



East Broadway Complete Streets Improvement Project

Initial Study – Mitigated Negative Declaration

prepared by

City of Long Beach

333 West Ocean Boulevard, 5th Floor

Long Beach, California 90802

Christopher Koontz, Advance Planning Officer

prepared with the assistance of

Rincon Consultants, Inc.

180 North Ashwood Avenue

Ventura, CA, 93003

December 2017

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Initial Study

1. Project Title

East Broadway Complete Streets Improvements Project

2. Lead Agency Name and Address

City of Long Beach
Planning and Building Department
333 West Ocean Boulevard, 5th Floor
Long Beach, California 90802

3. Contact Person and Phone Number

Christopher Koontz, Advance Planning Officer
(562) 570-6288

4. Project Location

The project site encompasses the stretch of East Broadway from Alamitos Avenue to Redondo Avenue in the City of Long Beach, California. Figure 1 shows the location of the site within the region. Figure 2 shows the project site within its local context.

5. Project Sponsor's Name and Address

Same as lead agency

6. General Plan Designation

The areas adjacent to the project site are categorized into seven different land use categories: LUD-2 (Mixed Style Homes), LUD-3B (Moderate Density Residential), LUD-4 (High Density Residential), LUD-7 (Mixed Use District), LUD-8R (Mixed Retail/Residential Strip), LUD-8N (Shopping Nodes), and LUD-11 (Open Space and Park).

7. Zoning

The areas adjacent to the East Broadway corridor are categorized into eight different zoning districts: R-2-A (Two-family Residential, accessory second unit), R-2-N (Two-family Residential, standard lot), R-3-S (Low-density Multi-family Residential, small lot), R-4-R (Moderate-density Multiple Residential), CNR (Neighborhood Commercial and Residential), PD-30 (Downtown Long Beach Planned Development District), CNP (Neighborhood Pedestrian-Oriented Commercial), and P (Park).

8. Description of Project

The proposed project involves repaving East Broadway between Alamitos Avenue and Redondo Avenue, and the modification of East Broadway between Alamitos Avenue and Temple Avenue to install safety improvements including protected bike lanes on both sides of the street. East Broadway currently consists of two lanes of traffic in each direction from Temple Avenue to Alamitos Avenue. The project includes removing existing pavement and resurfacing the roadway. The project would also include various concrete improvements and repairs to existing sidewalks, curbs, gutters, and curb ramps. In addition, the existing striping between Alamitos Avenue and Temple Avenue, which currently includes two vehicular travel lanes, would be reconfigured to provide one lane in each direction with on-street parking and protected bike lanes on both sides of the street, as well as a buffer to separate bicycle traffic from vehicular traffic. The project would not change existing striping on East Broadway from Temple Avenue to Redondo Avenue. Currently, on-street parking is generally allowed, but is restricted along certain sections of the project site during several time periods of the week. The project site covers approximately 12 acres and approximately 9,200 feet (1.7 mile) of road length. The project would remove 12 street trees and would relocate some bus stops along the project corridor. See Figure 3 for a conceptual site plan of the restriping between Alamitos Avenue and Temple Avenue.

9. Surrounding Land Uses and Setting

The project site is a minor avenue in Long Beach that is surrounded by commercial and residential land uses. Existing uses include restaurants, salons, retail, a gallery, a park, multi-family residences, and single family residences. See Figure 4 for photos of existing site conditions.

The areas adjacent to the project site are categorized into seven different land use categories: LUD-2 (Mixed Style Homes), LUD-3B (Moderate Density Residential), LUD-4 (High Density Residential), LUD-7 (Mixed Use District), LUD-8R (Mixed Retail/Residential Strip), LUD-8N (Shopping Nodes), and LUD-11 (Open Space and Park). One block of the project site (the block west of Bonito Avenue) falls within the Downtown Long Beach Planned Development District (PD-30). Planned districts (PD) offer more comprehensive guidelines for land uses than general zoning. The City of Long Beach's Downtown Plan (Downtown Plan) specifies which uses are generally permitted in the Downtown Plan Area, which uses are permitted in the Downtown Neighborhood Overlay, and which uses are permitted in Pedestrian-Oriented Use Main Streets and Secondary Streets (Long Beach 2012). The area of the project site that is zoned PD-30 (the block west of Bonito Avenue) falls predominately within the Downtown Neighborhood Overlay.

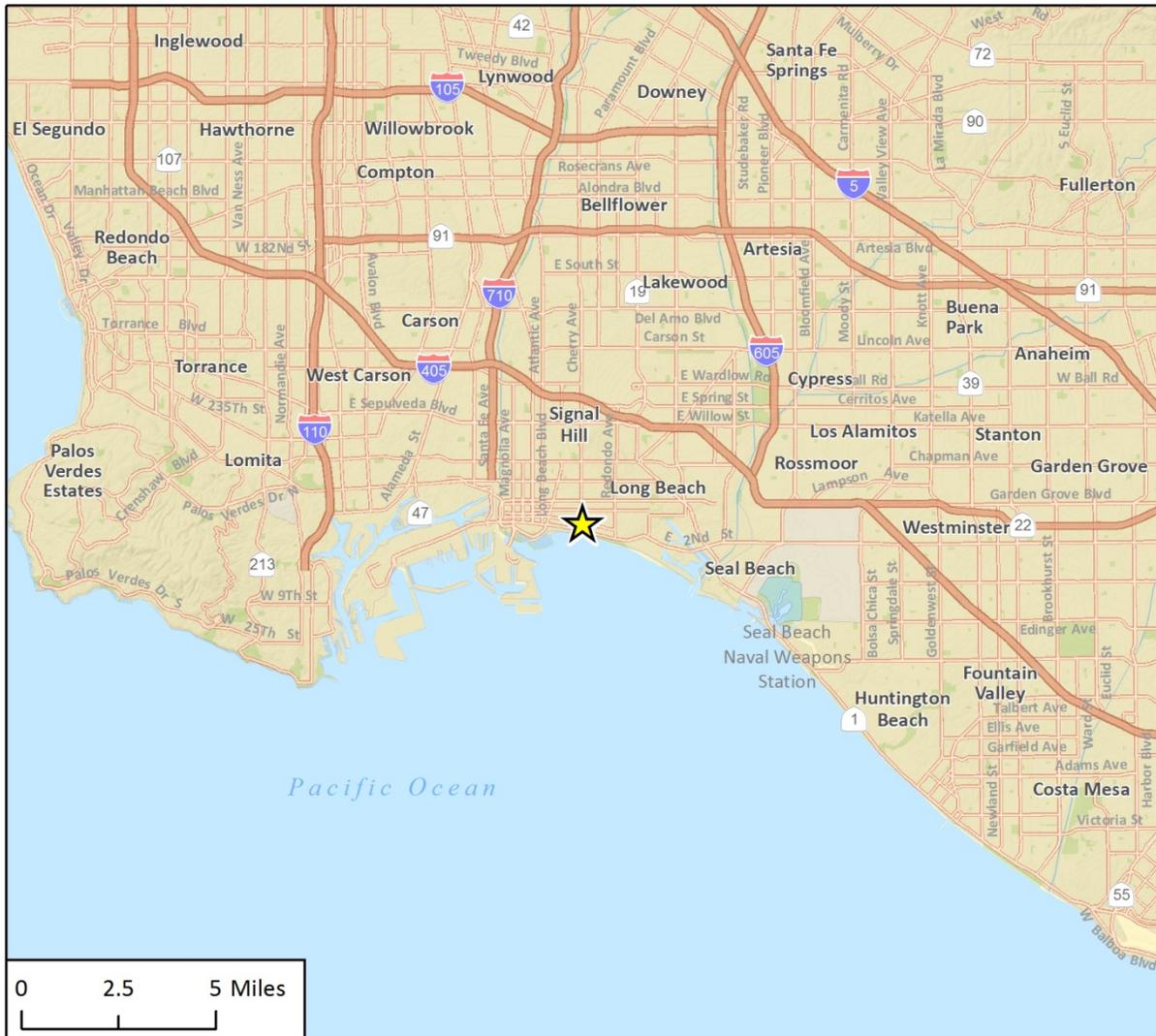
10. Other Public Agencies Whose Approval is Required

City of Long Beach is the lead agency and the approval of other public agencies is not required.

11. California Native American Tribe Consultation:

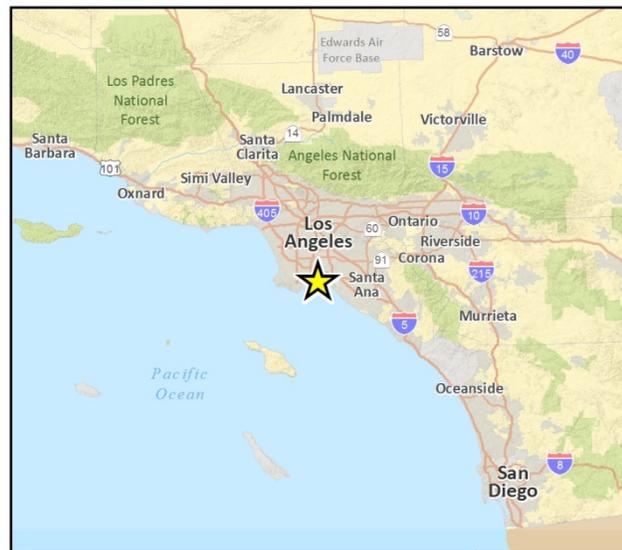
The City sent AB 52 consultation letters to six Native American tribes that have requested project information under AB 52. To date, no requests for consultation on this project have been received from Consultation has not been requested by California Native American tribes traditionally and culturally affiliated with the project area.

Figure 1 Regional Location



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★ Project Location N



FigX Regional Location

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Figure 2 Project Location

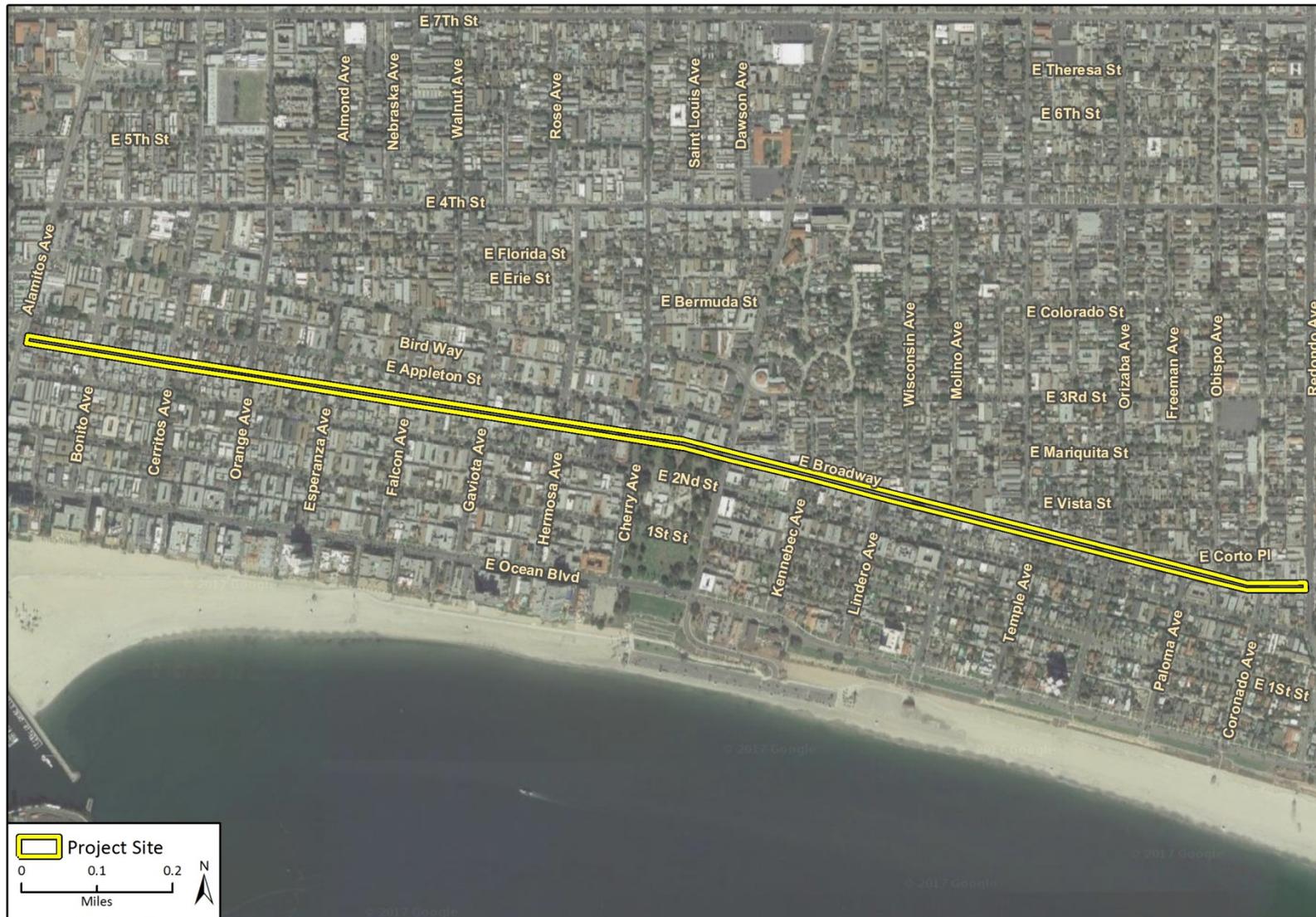
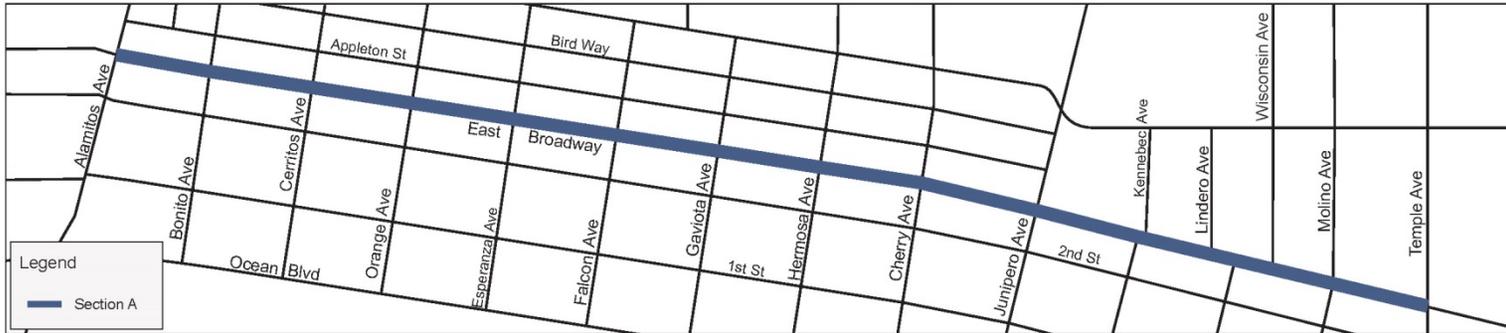
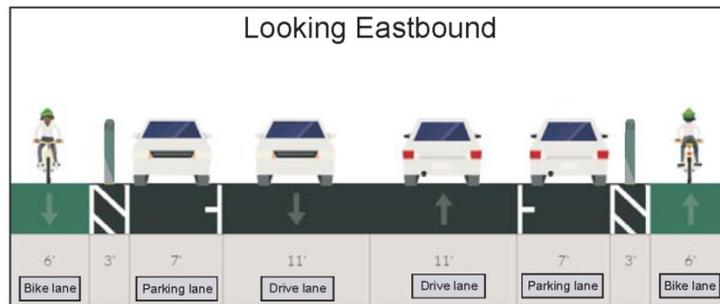


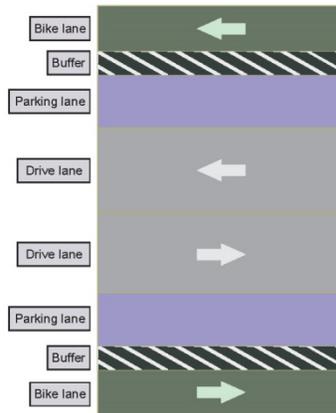
Figure 3 Conceptual Site Plan for Complete Streets Improvements



Cross-Section A:



Plan View A:



Source: Iteris 2017

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Potentially Significant Unless Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project have a substantial adverse effect on a scenic vista?*
- b. *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*
- c. *Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*

The proposed project involves repaving East Broadway between Alamitos Avenue and Redondo Avenue, and modification of East Broadway between Alamitos Avenue and Temple Avenue with striping reconfigurations to provide parking protected bike lanes on both sides of the street. East Broadway currently consists of two lanes of traffic in each direction from Temple Avenue to Alamitos Avenue. The proposed project would require roadway resurfacing, concrete improvements, and restriping of the road and would not result in the construction of a structure that could impede scenic vistas, destruction of scenic resources, or degradation of the visual character or quality of the project site. The project would remove 12 street trees, but the project corridor is not within a state scenic highway. Consequently, there would be no impact.

NO IMPACT

- d. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The proposed project would add bike lanes to East Broadway between Alamitos Avenue and Temple Avenue. East Broadway is classified as a minor avenue in the Long Beach Mobility Element (2013). A minor avenue provides for the movement of traffic to neighborhood activity centers and serves as a route between neighborhoods. As such, the project site is lined with street lighting and experiences light and glare from vehicle traffic. Bicycle lanes would not substantially increase light and glare along the roadway relative to existing conditions. In addition, reducing the vehicular lanes in both directions from two to one lane would reduce the number of vehicles in an area at any given time, potentially reducing concentrations of light from vehicles at night. The impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*
- e. *Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

There are no agricultural zones or forest lands in Long Beach, which is a fully urbanized community that has been urbanized for half a century. The project site is a roadway that does not contain agricultural resource or forest lands. As such, there would be no impacts to agricultural resources or forest lands.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

The project site is within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The local air quality management agency is required to monitor air pollutant levels to ensure that applicable air quality standards are met and, if they are not met, to develop strategies to meet the standards. The SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of state and federal air quality standards.

The SCAB is in non-attainment for federal standards of ozone, PM_{2.5}, and lead, and the state standards for ozone, PM₁₀, and PM_{2.5} (SCAQMD 2016). The SCAB’s non-attainment status is a result of several factors, the primary factors being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate air pollutants, and the number, type, and density of emission sources within the SCAB.

Because air quality in the SCAB currently exceeds several state and federal ambient air quality standards, the SCAQMD is required to implement strategies to reduce pollutant levels to recognized acceptable standards. To accomplish this requirement, the SCAQMD has adopted an AQMP that provides strategies for the attainment of state and federal air quality standards.

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. SCAQMD published a Final 2016 Air Quality Management Plan in March 2017. The 2016 AQMP is the most recent AQMP adopted by the SCAQMD and incorporates local city general plans and the Southern California Association of Government’s (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) socioeconomic forecast projections of regional population, housing and employment growth.

The proposed project does not involve the construction of any residences or commercial uses that would induce population growth in the area. The proposed resurfacing and restriping of an existing road would not result in the expansion of roadways or otherwise indirectly induce population growth. Therefore, the proposed project would not generate population, housing, or employment growth beyond forecasts used in the AQMP and would be consistent with the AQMP. Impacts would be less significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*
- c. *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 that exceed quantitative thresholds for ozone precursors)?*

The SCAQMD recommends the use of quantitative thresholds to determine the significance of temporary construction-related pollutant emissions and project operations. SCAQMD’s project-specific and cumulative significance thresholds are the same (SCAQMD 2003). Projects that exceed the project-specific significance thresholds are considered to by the SCAQMD to be cumulatively considerable (SCAQMD 2003). The SCAQMD has recommended thresholds for emissions of reactive organic gases (ROG), nitrous oxide (NO_x), carbon monoxide (CO), sulfur oxide (SO_x), particulate matter with a diameter between 2.5 and 10 micrometers (PM₁₀), and particulate matter with a diameter of 2.5 micrometers or less (PM_{2.5}).

The SCAQMD recommends the following quantitative regional significance thresholds for temporary construction activities and long-term project operation:

Construction Thresholds	Operational Thresholds
75 pounds per day of ROG	55 pounds per day of ROG
100 pounds per day of NO _x	55 pounds per day of NO _x
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SO _x	150 pounds per day of SO _x
150 pounds per day of PM ₁₀	150 pounds per day of PM ₁₀
55 pounds per day of PM _{2.5}	55 pounds per day of PM _{2.5}

The proposed project involves roadway resurfacing, concrete improvements, and restriping and would not involve construction or demolition of any structure. The proposed project would, however, generate short-term construction emissions associated with roadway resurfacing, concrete improvements, and restriping activities, such as mobile source emissions from roadwork vehicles and equipment, and ROG from paint. The project would also generate emissions from exporting old asphalt and importing new road base materials. Proportional estimates of import and

export from similar activities on Alamitos Avenue from 7th Street to Orange Avenue (an approximately 4,720-foot road length requiring 2,000 tons of export and 590 tons of import) were used to calculate emissions from hauling activities for the project (an approximately 9,200-foot road length) (Morris 2016).

The project would not generate a long term increase in emissions because resurfacing and restriping activities would be short term in nature and part of standard road maintenance procedures. Therefore, the project’s short term emissions from roadway resurfacing, concrete improvements, and restriping are compared to SCAQMD’s short term construction thresholds. Short term construction emissions were calculated for the proposed project using the SCAQMD’s California Emissions Estimator Model (CalEEMod) version 2016.3.1 and results are provided in Table 1.

Table 1 Estimated Maximum Daily Air Pollutant Emissions (lbs/day)

Emissions	ROG	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
Maximum lbs/day	7.9	63.3	39.6	0.1	3.8	2.4
<i>SCAQMD Construction Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Note: All calculations were made using CalEEMod Winter emissions results. See Appendix A for CalEEMod inputs and results.

Project emissions would not exceed SCAQMD’s recommended short-term construction thresholds; therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

Resurfacing and lane restriping is a standard, short-term road maintenance procedure that occurs in residential and non-residential areas and is not considered a significant source of air pollutant emissions for sensitive receptors. While lane resurfacing and restriping activities would not expose sensitive receptors to substantial pollutant concentrations, removing a lane in both directions to provide bike lanes may increase traffic congestion on East Broadway, which has the potential to result in CO hotspots, areas of high CO concentrations. A project’s localized air quality impact is considered significant if CO emissions create a hotspot where either the California one-hour standard of 20 ppm or the federal and state eight-hour standard of 9.0 ppm is exceeded. This typically occurs at severely congested intersections (level of service [LOS] E or worse).

A detailed CO analysis was conducted during the preparation of SCAQMD’s 2003 AQMP. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic (ADT) intersections in the SCAB, those which would be expected to experience the highest CO concentrations. The highest CO concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near the I-405 Freeway. The concentration of CO at this intersection was 4.6 ppm, which is well below the 35-ppm 1-hour CO federal standard. The Wilshire Boulevard/Veteran Avenue intersection has an ADT of approximately 100,000 vehicles per day.

Iteris, Inc. prepared a traffic analysis for the project and project alternatives in November 2017 (see Appendix B for East Broadway Feasibility Study). The analysis indicates that currently roughly 14,220 to 15,600 average daily vehicle trips utilize roadways and intersections along East Broadway from Alamitos Avenue to Temple Avenue (where proposed restriping activities would occur), which is 14 to 16 percent of the traffic volume at the location where the highest CO concentration in the region

occurs. Other roadways in the vicinity of the project site have lower average daily vehicle trips than East Broadway, ranging from 3,610 to 6,463 trips per day. Furthermore, due to stricter vehicle emissions standards in newer cars and new technology that increases fuel economy, CO emission factors under future land use conditions would be substantially lower than those under existing conditions. Thus, even though there may be incrementally more traffic congestion along East Broadway due to the proposed project, local mobile-source CO emissions would not result in or substantially contribute to concentrations that exceed the one-hour or eight-hour ambient air quality standards for CO. Therefore, impacts related to CO hot spots would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. *Would the project create objectionable odors affecting a substantial number of people?*

The SCAQMD has identified some common types of facilities that have been known to produce odors: agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, rendering plants, dairies, rail yards, and fiberglass molding operations (SCAQMD 1993). The proposed project involves roadway resurfacing, concrete improvements, and lane restriping and would not result in the construction of an odor-generating facility. The laying of asphalt and use of high-solvent paint may temporarily emit odors during resurfacing and restriping. However, compliance with SCAQMD Rule 1113 would limit the amount of volatile organic compounds in the paint applied to 100 grams per liter of traffic coating, reducing objectionable odors during construction. Odor from resurfacing activities would be temporary and is typical of roadway maintenance activities. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*
- c. *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*
- d. *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?*
- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Long Beach is a fully urbanized community that has been urbanized for over half a century. The proposed project would not have any significant impacts on biological resources because the project site—a roadway—does not support any native biological resources or habitats, and is not in the area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project would remove twelve street trees, eleven ficus trees and one magnolia trees, which were deemed in an Arborist Report to not be suitable for a parkway because they have outgrown their environment, or are in poor condition (Crumby 2017). Trees occurring in the City of Long Beach along City streets are afforded protection under Section 14.28, Trees and Shrubs (Ordinance C-7642), of the Long Beach Municipal Code and through the City of Long Beach’s Tree Maintenance Policy. The purpose of these regulations is to preserve and protect the community’s urban forest along City streets and to promote the health and safety of City trees, from the time they are planted through maturity. The project would not remove any street trees that have not been identified as either in poor condition or unsuitable for a parkway because they have outgrown their environment. In addition, the project would be required to comply with the City’s Tree Maintenance Policy. The proposed project would have a less than significant impact on biological resources.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The project site is currently developed as a roadway with street trees. Because the project would remove 12 existing trees, project implementation might disrupt nesting habitat for a variety of bird species that are afforded protection under the federal Migratory Bird Treaty Act (MBTA – 16 United State Code Section 703-711). Nesting season is typically February 1 through August 30. Construction-related disturbances could result in nest abandonment or premature fledging of the young. Therefore, the proposed project would have a potentially significant impact unless mitigation is incorporated.

Mitigation Measure

The following mitigation measure, and compliance with MBTA and California Fish and Game Code (CFGF) requirements, would be required to reduce impacts to nesting birds to a less than significant level.

- BIO-1 Nesting Birds.** To avoid disturbance of nesting and special-status birds, including raptorial species protected by the MBTA and CFGC, tree removal activities shall occur outside of the bird breeding season (February 1 through August 30), if feasible. If tree removal must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 3 days prior to initiation of vegetation removal activities. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No tree removal activities shall occur within this buffer until the avian biologist has confirmed that breeding/ nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*
- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*
- c. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*
- d. *Disturb any human remains, including those interred outside of formal cemeteries?*

The project site is an urban road that has been previously disturbed. Furthermore, the proposed project would involve roadway resurfacing, concrete improvements, and lane restriping and would not involve any excavation, demolition, or construction activities. Although the proposed project would include various concrete improvements, the project would not disturb native soils. Therefore, the proposed project would not disturb any historical, archaeological, or paleontological resources, or human remains that may be below the surface. Consequently, there would be no impact related to cultural resources.

NO IMPACT

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6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most

recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

- a.2. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*
- a.3. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a.4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*
- c. Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?*
- d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

According to Plate 2 of the Seismic Safety Element of the Long Beach General Plan, no active faults are known to traverse the project site and the project site is not located within, or immediately adjacent to an Alquist-Priolo Earthquake Fault Zone. Active faults within the City of Long Beach occur along the Newport-Inglewood Fault Zone. The Newport-Inglewood Fault Zone is a fault system consisting of a series of echelon fault segments and folds. Active or potentially active faults of the Newport-Inglewood Fault Zone include the Cherry Hill Fault, the Northeast Flank Fault and the Reservoir Hill Fault. Additionally, the Palos Verdes Fault, located approximately 4.5 miles southwest and offshore of the City, is considered an active fault. The project site would experience ground shaking from earthquakes generated along active faults located off-site. The intensity of ground shaking would depend upon the magnitude of the earthquake, distance to the epicenter and the geology of the area between the epicenter and the project site.

According to Plate 7 of the Seismic Safety Element of the Long Beach General Plan, the project site is located in an area designated as having minimal potential for liquefaction. The project site is also in a flat area and is not vulnerable to landslide impacts. The project would involve surface modifications to an existing flat, paved road and would not involve construction of any structures. Therefore, the project would not expose people or structures to risks due to seismic or geologic hazards. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project result in substantial soil erosion or the loss of topsoil?*

The project involves resurfacing of existing pavement, concrete improvements, and lane restriping of an existing paved road. The project would not disturb soil. As such, there would be no impact related to soil erosion.

NO IMPACT

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project involves resurfacing of existing pavement, concrete improvements, and lane restriping and would not construct facilities that require wastewater disposal. The project would have no impact related to septic tanks or alternative wastewater disposal systems.

NO IMPACT

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7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG), analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases, and ozone (O₃). GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆) (California Environmental Protection Agency [Cal EPA] 2016).

The accumulation of GHGs in the atmosphere regulates Earth’s temperature. Without the natural heat trapping effect of GHGs, Earth’s surface would be about 34° C cooler (Cal EPA, 2016). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project’s contribution towards an impact is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The SCAQMD threshold, which was adopted in December 2008, considers emissions of over 10,000 MT carbon dioxide equivalents (CO₂e) per year to be significant. However, the SCAQMD’s threshold

applies to only stationary sources and is intended to apply only when the SCAQMD is the lead agency.

In the latest guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in meeting minutes dated September 28, 2010:

- **Tier 1** – If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2** – Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3** – Establishes a screening significance threshold level to determine significance. There Working Group has provided a recommendation of 3,000 metric tons (MT) of CO₂e per year for all non-industrial projects.

The City of Long Beach has not adopted a GHG reduction plan; therefore, the proposed project is evaluated based on the SCAQMD's recommended Tier 3 threshold of 3,000 MT CO₂e per year for non-industrial projects. This threshold is based on attaining the 2020 goal for AB 32. The proposed project is anticipated to be operational prior to 2020 and the Association of Environmental Professionals' (AEP) Climate Change Committee published a white paper recommending that CEQA analysis for most land use development projects may continue to rely on current adopted thresholds for the immediate future in light of the change in focus on the 2030 reduction target for SB 32 (AEP 2016). Therefore, use of the SCAQMD's 3,000 MT per year CO₂e threshold, which is consistent with AB 32 2020 targets, is appropriate.

a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

The proposed project would temporarily generate GHG emissions during roadway resurfacing, concrete improvements, and lane restriping activities, but would not generate GHG emissions in the long-term. The California Emissions Estimator Model (CalEEMod) version 2016.3.1 was used to calculate annual GHG emissions from roadway resurfacing, concrete improvements, and restriping activities (see Appendix A). CalEEMod includes emissions from resurfacing and striping activities when calculating construction emissions for parking lot land uses (California Air Pollution Control Officers Association [CAPCOA] 2016). Project related emissions would generate an estimated 49 MT of CO₂e per year, which is below the significance threshold of 3,000 MT of CO₂e per year.

In addition, the project would provide bike lanes with buffers on East Broadway between Alamitos Avenue and Temple Avenue that would connect to an existing bike lane on Broadway west of Alamitos Avenue and to future proposed bike lanes on Alamitos Avenue; this improvement would likely increase bike ridership in the area, offsetting the project's GHG emissions. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

As discussed above, the project would emit GHGs during resurfacing and lane restriping activities, which would generate a nominal amount of GHG emissions. There would be no conflict with any plan, policy, or regulation adopted to reduce GHG emissions. Furthermore, the project is consistent with City, regional, and State policies to reduce GHG emissions by encouraging increased alternative transportation, such as bicycle use. One of the City's sustainability goals is to "create a system of at least 200 miles of interconnected bike routes by 2020" (City of Long Beach 2010). The 2013 Mobility Element of the General Plan restates the City Council's vision to become the most bicycle friendly large city in the United States and includes a Bicycle Master Plan with existing and proposed improvements to realize this vision. The proposed project involves the construction of bicycle facilities on East Broadway between Alamitos Avenue and Temple Avenue beyond the existing scope of the Mobility Element, which does not designate the project site as a bicycle route. The proposed project would add a Class IV directional separated bikeway to East Broadway between Alamitos Avenue and Temple Avenue. The proposed project would also align with regional goals expressed in the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to increase the use of bicycles to access regional transit. The project site lies along the route of six different Long Beach Transit bus routes (21, 22, 71, 72, 111, and 112) and is about half a mile from the Metro Blue Line light rail. Bicyclists could use East Broadway in conjunction with existing bike routes on East Broadway between Alamitos Avenue and Long Beach Boulevard to access the Blue Line and connect with other regional transit. The project would involve minor relocations of bus stops; however, bus stops would remain within the corridor, providing access to transit. Therefore, the project would be consistent with applicable plans, policies and regulations related to reducing GHG emissions and there would be no impact.

NO IMPACT

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8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *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?*
- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The proposed project involves resurfacing, concrete improvements, and restriping an existing roadway, East Broadway, and development of a bike lane in either direction. The nearest school to the project site is Mann Elementary School located approximately 0.15 miles north of the southeastern portion of the project site at 257 Coronado Avenue. Carousel Preschool is located approximately 0.25 miles north of the project site located on Cherry Avenue. Resurfacing, concrete improvements, and restriping activities are standard road maintenance procedures and are subject to City, State, and federal regulations regarding the transport, use, and disposal of hazardous materials. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The following databases compiled pursuant to Government Code Section 65962.5 were checked (September 14, 2017) for known hazardous materials contamination at the project site:

- U.S. EPA’s Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Search
- State Water Resources Control Board’s (SWRCB) Geotracker search for leaking underground storage tanks (LUST) and other Cleanup Sites
- California Department of Toxic Substances Control’s (DTSC) Envirostor Cleanup Site and Hazardous Waste Facilities Database

East Broadway within the project site does not contain any Superfund sites (US EPA 2017). However, the project site is adjacent to three LUST sites on East Broadway (SWRCB 2017). All three sites have been remediated and their cases closed. Additionally, there is one historical Waste Discharge Requirement (WDR) site adjacent to the project site near Alamitos Avenue. However, this case was closed in 2006 (SWRCB 2017). The project site is adjacent to one voluntary cleanup and one school investigation near Alamitos Avenue. However, according to DTSC each of these sites was closed and requires no additional action (DTSC 2017).

No hazardous material sites are located on or adjacent to the East Broadway corridor and the proposed project would not create a significant hazard to the public or the environment. Furthermore, all hazardous sites within 1,000 feet of the project site have been remediated. The project involves resurfacing, concrete improvements, and lane restriping and would not involve excavation or construction activities that could disturb hazardous materials in the soil or groundwater. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

The project site is located approximately 3 miles south of the Long Beach Municipal Airport and is located outside of the Airport Influence Area (L.A. County 2003). There would be no impact.

NO IMPACT

- f. *For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area?*

The project site is not in the vicinity of a private airstrip. There would be no impact.

NO IMPACT

- g. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project would not alter through-traffic operations for emergency vehicles or eliminate existing roads or cause more circuitous access conditions. As discussed in Section 16, Transportation/Traffic, with implementation of Mitigation Measure T-1 the project's impacts to intersection level of service would be less than significant. In addition, the proposed project is consistent with recommendations outlined in the Public Safety Element of the City's General Plan to reduce risks of emergencies and ensure that emergency response is not impeded. For example, the proposed project would not result in increased density, which is identified as a factor increasing hazard risks, nor does it involve the construction of any structure that may impede access to a hazard. In addition, the project would not impair implementation of or physically interfere with an adopted emergency response plan because construction of the proposed project would maintain one lane in each direction for traffic flow on East Broadway. As such, the proposed project would not introduce features that would interfere with an adopted emergency plan and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

City of Long Beach
East Broadway Complete Streets Improvement Project

- h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The project site is located in a fully urbanized area of Long Beach and is not near any wildland areas. There would be no impact related to wildland fire risk

NO IMPACT

9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place structures in a 100-year flood hazard area that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements?*
- b. *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?*
- c. *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, in a manner that would result in substantial erosion or siltation on- or off-site??*
- d. *Would the project substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?*
- e. *Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*
- f. *Would the project otherwise substantially degrade water quality?*

The proposed project involves resurfacing, concrete improvements, and lane restriping of an existing urban road. Project implementation would not discharge any wastewater, require the use of groundwater supplies, or involve construction that could interfere with groundwater recharge. The proposed project would not impact the existing storm drainage system, cause an increase in

surface runoff, provide additional sources of polluted runoff, or otherwise degrade water quality. In addition, project construction would comply with all requirements of the municipal code related to stormwater management and the City's Stormwater Management Plan. Consequently, there would be no impact.

NO IMPACT

- g. Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?*
- h. Would the project place structures in a 100-year flood hazard area that would impede or redirect flood flows?*
- i. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam?*
- j. Would the project result in inundation by seiche, tsunami, or mudflow?*

The entire project site is located in Zone X of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Map No. 06037C1970F). Zone X is defined as "Areas determined to be outside 500-year flood-plain." In addition, according to Plate 11 of the Seismic Safety Element of the Long Beach General Plan, Tsunami and Seiche Influence Areas, the project site is not in an area susceptible to tsunami or seiche. Furthermore, there are no dams or levees in the vicinity of the project site and no hillside surrounding the project site that would result in mudflow. In addition, the proposed project would involve roadway resurfacing, concrete improvements, and restriping and would not involve construction of structures. Therefore, the proposed project would have no impact related to exposing people or structures to the risk from flooding, seiche, tsunami, or mudflows.

NO IMPACT

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10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with an applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project physically divide an established community?

The proposed project involves resurfacing, concrete improvements, and restriping of an existing road. It would not result in the construction of any structure that could divide an established community. There would be no impact.

NO IMPACT

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 purpose of avoiding or mitigating an environmental effect?

The proposed project is consistent with and supports the visions and goals laid out in the Long Beach Downtown Plan and the General Plan. A discussion of the proposed project’s consistency with the Downtown Plan and Mobility Element visions and goals is provided below.

Downtown Plan

- Guiding Principal #3:** We encourage an infrastructure to accommodate a future that is less dependent on fossil fuels and more focused on walking, bicycling, and public transportation.
- Destination Downtown-Goal #6:** Uphold the title of The Most Bicycle Friendly City in America through the enhancement of existing bicycle amenities, such as the Bikestation; building on the success of Downtown’s dedicated 3rd Street and Broadway bicycle lanes; and integrating the Downtown’s bicycle-friendly roads and bikeways with the City’s greater bicycle path network.

3. **Sustainability Framework-Goal #7:** Continue promotion of alternative transportation as a means to, from, and within Downtown

A small portion of the westernmost section of the project site is in the Downtown Plan area. The proposed project would provide a safe bike route along East Broadway between Alamitos Avenue and Temple Avenue to other key local transit routes and destinations. It would provide an east-west bike route to access the Downtown area and would facilitate the use of alternative transportation to, from, and within Downtown. The project would involve minor relocations of bus stops; however, bus stops would remain within the corridor, providing access to transit.

Mobility Element

1. **Vision Statement:** This Mobility Element establishes the vision, goals, policies, and implementation measures required to improve and enhance the City's local and regional transportation networks, transforming Long Beach into a community that:
 - Offers flexible, convenient, affordable, and energy-efficient transportation options
 - Integrates land use planning with a multimodal mobility network, providing people with options to choose various forms of convenient transportation
2. **Goals:**
 - Balance the needs of all mobility users
 - Multimodal connectivity – better bicycle access: more bike routes and bike lanes will be added to provide a better bicycle access to transit stations and stops
 - Support active transportation and living
 - Protection natural resources

By providing a safe bike route along East Broadway from Alamitos Avenue to Temple Avenue, the proposed project would support the vision and goals of the City's Mobility Element. It would provide an energy-efficient transportation option to connect from the eastern end of the City to Downtown. Facilitating bicycle uses would reduce the dependence of residents on licensed drivers and encourage an active mode of transport and reduce environmental impacts related to automobile use.

The proposed project is consistent with land use plans and policies and would not require any modification to the existing land use designations specified in the General Plan. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?*

As discussed under Section 4, *Biological Resources*, the project site is not located in an area subject to a habitat conservation plan or natural community conservation plan. The proposed project would not conflict with such a plan and there would be no impact.

NO IMPACT

11 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The project site is not utilized for mineral resource recovery and the City’s General Plan does not identify the project site as an important mineral resource recovery site (Long Beach 1973). There would be no impact related to mineral resources.

NO IMPACT

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12 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels above those existing prior to implementation of the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise is defined as unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA).

Sound pressure level is measured on a logarithmic scale with the 0 dBA level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on

ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the ambient noise level to be judged as twice as loud. In general, a 3 dBA change in the ambient noise level is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while areas adjacent to arterial streets are typically in the 50-60+ dBA range. Normal conversational levels are usually in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as industrial machinery). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA (Federal Transit Administration [FTA] 2006). The manner in which homes in California are constructed generally provides a reduction of exterior-to-interior noise levels of about 25 dBA with closed windows (FTA 2006).

Some land uses are considered more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. Residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, parks and outdoor recreation areas are more sensitive to noise than are commercial and industrial land uses.

The City of Long Beach uses the State Noise/Land Use Compatibility Standards, which suggests a desirable exterior noise exposure at 65 dBA Community Noise Equivalent Level (CNEL) for sensitive land uses such as residences. Less sensitive commercial and industrial uses may be compatible with ambient noise levels up to 70 dBA CNEL. The City of Long Beach has adopted a Noise Ordinance (Long Beach Municipal Code Chapter 8.80) that sets exterior and interior noise standards. Exterior noise standards are designated for different city areas, referred to as districts. The project site lies in Noise District 1 (LBMC 8.80.160). Exterior noise limits for Districts 1 are given in Table 2. Interior noise standards apply based on land use and are given in Table 3.

Table 2 Exterior Noise Limits

Time Period	Noise Level (dBA)¹
10:00 PM to 7:00 AM	45
7:00 AM to 10:00 PM	50

Source: City of Long Beach Municipal Code Section 8.80.160

¹Cannot be exceeded more than 30 minutes cumulatively in an hour

Table 3 Interior Noise Limits

Receiving Land Use	Source Land Use	Time Period	Noise Level (dBA) ¹
All	Residential	10:00 PM to 7:00 AM	35
		7:00 AM to 10:00 PM	45
All	School	7:00 AM to 10:00 PM (while school is in session)	45
Hospital, designated quiet zones, and noise sensitive zones	--	Any time	40

Source: City of Long Beach Municipal Code Section 8.80.170

¹Cannot be exceeded more than 5 minutes cumulatively in an hour.

Vibration is a unique form of noise. It is unique because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The most common source of noise in the vicinity of the project site is traffic on East Broadway and surrounding roads. Motor vehicle noise is of concern because it is characterized by a high number of individual events that can create sustained noise levels. Ambient noise levels would be expected to be highest during the daytime and rush hour unless congestion slows speeds substantially. Noise impacts could affect sensitive receptors along or near East Broadway, which include residences, hotels, churches, and schools. For example, Mann Elementary School is located approximately 0.15 mile north of the project sight on Coronado Avenue and there are residences along East Broadway.

- a. *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?*
- c. *Would the project result in a substantial permanent increase in ambient noise levels above levels existing without the project?*

The proposed project would generate noise from roadway resurfacing, concrete improvements, and lane restriping activities. The project would not generate any new vehicle trips; therefore, it would not directly increase roadway noise in the project vicinity. However, the project would likely redirect vehicle trips from East Broadway to 3rd Street and Orange Avenue, which would reduce roadway noise on East Broadway, but increase roadway noise on 3rd Street and Orange Avenue. In addition, resurfacing of East Broadway would result in a smoother surface as compared to existing roadway conditions thus reducing roadway noise from cracks and potholes. Table 4 provides a summary of daily traffic changes on roadway segments, resulting from the project.

Table 4 Roadway Traffic Volumes

#	Roadway Segment	Existing ADT	Existing Plus Project ADT	Percent Traffic Change
1	East Broadway Between Alamitos Ave & Bonito Ave	14,390	10,976	-24%
2	East Broadway Between Orange Ave & Esperanza Ave	15,159	10,466	-31%
3	East Broadway Between Falcon Ave & Gaviota Ave	15,600	10,468	-33%
4	East Broadway Between Cherry Ave & Junipero Ave	14,696	11,098	-24%
5	East Broadway Between Molino Ave & Temple Ave	14,220	9,831	-31%
6	3 rd St Between Alamitos Ave & Bonito Ave	6,463	7,000	8%
7	3 rd St Between Cherry Ave & Junipero Ave	5,749	7,275	27%
8	3 rd St Between Molino Ave & Temple Ave	4,931	6,177	25%
9	Orange Ave Between 3 rd St & East Broadway	3,610	3,708	3%
10	Cherry Ave Between 3 rd St & East Broadway	6,446	5,960	-8%

ADT = Average Daily Trips

Source: Average daily trips from Iteris, Inc. 2017. .

Due to the logarithmic nature of noise, a 10% increase in the number of vehicles on a roadway would result in a noise increase of approximately 0.4 dBA, a 30% increase would result in a 1.1 dBA increase, and a doubling of traffic (i.e., 100% traffic increase) would increase noise levels by approximately 3 dBA. As discussed above, a 3 dBA change in the ambient noise level is noticeable, while 1-2 dBA changes generally are not perceived. Table 5 summarizes the noise increases associated with the daily traffic increases on 3rd Street and Orange Avenue resulting from the project. Increases in roadway noise would be less than 1.1 dBA on all segments, which is less than the threshold of perception (3 dBA). Therefore, the project would not result in a substantial permanent increase in ambient noise levels above levels existing without the project.

Table 5 Project Roadway Noise Increases

#	Roadway Segment	Percent Traffic Increase	Noise Increase (dBA)
6	3rd St Between Alamitos Ave & Bonito Ave	8%	<0.4
7	3rd St Between Cherry Ave & Junipero Ave	27%	<1.1
8	3rd St Between Molino Ave & Temple Ave	25%	<1.1
9	Orange Ave Between 3rd St & East Broadway	3%	<0.2

LESS THAN SIGNIFICANT IMPACT

- d. *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?*

Resurfacing, concrete improvements, and lane restriping would occur at project implementation and lane markings would be temporary, with activities likely completed in less than one month. Noise sources during resurfacing and restriping would include sounds from roadwork crew and their vehicles, such as engines idling, conversations, and car door slamming, and noise generated by any equipment used in resurfacing and lane restriping, such as backhoe, loader, paver, and air compressor.

Due to the temporary nature of noise associated with resurfacing and restriping, the proposed project would not result in a substantial permanent increase in ambient noise levels. The project would, however, result in a periodic increase in ambient noise levels. The project site lies in Noise District 1 (LBMC 8.80.160), which has an exterior noise limit of 50 dBA for a cumulative period of 30 minutes in any hour between 7 AM and 10 PM. In comparison, a paver generates a maximum noise level of about 85 dBA Lmax and an air compressor generates a maximum noise level of about 80 dBA Lmax at 50 feet from the source (Caltrans 2013). Nevertheless, resurfacing and restriping activities would be temporary and would adhere to City restrictions for construction activities, which restricts construction activities to between the hours of 7:00 AM and 7:00 PM during weekdays and 9:00 AM and 6:00 PM on Saturdays (LBMC Section 8.80.020). In addition, the proposed project and future maintenance of road surface and lane markings would be exempt from Noise Ordinance provisions according to LBMC Section 8.80.330; this exemption applies to construction maintenance and repair operations conducted by public agencies that are deemed necessary to serve the best interests of the public and protect public health, and includes road repair, such as the proposed project. Because noise impacts from the proposed project are exempt from the City's Noise Ordinance, and would be temporary and would adhere to construction timing restrictions, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. The vibration thresholds established by the FTA are 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 80 VdB for residences and buildings where people normally sleep, including hotels, and 83 VdB for institutional land uses with primary daytime use (such as churches and schools). In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB could damage fragile buildings and levels in excess of 95 VdB could damage extremely fragile historic buildings.

Roadway resurfacing, concrete improvements, and lane restriping activities would not utilize heavy construction equipment that generate high levels of vibration, but rather would use medium duty trucks, loaders, pavers, and air compressors typical of standard road maintenance activities (FTA 2006). The FTA's *Transit Noise and Vibration Impact Assessment* provides vibration levels for equipment typically associated with vibration, such as pile drivers or vibratory rollers (2006). It does not list medium duty trucks, loaders, pavers, and air compressors because they are not generators of substantial vibration. Moreover, project activities would be temporary and would be adhere to

the hours of 7:00 AM and 7:00 PM during weekdays and 9:00 AM and 6:00 PM on Saturdays (LBMC Section 8.80.020). Because the proposed project would not involve the use of heavy construction machinery that generates high volumes of vibration and activities would adhere to daytime hours when people are not sleeping, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*
- f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?*

The project site is located approximately three miles south of the Long Beach Municipal Airport and is located outside the Airport Influence Area (LA County 2003). The project site is not in the vicinity of a private airstrip. There would be no impact.

NO IMPACT

13 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *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)?*

The proposed project involves roadway resurfacing, concrete improvements, and lane restriping and does not involve the construction of any structures; therefore, it would not directly induce population growth by constructing new homes and businesses. Additionally, the proposed project would not construct any roads or infrastructure that might indirectly enable further population growth. There would be no impact to the City's population.

NO IMPACT

- b. *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*
- c. *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

The project site is an existing roadway and the proposed project would not displace any housing or people that would require the construction of replacement housing elsewhere. There would be no impact.

NO IMPACT

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14 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Fire protection at the project site is provided by the Long Beach Fire Department (LBFD). The proposed project would involve roadway resurfacing, concrete improvements, and lane restriping and would not increase population and thus, demand on LBFD services. The proposed project is anticipated to reduce collisions between vehicles, bicycles and pedestrians, thus reducing the need for public safety personnel to respond to such incidents. The proposed project would result in decreased level of service at the intersection of Alamitos and 3rd Street, which could incrementally affect response time. However, as discussed in Section 16, Transportation/Traffic, with implementation of Mitigation Measure T-1 the project’s impacts to intersection level of service would be less than significant. In addition, such a change would not necessitate new or expanded fire facilities and lane widths would remain sufficient for safety and emergency vehicles to travel. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

Police protection is provided by the Long Beach Police Department (LBPD). The proposed project would involve resurfacing and lane restriping and would not increase population and thus, demand on LBPD services. The project is anticipated to reduce collisions between vehicles, bicycles and pedestrians, thus reducing the need for public safety personnel to respond to such incidents. The proposed project would result in decreased level of service at the intersection of Alamitos and 3rd Street, which could incrementally affect response time. However, as discussed in Section 16, Transportation/Traffic, with implementation of Mitigation Measure T-1 the project's impacts to intersection level of service would be less than significant. However, such a change would not necessitate new or expanded police facilities and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The proposed project involves roadway resurfacing, concrete improvements, and lane restriping and would not increase area population. Therefore, the proposed project would not increase student enrollment in area schools and would not require new or altered school facilities. There would be no impact.

NO IMPACT

- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The proposed project involves roadway resurfacing, concrete improvements, and lane restriping and would not increase area population. Therefore, the proposed project would not increase park users or result in adverse physical impacts to recreational facilities. There would be no impact.

NO IMPACT

- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?*

The proposed project involves roadway resurfacing, concrete improvements, and lane restriping and would not increase area population. Therefore, it would not increase the number of users at libraries or other government facilities. There would be no impact.

NO IMPACT

15 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project involves roadway resurfacing, concrete improvements, and lane restriping and would not increase area population. Therefore, it would not increase the number of park users or increase demand for park facilities. The project would enhance opportunities for recreational bicycling on East Broadway from Alamos Avenue to Temple Avenue by providing a protected bike lane in each direction. There would be no impact.

NO IMPACT

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16 Transportation/Traffic

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion in this section is based on the traffic analysis prepared by Iteris, Inc. in November 2017 (see Appendix B for East Broadway Feasibility Study). This study analyzes four alternatives to implement complete street elements along East Broadway from Alamos Avenue to Temple

Avenue. The project is Alternative 3 in the study and the following discussion summarizes impacts related to the project (Alternative 3) only. The study evaluates traffic operations at nineteen intersections and ten roadway segments along East Broadway where complete streets improvements are proposed (Alamitos Avenue to Temple Avenue) and 3rd Street for each of the following scenarios:

- Existing Conditions
- Existing Plus Project Conditions
- Opening Year 2020 without Project Conditions
- Opening Year 2020 with Project Conditions

The Opening Year 2020 traffic condition is based on the traffic growth forecasts prepared through the use of the 2016 SCAG Regional Transportation model.

- a. *Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into 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?*
- b. *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?*

Traffic impacts in Long Beach are assessed using a level of service (LOS) approach, which ranks traffic conditions at a specific location on a scale from A to F. Level A indicates an excellent level of traffic operation, while Level F indicates forced flow (i.e. traffic jam) conditions. The Long Beach General Plan Mobility Element identifies the minimum acceptable LOS for intersections along minor avenues (like East Broadway) and neighborhood connectors (like 3rd Street) as LOS C. The project would have a significant impact if it would cause a study intersection to deteriorate from LOS C to LOS D, E or F.

The Alamitos Avenue Complete Streets Improvements Project Final Environmental Impact Report (SCH#2017011072; certified in November 2017) analyzed a geographic study area that included the project site (City of Long Beach 2017b). That EIR identified a significant and unavoidable level of service impact at the intersection of Alamitos Avenue/East Broadway. The proposed project would contribute to the impact previously identified at this intersection, but would not further exacerbate the significant and unavoidable impact. Therefore, the traffic analysis does not evaluate impacts at the intersection of Alamitos Avenue/East Broadway.

A level of service analysis was conducted to evaluate existing plus project intersection operations during the AM and PM peak hours at the 19 study intersections. Existing conditions are based on traffic counts completed in December 2016. Table 6 summarizes the existing plus project level of service at the study intersections. As shown therein, all intersections, except for the Alamitos Avenue/3rd Street intersection, would operate at LOS C or better during the AM and PM peak hours. The intersection of Alamitos Avenue/3rd Street is forecast to operate at a deficient LOS with implementation of the project. This impact is potentially significant and mitigation would be required. Table 7 summarizes the opening year 2020 plus project level of service at the study intersections. . As shown therein, all intersections, except for the Alamitos Avenue/3rd Street intersection, would operate at LOS C or better during the AM and PM peak hours under the opening year 2020 scenario. The intersection of Alamitos Avenue/3rd Street is forecast to operate at a deficient LOS with implementation of the project under the opening year 2020 scenario. This impact is potentially significant and mitigation would be required.

Table 6 Existing Plus Project Intersection LOS

Intersections	Existing Conditions				Existing Plus Project Conditions				Change in AM Delay	Change in PM Delay	Significant Impact?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS			
1. Bonito Ave/East Broadway	13.4	B	15.9	C	12.3	B	19.1	C	-1.1	3.2	No
2. Cerritos Ave/East Broadway	16.6	C	25.2	D	14.5	B	18.0	C	-2.1	-7.2	No
3. Orange Ave/East Broadway	5.1	A	12.6	B	6.9	A	13.5	B	1.8	0.9	No
4. Esperanza Ave/East Broadway	12.6	B	16.5	C	13.2	B	12.8	B	0.6	-3.7	No
5. Falcon Ave/East Broadway	5.3	A	5.5	A	6.9	A	7.7	A	1.6	2.2	No
6. Gaviota Ave/East Broadway	12.2	B	16.5	C	12.1	B	15.5	C	-0.1	-1.0	No
7. Hermosa Ave/ East Broadway	12.7	B	17.1	C	13.2	B	15.9	C	0.5	-1.2	No
8. Cherry Ave/East Broadway	7.8	A	8.3	A	9.3	A	11.4	B	1.5	3.1	No
9. Junipero Ave/East Broadway	11.8	B	8.1	A	11.8	B	10.4	B	0.0	2.3	No
10. Kennebec Ave/East Broadway	10.9	B	12.7	B	10.9	B	13.4	B	0.0	0.7	No
11. Lindero Ave/East Broadway	11.2	B	11.4	B	11.1	B	12.2	B	-0.1	0.8	No
12. Wisconsin Ave/East Broadway	10.4	B	11.8	B	10.5	B	12.0	B	0.1	0.2	No
13. Molino Ave/East Broadway	16.1	C	16.1	C	13.4	B	12.9	B	-2.7	-3.2	No
14. Temple Ave/East Broadway	10.6	B	12.8	B	10.5	B	7.7	A	-0.1	-5.1	No
15. Alamitos Ave/3rd St	40.5	D	11.4	B	61.3	E	12.2	B	20.8	0.8	Yes
16. Orange Ave/3rd St	9.1	A	9.9	A	10.4	B	10.1	B	1.3	0.2	No
17. Cherry Ave/3rd St	12.2	B	10.7	B	12.3	B	11.1	B	0.1	0.4	No
18. Junipero Ave/3rd St	10.1	B	11.5	B	11.9	B	14.1	B	1.8	2.6	No
19. Temple Ave/3rd St	9.7	A	10.8	B	11.0	B	12.9	B	1.3	2.1	No

LOS = Level of Service; Delay = Average Vehicle Delay (seconds)

Note: Highway Capacity Manual (HCM) 2000 Methodology

Source: Iteris, Inc. 207

Table 7 Opening Year 2020 Plus Project Intersection LOS

Intersections	Opening Year 2020 Conditions				Opening Year 2020 Plus Project Conditions				Change in AM Delay	Change in PM Delay	Significant Impact?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS			
1. Bonito Ave/East Broadway	13.7	B	17.2	C	12.5	B	20.7	C	-1.2	3.5	No
2. Cerritos Ave/East Broadway	17.0	C	28.6	D	14.9	B	18.9	C	-2.1	-9.7	No
3. Orange Ave/East Broadway	5.2	A	13.2	B	7.0	A	14.3	B	1.8	1.1	No
4. Esperanza Ave/East Broadway	12.8	B	16.8	C	13.5	B	13.0	B	0.7	-3.8	No
5. Falcon Ave/East Broadway	5.4	A	5.8	A	7.1	A	8.2	A	1.7	2.4	No
6. Gaviota Ave/East Broadway	12.3	B	17.3	C	12.3	B	16.3	C	0.0	-1.0	No
7. Hermosa Ave/ East Broadway	13.0	B	17.3	C	13.7	B	16.3	C	0.7	-1.0	No
8. Cherry Ave/East Broadway	7.9	A	8.7	A	9.3	A	11.7	B	1.4	3.0	No
9. Junipero Ave/East Broadway	12.0	B	8.5	A	11.8	B	10.7	B	-0.2	2.2	No
10. Kennebec Ave/East Broadway	10.9	B	13.1	B	11.1	B	13.8	B	0.2	0.7	No
11. Lindero Ave/East Broadway	11.4	B	11.5	B	11.3	B	12.5	B	-0.1	1.0	No
12. Wisconsin Ave/East Broadway	10.5	B	11.9	B	10.6	B	12.2	B	0.1	0.3	No
13. Molino Ave/East Broadway	16.8	C	16.8	C	13.7	B	13.3	B	-3.1	-3.5	No
14. Temple Ave/East Broadway	11.0	B	14.4	B	10.6	B	7.8	A	-0.4	-6.6	No
15. Alamitos Ave/3rd St	47.6	D	11.8	B	72.6	E	12.7	B	25.0	0.9	Yes
16. Orange Ave/3rd St	9.4	A	10.0	A	11.1	B	10.0	A	1.7	0.0	No
17. Cherry Ave/3rd St	12.3	B	10.9	B	12.5	B	11.5	B	0.2	0.6	No
18. Junipero Ave/3rd St	10.4	B	12.0	B	12.5	B	15.0	C	2.1	3.0	No
19. Temple Ave/3rd St	9.9	A	11.1	B	11.4	B	13.6	B	1.5	2.5	No

LOS = Level of Service; Delay = Average Vehicle Delay (seconds)

Note: Highway Capacity Manual (HCM) 2000 Methodology

Source: Iteris, Inc. 207

Table 8 and Table 9 summarize the existing plus project and opening year 2020 with project volume-to-capacity (V/C) ratios at study roadway segments. As shown therein, all roadway segments are forecast to continue to operate below the daily theoretical capacity (V/C of 1.00) under existing (2016) and opening year 2020 conditions with implementation of the project, despite the reduction in vehicle capacity along Broadway. Impacts to roadway segments would be less than significant.

Table 8 Existing Plus Project Roadway Segment LOS

	Roadway	Location	Existing Plus Project ADT Volumes	Capacity	V/C
1	East Broadway	Between Alamos Ave & Bonito Ave	10,976	13,000	0.84
2	East Broadway	Between Orange Ave & Esperanza Ave	10,466	13,000	0.81
3	East Broadway	Between Falcon Ave & Gaviota Ave	10,468	13,000	0.81
4	East Broadway	Between Cherry Ave & Junipero Ave	11,098	13,000	0.85
5	East Broadway	Between Molino Ave & Temple Ave	9,831	13,000	0.76
6	3rd Street	Between Alamos Ave & Bonito Ave	7,000	13,000	0.54
7	3rd Street	Between Cheery Ave & Junipero Ave	7,275	13,000	0.56
8	3rd Street	Between Molino Ave & Temple Ave	6,177	13,000	0.48
9	Orange Avenue	Between 3rd St & East Broadway	3,708	13,000	0.29
10	Cherry Avenue	Between 3rd St & East Broadway	5,960	13,000	0.46

V/C = Volume-to-Capacity ratio; ADT = Average daily trips

Source: Iteris, Inc. 207

Table 9 Opening Year 2020 Plus Project Roadway Segment LOS

	Roadway	Location	Existing Plus Project ADT Volumes	Capacity	V/C
1	East Broadway	Between Alamos Ave & Bonito Ave	11,396	13,000	0.88
2	East Broadway	Between Orange Ave & Esperanza Ave	10,866	13,000	0.84
3	East Broadway	Between Falcon Ave & Gaviota Ave	10,868	13,000	0.84
4	East Broadway	Between Cherry Ave & Junipero Ave	11,523	13,000	0.89
5	East Broadway	Between Molino Ave & Temple Ave	10,207	13,000	0.79
6	3rd Street	Between Alamos Ave & Bonito Ave	6,737	13,000	0.52
7	3rd Street	Between Cheery Ave & Junipero Ave	7,506	13,000	0.58
8	3rd Street	Between Molino Ave & Temple Ave	7,139	13,000	0.55
9	Orange Avenue	Between 3rd St & East Broadway	3,849	13,000	0.30
10	Cherry Avenue	Between 3rd St & East Broadway	7,300	13,000	0.56

V/C = Volume-to-Capacity ratio; ADT = Average daily trips

Source: Iteris, Inc. 207

Mitigation Measure

The following mitigation measure would be required to reduce project level and cumulative impacts to the Alamos Avenue/3rd Street intersection to a less than significant level.

T-1 Signal Timing. The cycle length at the intersection of Alamos Avenue/3rd Street shall be increased from 75 seconds to 80 seconds.

As shown in Table 10 and Table 11, with implementation of Mitigation Measure T-1, the project would not degrade LOS at the Alamos Avenue/3rd Street intersection to below existing or opening

year 2020 levels. While operation during the AM peak hour would remain at LOS D, implementation of Mitigation Measure T-1 would decrease average vehicle delay.

Implementation of the proposed project would allow for a more balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, including motorist, pedestrians, and bicyclists. As noted in the City of Long Beach Mobility Element, some cities are adopting more flexible policies to solving traffic problems. For example, some communities have started accepting a lower (worse) automobile LOS standard in their downtowns and in urban neighborhoods or along transit corridors. By doing so, these cities are increasing capacity for other modes like transit and bikes.

Lastly, as indicated in the City's Bicycle Master Plan, improving the safety and connectivity of the City's bicycle network reduces vehicle miles traveled (VMT) by replacing vehicular trips with bicycle trips. Reducing VMT has a measurable impact on reducing human generated greenhouse gases (GHGs) in the atmosphere that contribute to climate change. While the City's current significant impact criteria evaluates local and regional transportation systems based on adopted LOS standards, the State recently passed Senate Bill (SB) 743, which adds Chapter 2.7, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, to Division 13 (Section 21099) of the Public Resources Code. A key provision of SB 743 includes replacing the measurement of automobile delay (LOS standards) with VMT as a metric that can be used for measuring environmental impacts. Under SB 743, the focus of the environmental impacts of transportation shift from driver delay to reduction of greenhouse gas (GHG) emissions, creation of multimodal networks, and promotion of a mix of land uses, and LOS standards become local policy thresholds as adopted among individual agencies. Although the project is not a transit-oriented infill project, it is consistent with the goals of SB 743 to reduce VMT, as it improves mobility for bicyclists and pedestrians.

Although the traffic analysis does not identify significant impacts at the Cherry Avenue/East Broadway and Junipero Avenue/East Broadway intersections, the condition below is recommended due to the eastbound and westbound peak hour left-turn volumes at these locations (though not a "mitigation measure" that is required under CEQA).

Recommended Condition

T-2 Left-Turn Lane. A dedicated left-turn lane should be included at the intersections of Cherry Avenue/East Broadway and Junipero Avenue/East Broadway. See conceptual plans in the East Broadway Feasibility Study (Appendix B).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Table 10 Mitigated Existing Plus Project Intersection LOS

Intersections	Opening Year 2020 Conditions				Mitigated Existing Plus Project Conditions				Change in AM Delay	Change in PM Delay	Significant Impact?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS			
15. Alamitos Ave/3rd St	40.5	D	11.4	B	40.1	D	12.3	B	-0.4	0.9	No

LOS = Level of Service; Delay = Average Vehicle Delay (seconds)

Note: Highway Capacity Manual (HCM) 2000 Methodology

Source: Iteris, Inc. 207

Table 11 Mitigated Opening Year 2020 Plus Project Intersection LOS

Intersections	Opening Year 2020 Conditions				Mitigated Opening Year 2020 Plus Project Conditions				Change in AM Delay	Change in PM Delay	Significant Impact?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS			
15. Alamitos Ave/3rd St	47.6	D	11.8	B	46.9	D	12.7	B	-0.7	0.9	No

LOS = Level of Service; Delay = Average Vehicle Delay (seconds)

Note: Highway Capacity Manual (HCM) 2000 Methodology

Source: Iteris, Inc. 207

- c. *Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

The project site is not in the vicinity of a private air strip and is located approximately three miles south of the Long Beach Municipal Airport outside of the Airport Influence Area (L.A. county 2003). There would be no impact.

NO IMPACT

- d. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The project would upgrade the East Broadway corridor between Alamitos Avenue and Temple Avenue to a Class IV directional separated bikeway, which provides a designated lane for bike use. According to the City's Bicycle Master Plan Update (2017), a before and after study in Montreal of physically separated bikeways indicated that this type of facility can reduce collisions between bicyclists and vehicles by 74 percent. Other studies have found a range in crash reductions from eight percent to 94 percent when physically separated bikeways are implemented (City of Long Beach 2017). Additionally, the project would benefit pedestrian users by increasing the setback between pedestrians and vehicles, reducing potential conflicts between pedestrians and vehicles and improving safety. By providing a designated lane, the project would reduce conflicts between bicyclists, pedestrians, and vehicles, reducing hazards. There would be no impact.

NO IMPACT

- e. *Would the project result in inadequate emergency access?*

The proposed project would not alter through traffic operations for emergency vehicles or eliminate existing roads or cause more circuitous access conditions because construction of the proposed project would maintain one lane in each direction for traffic flow on East Broadway. Therefore, impacts to emergency access would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?*

The proposed project does not conflict with policies, plans, and programs regarding public transit, and would serve to meet goals set out by the City and regional policies, plans, and programs related to alternative transportation and encouraging bicycle use. As previously discussed in Section 5, *Greenhouse Gas Emissions*, expanding bicycle transit is a key component of the City's Sustainable City Action Plan, Mobility Element, Downtown Plan, and SCAG's 2016 RTP/SCS. Furthermore, the proposed project would improve bicycle safety in the project site by providing a parking protected lane for bicycle users on each side of East Broadway. The proposed project would also facilitate safe access by bicycle to local bus routes and the Metro Blue Line. The project would involve minor relocations of bus stops; however, bus stops would remain within the corridor, providing access to transit. Consequently, there would be no impact.

NO IMPACT

17 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (Public Resources Code [PRC] Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a) (1) (A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?*

The project site is an existing urban road that has been previously disturbed. Furthermore, the proposed project would involve roadway resurfacing, concrete improvements, and would not involve any demolition, excavation, or similar construction activities. Although the project may include removal of existing asphalt in order to rehabilitate the roadway, the project would not disturb native soils. It would not affect a tribal cultural resource listed or eligible for listing in the state or local register of historical resources, or determined by the lead agency to be significant to a California Native American tribe. There would be no impact.

NO IMPACT

18 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*
- 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?*
- c. *Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects??*
- d. *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*
- e. *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?*

The proposed project involves roadway resurfacing, concrete improvements, and restriping of an existing urban road. The proposed project would not generate any wastewater, utilize water supplies, or result in additional storm water runoff. Therefore, the proposed project would not impact treatment capacity to capacity at existing wastewater facilities, water supplies, or require any modification of existing storm water drainage facilities. There would be no impact.

NO IMPACT

- f. *Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*
- g. *Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

The proposed project would not involve the construction or demolition of any structures that would generate large amounts of solid waste or the continuous generation of solid waste from project operations. Roadway resurfacing activities may remove existing asphalt, which would be recycled for future road resurfacing activities. Restriping activities may generate minimal amounts of solid waste that is typical of road maintenance activities and would present a nominal impact on landfills serving Long Beach. Disposal of any waste generated by project construction or ongoing maintenance activities would have to comply with federal, state, and local statutes and regulations related to solid waste. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

19 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed under Section 4, *Biological Resources*, with implementation of Mitigation Measure BIO-1, impacts to biological resources would be less than significant. As discussed under Section 5, *Cultural Resources*, no impact to cultural resources would occur as part of the proposed project.

NO IMPACT

b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As discussed in Section 16, Transportation/Traffic, the project would not result in a cumulatively considerable impact on any roadways or intersections, except for the intersection of Alamitos Avenue/3rd Street, under the opening year 2020 cumulative condition. At the intersection of Alamitos Avenue/3rd Street, the project would degrade intersection operations from LOS D under the opening year 2020 cumulative condition to LOS E. However, with implementation of Mitigation Measure T-1, the project would not degrade LOS at the Alamitos Avenue/3rd Street intersection to below opening year 2020 cumulative conditions. Therefore, with implementation of Mitigation Measure T-1, the project would not result in a cumulatively considerable traffic impact.

As described in the discussion of environmental checklist Sections I through XVIII, the proposed project would have no impact or a less than significant impact with respect to all other environmental issues. Agricultural, cultural resources, hydrology, mineral resources, population and housing, recreation, and tribal cultural resources issue areas were determined to have no impact in comparison to existing conditions and, therefore, would not contribute to cumulative impacts. Impacts related to aesthetics, biological resources, land use and planning, noise, geology and soils, and hazards and hazardous materials would be specific to the project site; therefore, impacts to these resources areas would not contribute to any significant cumulative impacts related to these issues. In addition, the proposed project would not generate population growth; therefore, it would not contribute to any cumulative increases in demand for public services, recreation, or utilities such as water, wastewater, and solid waste service. Lastly, greenhouse gas impacts and regional air quality impacts are cumulative by nature; therefore, because the project would have short-term, less than significant impacts related to air quality and greenhouse gas emissions, impacts would not be cumulatively considerable.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the preceding sections, the project would not result, either directly or indirectly, in adverse hazards related to air quality, hazardous materials or noise. Compliance with applicable rules and regulations would reduce potential impacts on human beings to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

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