look out at all times during site excavation for abandoned oil wells. Actions to be taken to monitor the abandoned oil well with field instrumentation to assess any safety concerns shall be included in the SMP.</p> <p><b>Mitigation Measure F-11 – Former LA County Flood Control Dump Site:</b> If, during construction, a dump site is discovered, then the developer shall implement tailored mitigation to remove the dump materials during site construction activities. Response actions to be taken by the contractor if the former dump is encountered shall be provided in the SMP (required by Mitigation Measure F-1) and may include removal through excavation of dump debris, staging of the debris on plastic, monitoring of the excavation for landfill gas, debris loading and disposal in an off-site permitted facility.</p> <p><b>Mitigation Measure F-12 – Soil Transportation Plan:</b> The developer shall develop a Soils Transportation Plan in compliance with state of California and federal Department of Transportation requirements for the safe and legal transport to an off site disposal facility for hazardous materials that may be encountered during construction activities.</p> <p><b>Mitigation Measure F-13 – Dust Monitoring Plan:</b> The developer shall provide a Dust Monitoring Plan in accordance with the requirements of South Coast Air Quality Management District (SQAQMD) Rule 403 to monitor and control fugitive dust that may be generated as a result of</p>	

Table ES-1 (Continued)

## Summary of Project Impacts and Mitigation Measures

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		construction activities through application of Best Available Control Measures during construction.	
Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would create a significant hazard to the public or environment.	Potentially Significant	Refer to Mitigation Measures F-1, F-4, F-6, F-7, F-8, and F-9.	Less Than Significant
<b>Hydrology and Water Quality</b>			
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Less Than Significant	No mitigation measures are required.	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table ES-1 (Continued)

## Summary of Project Impacts and Mitigation Measures

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			
Would the project violate any water quality standards or waste discharge requirements?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Otherwise substantially degrade water quality?	Less Than Significant	No mitigation measures are required.	Less Than Significant
<b>Land Use</b>			
Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the	Potentially Significant	No mitigation measures are provided that could reduce the significance of impacts.	Significant and Unavoidable

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
purpose of avoiding or mitigating an environmental effect?			
<b>Noise</b>			
Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant	<p><b>Mitigation Measure I-1:</b> Blasting and impact pile driving shall not be used for construction activities. If sonic pile drivers are used for the construction of the proposed project, the other pieces of construction equipment on-site at the time shall not be operated within 600 feet of the property line closest to the noise sensitive receptor location R4.</p> <p><b>Mitigation Measure I-2:</b> Engine idling from construction equipment such as bulldozers and haul trucks shall be limited. Idling of haul trucks shall be limited to five (5) minutes at any given location as established by the South Coast Air Quality Management District.</p> <p><b>Mitigation Measure I-3:</b> Construction activities shall be scheduled so as to avoid operating several pieces of heavy equipment simultaneously (i.e., no more than six (6) pieces of equipment within 600 feet from the property line of the noise-sensitive receptor R4), which causes excessively high noise levels.</p> <p><b>Mitigation Measure I-4:</b> Noise-generating construction equipment operated at the project site shall be equipped with effective noise control devices, i.e., mufflers, lagging, and/or motor enclosures. All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.</p> <p><b>Mitigation Measure I-5:</b> The project developer shall retain the services of a qualified acoustical engineer with expertise in design of building sound isolations, who shall submit a</p>	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>signed report to the City during plan check for review and approval, which demonstrates that the proposed building design for the residential uses and the hotel building achieves an interior sound environment of 45 dBA (CNEL), as required by City’s building code.</p> <p><b>Mitigation Measure I-6:</b> The project developer shall retain the services of a qualified acoustical engineer experienced in mechanical noise analysis to provide an acoustical report to City building officials during plan check, which demonstrates that the project’s mechanical design meets the requirements of the City’s Noise Ordinance. All noise attenuating features necessary to demonstrate compliance with the City’s Noise Ordinance shall be identified in the acoustical report.</p>	
<p>Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</p>	<p>Less Than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant</p>
<p>Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</p>	<p>Potentially Significant</p>	<p>Refer to Mitigation Measures I-5 and I-6.</p>	<p>Less Than Significant</p>
<p>Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</p>	<p>Potentially Significant</p>	<p>Refer to Mitigation Measures I-1 through I-4.</p>	<p>Less Than Significant</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<b>Population and Housing</b>			
Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less Than Significant	No mitigation measures are required.	Less Than Significant
<b>Public Services</b>			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for police protection?	Potentially Significant	<b>Mitigation Measure K-1:</b> The project developer shall notify LBPD of the times of day and locations of all temporary lane closures throughout construction activities, and such closures shall be coordinated so that they do not occur during peak traffic periods, to the extent feasible.	Less Than Significant
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or	Less Than Significant	No mitigation measures are required.	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<p>physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for fire protection?</p>			
<p>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools?</p>	<p>Less Than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant</p>
<p>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the</p>	<p>Less Than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<p>construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for parks and recreation resources?</p>			
<p>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for library resources?</p>	<p>Less Than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant</p>
<b>Traffic and Circulation</b>			
<p>Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into</p>	<p>Potentially Significant</p>	<p>For the study intersections where project-related traffic volumes are expected to have a significant traffic impact and result in unacceptable operating conditions, the TIA identifies traffic improvement measures that change the intersection geometry to increase capacity. These capacity improvements involve roadway widening and re-striping to reconfigure (add lanes) to specific approaches of a key</p>	<p>Significant and Unavoidable</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<p>account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</p>		<p>intersection. The identified improvements are expected to accomplish the following:</p> <ul style="list-style-type: none"> <li>• Mitigate the impact of future non-project (ambient traffic growth and cumulative project) traffic and project traffic, and/or</li> <li>• Improve LOS to acceptable ranges and/or to pre-project conditions.</li> </ul> <p><b><u>Traffic Reduction Measures</u></b></p> <p>The following improvements, included as mitigation measures, will be implemented by the proposed project to help offset the project’s significant impacts at the key study intersections:</p> <p><b>Mitigation Measure L-1 – TDM Plan.</b> The proposed project shall implement a TDM Plan. The TDM Plan shall consist of subsidized transit passes for all residents and employees, on-site flex cars, guaranteed ride home, airport shuttle for hotel guests and a bike facility on-site.</p> <p><b>Mitigation Measure L-2 – Shuttle Service.</b> The proposed project shall implement a shuttle service along 2<sup>nd</sup> Street between Bay Shore Avenue and the project site.</p> <p><b><u>Intersection Improvements for Existing Plus Project Traffic Conditions</u></b></p> <p>The results of the existing plus project LOS analysis as summarized in Table IV.L-10 indicates that the proposed project will significantly impact four (4) of the twenty-five (25) key study intersections. The following are improvements recommended to mitigate the existing plus project traffic impacts:</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p><b>Mitigation Measure L-3 – Intersection No. 6 – PCH at 7<sup>th</sup> Street:</b> Modify the existing medians on PCH and restripe PCH to provide a second northbound left-turn lane. Modify the existing traffic signal accordingly. Implementation of this improvement completely offsets the impact of the proposed project. The installation of this mitigation measure is subject to the approval of the City of Long Beach and/or Caltrans.</p> <p><b>Mitigation Measure L-4 – Intersection No. 14 – Bay Shore Avenue at 2<sup>nd</sup> Street:</b> Project shuttle service. Implementation of this improvement completely offsets the impact of the proposed project.</p> <p><b>Mitigation Measure L-5 – Intersection No. 17 – PCH at 2<sup>nd</sup> Street:</b> Project shuttle service. Purchase right-of-way from the Mobil gas station located on the southeast corner of the intersection and construct an exclusive northbound right-turn lane. Restripe 2<sup>nd</sup> Street to convert the eastbound shared through/right-turn lane into an exclusive third eastbound through lane. Modify the existing traffic signal to provide an eastbound right-turn overlap phase. Modify the median and extend the left-turn storage for the dual westbound left-turn lanes on 2<sup>nd</sup> Street. The installation of these mitigation measures are subject to the approval of the City of Long Beach and/or Caltrans.</p> <p>Based on existing constraints, any additional mitigation beyond what was identified above would be considered non-feasible. Hence the project’s impact at this key intersection would be considered significant and unavoidable.</p> <p><b>Intersection No. 19 – Studebaker Road at 2<sup>nd</sup> Street:</b> No physical mitigation measures are feasible; any additional turn lanes will require widening and additional right-of-way.</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>Hence the project’s impact at this key intersection would be considered significant and unavoidable.</p> <p><b><u>Intersection Improvements for Year 2015 Plus Project Traffic Conditions</u></b></p> <p>The results of the Year 2015 LOS analysis as summarized in IV.L-11 indicates that the proposed project will significantly impact six (6) of the twenty-five (25) key study intersections. The following are improvements recommended to mitigate the Year 2015 plus project traffic impacts:</p> <p><b>No. 6 – PCH at 7<sup>th</sup> Street</b> <i>(Same as Mitigation Measure L-3)</i>: Modify the existing medians on PCH and restripe PCH to provide a second northbound left-turn lane. Modify the existing traffic signal accordingly. Implementation of this improvement completely offsets the impact of the proposed project. The installation of this mitigation measure is subject to the approval of the City of Long Beach and/or Caltrans.</p> <p><b>Mitigation Measure L-6 – Intersection No. 8 – Studebaker Road at SR-22 Westbound Ramps</b>: Modify the intersection to create two separate intersections. The northerly intersection will be entirely new and will consist of the SR-22 westbound off-ramp. The new intersection will provide two northbound through lanes, three southbound through lanes, dual westbound left-turn lanes and a free westbound right-turn lane controlled by a two-phase traffic signal. The existing southerly intersection will consist of the SR-22 westbound on-ramp and will provide two northbound through lanes, a free northbound right-turn lane, an exclusive southbound left-turn lane and two southbound through lanes controlled by a two phase traffic signal. Implementation of these improvements completely offsets the impact of the proposed project. The installation of these mitigation</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>measures are subject to the approval of the City of Long Beach and/or Caltrans.</p> <p><b>No. 14 – Bay Shore Avenue at 2<sup>nd</sup> Street</b> (<i>Same as Mitigation Measure L-4</i>): Project shuttle service. Implementation of this improvement completely offsets the impact of the proposed project.</p> <p><b>No. 17 – PCH at 2<sup>nd</sup> Street</b> (<i>Same as Mitigation Measure L-5</i>): Project shuttle service. Purchase right-of-way from the Mobil gas station located on the southeast corner of the intersection and construct an exclusive northbound right-turn lane. Restripe 2<sup>nd</sup> Street to convert the eastbound shared through/right-turn lane into an exclusive third eastbound through lane. Modify the existing traffic signal to provide an eastbound right-turn overlap phase. Modify the median and extend the left-turn storage for the dual westbound left-turn lanes on 2<sup>nd</sup> Street. The installation of these mitigation measures are subject to the approval of the City of Long Beach and/or Caltrans.</p> <p>Based on existing constraints, any additional mitigation beyond what was identified above would be considered non-feasible. Hence the project’s impact at this key intersection would be considered significant and unavoidable.</p> <p><b>Mitigation Measure L-7 – Intersection No. 18 – Shopkeeper Road at 2<sup>nd</sup> Street:</b> Restripe Shopkeeper Road to provide a separate northbound right-turn lane. Extend the storage capacity for the westbound left-turn lane on 2<sup>nd</sup> Street. Modify the existing traffic signal accordingly. Implementation of these improvements completely offsets the impact of the proposed project. The installation of these</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>mitigation measures are subject to the approval of the City of Long Beach.</p> <p><b>No. 19 – Studebaker Road at 2<sup>nd</sup> Street</b> (<i>Same as under Existing Plus Project Conditions</i>): No physical mitigation measures are feasible; any additional turn lanes will require widening and additional right-of-way. Hence, the project’s impact at this key intersection would be considered significant and unavoidable.</p> <p><b><u>Construction Traffic Mitigation Measures</u></b></p> <p>The following mitigation measure would reduce impacts related to construction traffic:</p> <p><b>Mitigation Measure L-8 – Construction Truck Traffic</b> – In order to minimize the temporary construction impact at the intersection of PCH/2<sup>nd</sup> Street, construction travel patterns to the site shall be modified and trucks shall circulate the site in a “counterclockwise” manner. Trucks traveling to the site shall travel through the PCH/2<sup>nd</sup> Street intersection, make a westbound left-turn at Marina Drive and make a southbound left-turn into the site through the existing median break. This path of travel would require a flag person at the Marina Drive entrance to facilitate the safe travel of trucks through the existing median break along Marina Drive.</p> <p><b><u>Transportation Improvement Fee</u></b></p> <p><b>Mitigation Measure L-9 – Transportation Improvement Fee</b> – Pursuant to the requirements of the City of Long Beach Municipal Code, Transportation Improvement Fees shall be required of the project. The Transportation Improvement Fee, based on the size of all new residential and commercial</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

Environmental Issue	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>development in the City of Long Beach, is assessed as shown below:</p> <ul style="list-style-type: none"> <li>• Residential: \$1,125.00 per unit</li> <li>• Retail (City-Wide): \$3.00 per square-foot</li> <li>• Hotel (City-Wide): \$750 per quest room</li> <li>• Movie Theatre (City-Wide): \$140.00 per seat</li> </ul> <p>Based on a total project development of 325 residential dwelling units, a 100-room hotel, 216,935 SF of commercial (retail/restaurant) space, and a 99-seat theatre and using the above-referenced unit costs, the proposed Second + PCH Development can be expected to pay up to \$1,104,711 in Transportation Improvement Fees. The precise fee, plus any credit for existing development, shall be determined by the City of Long Beach upon issuance of project building permits.</p> <p><b><u>CALTRANS Analysis Traffic Improvements</u></b></p> <p>Recommended improvements required at the following location to mitigate the proposed project’s impact per Caltrans’ methodology include the following:</p> <p><b>No. 17 – PCH at 2<sup>nd</sup> Street</b> (<i>Same as Mitigation Measure L-3</i>): Project shuttle service. Purchase right-of-way from the Mobil gas station located on the southeast corner of the intersection and construct an exclusive northbound right-turn lane. Restripe 2nd Street to convert the eastbound shared through/right-turn lane into an exclusive third eastbound through lane. Modify the existing traffic signal to provide an eastbound right-turn overlap phase. Modify the median and extend the left-turn storage for the dual westbound left-turn lanes on 2nd Street. The installation of these mitigation measures are subject to the approval of the City of Long Beach and/or Caltrans.</p>	

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
		<p>Based on existing constraints, any additional mitigation beyond what was identified above would be considered non-feasible. Hence, the Project's impact at this key intersection would be considered significant and unavoidable.</p> <p><b>Mitigation Measure L-10 – No. 25 – Seal Beach Boulevard at PCH:</b> Convert the westbound right turn lane into a third westbound through lane and widen to allow for an exclusive right-turn lane. Implementation of these improvements completely offsets the impact of the proposed project. The installation of this mitigation measure is subject to the approval of the City of Seal Beach and/or Caltrans.</p> <p>As an alternative to the aforementioned improvements, the proposed project could pay the appropriate City of Seal Beach Transportation Facilities and Programs Development Fees to offset its impact at this location. It should be noted that if the aforementioned recommended roadway improvements are not implemented, then the project's impact at this key intersection would be considered significant and unavoidable.</p>	
<p>Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</p>	<p>Potentially Significant</p>	<p>Refer to Mitigation Measures L-1 through L-10.</p>	<p>Significant and Unavoidable</p>

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project result in inadequate emergency access?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project result in inadequate parking capacity?	Less Than Significant	Refer to Mitigation Measure K-1 (Police Protection).	Less Than Significant
Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	Less Than Significant	No mitigation measures are required.	Less Than Significant
<b>Utilities and Service Systems</b>			
Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project have insufficient water supplies available to serve the project	Less Than Significant	No mitigation measures are required.	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
from existing entitlements and resources, or would new or expanded entitlements be needed?			
Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	Less Than Significant	No mitigation measures are required.	Less Than Significant
Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less Than Significant	No mitigation measures are required.	Less Than Significant

**Table ES-1 (Continued)**

**Summary of Project Impacts and Mitigation Measures**

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
<p>Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</p>	<p>Potentially Significant</p>	<p><b><u>Construction</u></b></p> <p><b>Mitigation Measure M.3-1:</b> Prior to the issuance of any demolition or construction permit, the Applicant shall provide a copy of the receipt or contract indicating that the construction contractor shall only contract for waste disposal services with a company that recycles demolition and construction-related wastes. The contract specifying recycled waste service shall be presented to the Development Services Department prior to approval of certificate of occupancy.</p> <p><b>Mitigation Measure M.3-2:</b> In order to facilitate on-site separation and recycling of construction related wastes, the construction contractor shall provide temporary waste separation bins on-site during demolition and construction.</p> <p><b><u>Operation</u></b></p> <p><b>Mitigation Measure M.3-3:</b> The proposed project shall include recycling bins at appropriate locations to promote recycling of paper, metal, glass, and other recyclable material. The bins shall be picked up and appropriately recycled as a part of the proposed project's regular trash disposal program.</p> <p><b>Mitigation Measure M.3-4:</b> New homeowners/tenants shall be provided with educational materials on the proper management and disposal of household hazardous waste, in accordance with educational materials made available by the County of Los Angeles Department of Public Works.</p>	<p>Less Than Significant</p>

Table ES-1 (Continued)

## Summary of Project Impacts and Mitigation Measures

<b>Environmental Issue</b>	<b>Significance Before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance After Mitigation</b>
Would the project comply with federal, state, and local statutes and regulations related to solid waste?	Less Than Significant	No mitigation measures are required.	Less Than Significant