December
2018

Laserfiche Office Project

Initial Study/Mitigated Negative Declaration

Prepared for the City of Long Beach

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Appendix F – Traffic Impact Analysis

Appendix G – Assembly Bill 52 Consultation Correspondence

Acronyms

AB	Assembly Bill
AQMP	Air Quality Management Plan
BMP	Best Management Practices
CA	California
CalEEMod	California Emissions Estimator Model®
CCN	District to Community 4-4-N Commercial
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	Carbon dioxide equivalent
dBA	A-weighted decibels
EIR	Environmental Impact Report
FHWA	Federal Highways Administration
GHG	greenhouse gas
gpd	gallons per day
HAZWOPER	Hazardous Waste Operations and Emergency Response
HR	High Rise
LBMC	Long Beach Municipal Code
LID	Low Impact Development
LLC	Limited Liability Corporation
LOS	level of service
LST	localized significance threshold
LUD	Land Use Designation
mgd	millions of gallons per day
MT	metric tons
NB	northbound
NOx	Oxides of Nitrogen
PM	particulate matter
PPV	Peak Particle Velocity
R-1-N	Single Family Residential District
R-4-N	Medium-density Multiple Residential
SCAQMD	South Coast Air Quality Management District
SB	southbound
SF	square foot
SO_x	oxides of sulfur
VdB	vibration decibels

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Environmental Checklist Form

1. **Project Title:** Laserfiche Office Project
2. **Lead Agency and address:** City of Long Beach Planning Bureau, 333 West Ocean Boulevard – 5th Floor, Long Beach, CA,90802
3. **Contact person and phone number:** Alexis Oropeza, Senior Planner (562) 570-6413
4. **Project Address:** 3443 Long Beach Boulevard and 210 East 35th Street. Previously addressed as 3435-3459 Long Beach Boulevard and 3432-3464 Locust Avenue
5. **Project Assessor Parcel Numbers:** 7141-004-019, 020, 027, 028, 029, 030, 031, 033, and 034
6. **Project sponsor's name and address:** 888-5 Partners, LLC, 3545 Long Beach Boulevard, Long Beach, CA 90807
7. **General Plan designation:** Land Use Designation (LUD) 1 (Single Family District) and LUD 8 (Major Commercial Corridor)
8. **Zoning:** Single-Family Residential (R-1-N) District and Community Commercial Automobile-Oriented District within the High-Rise Overlay (HR-4) District
9. **Description of project:** The project includes consolidation of 10 existing lots to a single lot for development of a new 102,848-square-foot office building and a separate 3-story parking garage with one rooftop level of parking.
10. **Surrounding land uses and setting: Briefly describe the project's surroundings:** Surrounding land uses include a multi-tenant office commercial building and parking lot with an inactive oil well to the north; a restaurant, several active oil wells, and above-ground storage tanks to the east; single-family residences, an active oil well, and an Arco Gas Station to the south; and single-family residences to the west.
11. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):** The City of Long Beach is the California Environmental Quality Act (CEQA) lead agency. Approvals by other public agencies, including the California Department of Conservation Division of Oil, Gas, and Geothermal Resources, may also be required to implement the project.
12. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?** The City initiated Assembly Bill (AB) 52 consultation by mailing letters via certified mail on July 17, 2018, to five Native American tribes that have requested project information under AB 52. To date, one request for consultation has been received from the Gabrieleno Band of Mission Indians.

Project Summary

A. Project Location

The project site is approximately 2.1 acres and consists of ten parcels most of which are now vacant, dirt-covered lots. The project site is located between Locust Avenue and Long Beach Boulevard, south of East 35th Street, and north of Interstate (I-) 405 in the central portion of the City of Long Beach (Figure 1). A description of the project site and current uses is provided below:

- The five parcels along Locust Avenue comprise the western portion of the project site. These five parcels are currently vacant.
- The five parcels along Long Beach Boulevard comprise the eastern portion of the project site. These five parcels are currently vacant.

B. Project Description

The Laserfiche Office Project (project) consists of a new four-story office building and a separate three-story parking garage. Table 1 summarizes the key elements associated with the office building and parking garage, and Figure 2 depicts the project site plan. The project includes the following primary components:

- Office building – The project includes a new 102,848-square-foot office building that is up to 74 feet in height (maximum four stories) above ground level. The building includes offset terraces and mezzanine design features.
- Parking garage – The project includes a separate three-story parking garage with one rooftop level of parking with a total of 343 parking spaces. Access to the parking garage would occur from East 35th Street west of the existing alley entrance in the center of the project site.
- Offsite improvements – The project includes modification of the East 35th Street intersection from a two-way stop-controlled intersection to a signalized intersection, improving level of service (LOS) conditions.
- Entitlements and project approvals – The project requires the following entitlements and discretionary actions:
    - Zone Change of five existing lots (assessor parcel numbers: 7141-004-033, 034, 019, and 020) fronting on Long Beach Boulevard from a Community Commercial Automobile-Oriented District to Community R-4-N Commercial (CCN) District
    - Zone Change of five existing lots (assessor parcel numbers: 7141-004-027, 028, 029, 030, and 031) fronting on Locust Street from Single-Family Residential District (R-1-N) to CCN District in conjunction with a General Plan Amendment from LUD 1 to LUD 8
    - Zoning Code Amendment to permit the averaging of setbacks for the proposed office building within the High-Rise Overlay (HR-4) District.
    - Site plan review of a four-story office building up to 74 feet in height, containing 102,848 square feet of floor area, and a three-story parking garage with one rooftop level of parking with a total of 343 parking spaces.
    - Tentative Tract Map to create a single lot for development, including vacation of a portion of the alley that runs north-to-south (between Long Beach Boulevard and Locust Street)
        - The alley easement will be maintained.
    - General Plan Conformity Finding for the vacation of the northern 250 feet of the unnamed alley, which runs north-to-south between East 35th Street and Wardlow Road

Figure 3 through Figure 5 depict the visual simulations prepared for the project site. Figure 6 through Figure 9 depict representative site photos taken in December 2018.

Table 1. Laserfiche Office Project – Building and Site Characteristics

Project Element	Office Building			Parking Garage		
Project Site Summary						
Project Address	3443 Long Beach Boulevard			210 E. 35th Street		
Lot Area	84,761 SF (for both office and parking)			84,761 SF (for both office and parking)		
Assessor Parcel Numbers	7141-004-019, 020, 033, 034			7141-004-027, 028, 029, 030, 031		
Zone	Existing: CCA with HR-4 Overlay / Proposed: CCN with HR-4			Existing: R-1-N / Proposed: CCN		
General Plan	Existing: LUD 8 (Major Commercial Corridor) / Proposed: LUD 8			Existing: LUD 1 (Single Family District) / Proposed: LUD 8		
Project Summary						
Proposed Stories	4 Stories			3 Stories with Rooftop Parking		
Proposed Building Height	74'-0" to top of parapet			38'-0" to top of parapet		
Setbacks	**Location**	**Required (per HR overlay)**	**Proposed***	**Location**	**Required (per CCN)**	**Proposed***
	Long Beach Avenue (front)	20'-0"	18-6" minimum (Level 1) / 21'-3" average setback**	Locust Avenue (front)	15'-0"	15'-0" minimum
	E. 35th Street	20'-0"	30'-0" (Level 1) / 20'-2" average setback**	E. 35th Street (side)	10'-0"	10'-0" minimum
	Adjacent property	Underlying (5'-0" per CCN)	37'-0" (to stair) / 25'-0" (to building face)	Adjacent property (residential rear yard)	20'-0"	20'-0" minimum
	Locust Avenue	Not Applicable	See parking	Adjacent property (residential side yard)	10'-0"	10'-0" minimum
				Long Beach Boulevard	Not Applicable	See Office

Table 1. Laserfiche Office Project – Building and Site Characteristics

Project Element	Office Building			Parking Garage		
Proposed Building Area	**Level**	**Building Area (SF)**	**Notes**	**Level**	**Building Area (SF)**	**Notes**
	1	24,072	6,300 SF Outdoor Patio	1	33,108	None
	2	25,609		2	33,108	
	3	27,261	410 SF Balcony	3	33,108	None
	4	25,906	1,500 SF Balcony	Roof	Not Applicable	33,108 SF Rooftop Parking
	Total	102,848		Total	99,324	None
Lot Coverage (Allowed / Proposed)	35.4% 30,018 SF / 84,761 SF)			39.1% (33,108 SF / 84,761 SF)		
Parking Summary						
Proposed Vehicular Spaces	See Parking Garage			343		
Proposed Bicycle Spaces	See Parking Garage			54		

Note:
** See plans and elevations for addition information (Appendix A)*
*** Zoning code amendment to high rise (HR) overlay district allowing the averaging of setbacks*
CCA: Community Commercial Automobile-Oriented

C. Figures

Figure 1. Regional Vicinity and Project Location

Note: Aerial image date December 16, 2017, site conditions depicted do not reflect current vacant status of lot

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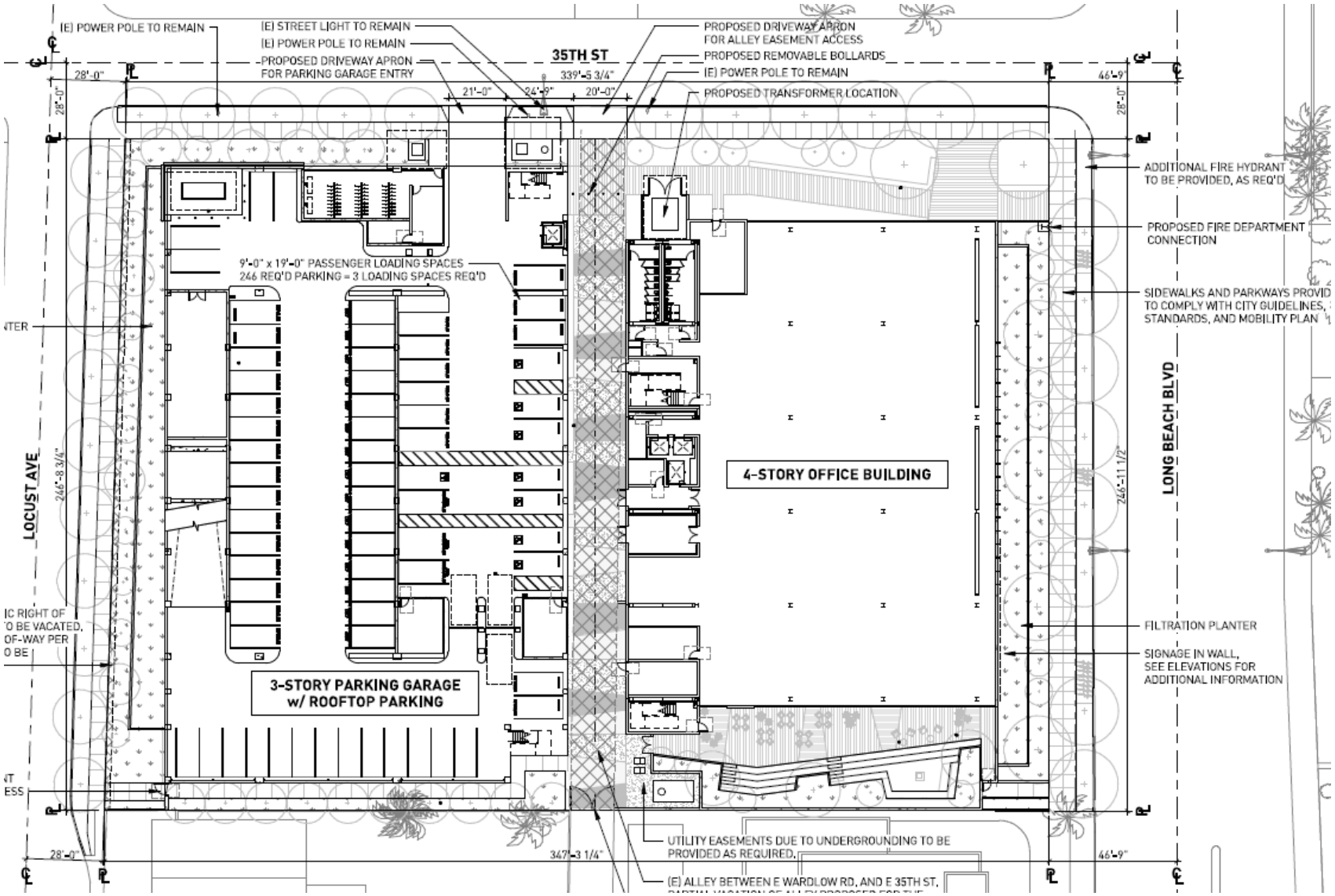
Figure 2. Project Site Plan



Source: 888-5 Partners, LLC 2018

Figure 3. Visual Simulation from Interstate 405

Source: 888-5 Partners, LLC 2018

Figure 4. Visual Simulation from Long Beach Boulevard (Northbound)

Source: 888-5 Partners, LLC 2018

Figure 5. Visual Simulation from Locust Avenue/East 35th Street (Sidewalk)

Source: 888-5 Partners, LLC 2018

Figure 6. Site Photo – East 35th Street and Locust Avenue – Northwest Corner Facing South

Figure 7. Site Photo – East 35th Street Facing South – Existing Alley

Figure 8. Site Photo – Southeast parcels from alley – Former location of Rocks Cocktail Lounge

Figure 9. Site Photos – Northeast Parcels – View From Alley Facing East

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, which involves at least one impact that is a "Potentially Significant Impact" or “Less Than Significant With Mitigation Incorporated” as indicated by the checklist below and on the following page.

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

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the project would not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project may have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
- ☐ I find that the proposed project may have a "Potentially Significant Impact" or "Less Than Significant with Mitigation Incorporated" 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 EIR is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, that nothing further is required.

12/12/2018

Date:

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

I. Aesthetics

Environmental Issue Area:	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 or scenic highway?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☒

Impact Analysis:

The project site is vacant with dirt-covered lots. Multi-tenant office commercial buildings and a parking lot with an active oil well are located to the north of the site, a restaurant, several active oil wells, and above-ground storage tanks to the east, single-family residences, an active oil well, and an Arco Gas Station to the south, and single-family residences to the west.

a) **No Impact** – The City of Long Beach (City) General Plan Scenic Routes Element (1975) identifies areas within the City that are considered scenic assets, of which there are none identified within the project area. According to the California Scenic Highway Mapping System for the Orange County area, there are no designated scenic highways in the project area (Caltrans 2018a).

b) **No Impact** – The project site is not within a state scenic highway (Caltrans 2018a). Additionally, the project would not damage any scenic resources, including trees, rock outcroppings or historic buildings as these resources are not present on the project site.

c) **Less Than Significant Impact** –The project includes a new four-story office building (with an additional below grade level) and a separate three-story parking garage (with an additional below grade level). The building character and scale is compatible with other existing office and commercial related uses located along Long Beach Boulevard, which includes three- and four-story structures in proximity to the project site. Also, the proposed landscape plan includes shrubs and trees that would provide screening to complement and enhance the visual quality of the parking structure as viewed from surrounding areas. Therefore, the project would not degrade the visual quality or substantially change the visual character of the project area.

d) **Less Than Significant Impact** – The site and its surroundings are located in an urbanized environment, with nighttime lighting. The project involves the construction of a new four-story office building and a separate three-story parking garage. Light and glare from the proposed building would be similar to the light and glare currently produced from the existing residential, commercial, and industrial/ manufacturing uses. The project would be required to comply with the lighting requirements for parking garages of the Long Beach Municipal Code (LBMC), including Section 21.41.259, which requires that all light introduced by the project to be directed and shielded. Therefore, the project would not create a new source of light or glare that would adversely affect day or nighttime view in the area.

II. Agricultural Resources

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) 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) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Impact Analysis:

The project site is located in an urban setting and characterized as an “Urban and Built-Up Land” by the California Department of Conservation, Farmland Mapping and Monitoring Program (2016). Urban and Built-Up Land is characterized by structures with a building density of at least 1 unit to 1.5 acres, such as commercial structures.

a) **No Impact** –The project site is not utilized for agriculture production. No farmland is present that could be converted.

b) **No Impact** – The project site is not zoned for agriculture and is not under a Williamson Act (California Department of Conservation 2017) contract.

c) **No impact** – The project site is zoned for commercial use and therefore not zoned for forest use or timberland production (City of Long Beach 2018).

d) **No Impact** – See II. Agricultural Resources, Environmental Issue Area: b) and c).

e) **No Impact** – See II. Agricultural Resources, Environmental Issue Area: b) and c).

III. Air Quality

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Impact Analysis:

The following analysis is based on the *Laserfiche Air Quality/Greenhouse Gas Technical Memorandum* (HDR 2018) (Appendix B).

The project is located in the City of Long Beach, an area within the South Coast Air Basin, which includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality regulation in the South Coast Air Basin is administered by South Coast Air Quality Management District (SCAQMD).

The *CEQA Air Quality Handbook* (SCAQMD 1993) was used to determine whether potential air quality impacts of the project are significant. Table 2 lists the daily thresholds for construction and operational emissions that have been established by the SCAQMD.

Table 2. South Coast Air Quality Management District Air Quality Thresholds of Significance

Pollutant	Construction (pounds/day)	Operation (pounds/day)
Oxides of Nitrogen (NO_X)	100	55
Volatile Organic Compounds	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
Oxides of Sulfur (SO_x)	150	150
CO	550	550

Source: SCAQMD 1993

SCAQMD has developed localized significance threshold (LST) methodology and mass rate look-up tables by source receptor area that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area. LSTs are derived based on the location of the activity (i.e., the source receptor area); the emission rates of NOx, CO, $PM_{2.5}$, and PM_{10}; the size of the project study area, and the distance to the nearest exposed individual. For this project, the appropriate source receptor area for the LST is the South Coastal Los Angeles County area (Area 4). The nearest sensitive receptors are the homes located immediately south and west of the project site. Table 3 lists the LST emission rates for a 2-acre site located within 25 meters of a sensitive use.

Table 3. South Coast Air Quality Management District Localized Significance Thresholds

Pollutant	Construction (pounds/day)	Operation (pounds/day)
NOx	131	131
PM_{10}	842	845
$PM_{2.5}$	7	2
CO	5	1

Source: SCAQMD 1993

Construction Impacts – Construction activities associated with implementation of the project have the potential to create air quality impacts through the use of heavy-duty construction equipment, construction worker vehicle trips, material delivery trips, and heavy-duty haul truck trips generated from construction activities. In addition, earthwork activities would result in fugitive dust emissions and paving operations and would also release Reactive Organic Gases (ROGs) from off-gassing. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources. Table 4 shows typical emissions related to construction phases.

Table 4. Construction Emissions

Phase	CO	ROGs	NOx	PM_{10}	$PM_{2.5}$
Site Preparation	12.3	1.8	21.5	1.3	0.8
Grading	10.6	2.1	22.8	4.1	2.5
Building Construction	20.5	3.2	23.7	2.4	1.4
Paving	12.6	1.3	12.6	0.9	0.7
Architectural Coating	2.6	18.4	1.9	0.3	0.2
Peak Day (pound/day)	**23.1**	**21.5**	**25.6**	**4.1**	**2.5**
SCAQMD Thresholds	**550**	**75**	**100**	**150**	**55**
Exceedance	**No**	**No**	**No**	**No**	**No**

Table 5 shows the construction-related emissions of CO, NOx, PM10, and PM2.5 compared to the LSTs for the South Coastal Los Angeles County area at a distance of 25 meters. As required by the SCAQMD's Localized Significance Threshold Methodology (2008), only the on-site construction emissions are included in Table 5.

Table 5. Summary of On-Site Construction Emissions, Localized Significance

Project Phase	Emission Rates (pounds/day)			
	CO	NOX	PM_{10}	$PM_{2.5}$
Site Preparation	11.9	21.5	1.2	0.8
Grading	10.2	22.7	3.9	2.5
Building Construction	15.3	18.9	1.1	1.0
Paving	11.9	12.6	0.7	0.7
Architectural Coating	1.8	1.8	0.1	0.1
Peak Day (pound/day)	**18.9**	**22.7**	**3.9**	**2.5**
SCAQMD Thresholds	**842**	**131**	**7**	**5**
Exceeds Daily SCAQMD Threshold?	**No**	**No**	**No**	**No**

As identified, the calculated emissions rates for the proposed on-site construction activities would not exceed the SCAQMD's LSTs; although fugitive dust emissions generated during construction may cause significant impacts if not properly managed, especially on sensitive receptors near the project site. Implementation of Mitigation Measure (MM) AQ-1 would reduce potential impacts to a level less than significant.

MM AQ-1: Fugitive Dust Control

During clearing, grading, earthmoving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the SCAQMD Rule 403. All material excavated or graded shall be sufficiently watered in sufficient quantities to prevent the generation of visible dust plumes. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on-site or off-site shall be securely covered to prevent excessive amounts of dust. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized so as to prevent excessive amounts of dust. These control techniques shall be indicated in project specifications.

In addition, where feasible, the following measures will be implemented to reduce construction emissions;

- Minimize land disturbance
- Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas
- Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes
- Cover trucks when hauling dirt
- Stabilize the surface of dirt piles if not removed immediately
- Limit vehicular paths on unpaved surfaces and stabilize any temporary roads
- Minimize unnecessary vehicular and machinery activities
- Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway
- Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities
- Ensure that all construction equipment is properly tuned and maintained
- Minimize idling time to 5 minutes, which saves fuel and reduces emissions
- Provide an operational water truck on-site at all times and use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas
- Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators

Operation Impacts

Long-term air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related changes. The proposed project would have potential long-term operational air quality impacts from mobile source emissions associated with project-related vehicular trips and stationary source emissions from on-site energy consumption. Table 6 shows anticipated daily operational emissions.

Table 6. Daily Operational Emissions

Source	CO	NOx	ROG	SO_x	PM10	PM2.5
Area	0.05	0.00	2.36	0.00	0.00	0.00
Energy	0.24	0.29	0.03	0.00	0.02	0.02
Mobile	25.90	9.44	1.95	0.09	6.94	1.92
Total	26.19	9.73	4.35	0.09	6.97	1.94
SCAQMD Thresholds	**550**	**55**	**55**	**150**	**150**	**55**
Exceeds Daily SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Columns may not add up due to rounding.
SO_x: Oxides of Sulfur

Table 7 identifies the operational emissions of CO, NOX, PM10, and PM2.5 compared to the LSTs for the South Coastal L.A. County area at a distance of 25 m. As required by the SCAQMD's LST Methodology, only the on-site emissions are included in Table 7, which includes all of the area source and energy emissions, and five percent of the on-road emissions. As shown, the calculated emissions rates for the proposed on-site operational activities would not exceed the LSTs.

Table 7. Summary of On-Site Operation Emissions, Localized Significance

Project Phase	Emission Rates (pounds/day)			
	CO	NOx	PM_{10}	$PM_{2.5}$
Area	0.05	0.00	0.00	0.0
Energy	0.24	0.29	0.02	0.02
Mobile	1.30	0.47	0.35	0.10
Total (pounds/day)	**1.59**	**0.76**	**0.37**	**0.12**
SCAQMD Thresholds	**842**	**131**	**2**	**1**
Exceeds Daily SCAQMD Threshold?	**No**	**No**	**No**	**No**

Given the extremely low level of CO concentrations in the project area, project-related vehicular trips are not anticipated to result in the CO concentrations exceeding the state or federal CO standards. Because no CO hot spot would occur, there would be no project-related impacts on CO concentrations.

a) **Less Than Significant Impact** – An Air Quality Management Plan (AQMP) describes air pollution control strategies to be taken by a city/county or region classified as a nonattainment area. The main purpose of an AQMP is to bring the area into compliance with the requirements of federal and state air quality standards. CEQA requires that certain proposed projects be analyzed for consistency with the AQMP. For a project to be consistent with the 2016 AQMP, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality. However, if feasible mitigation measures are implemented and shown to reduce the impact level from significant to less than significant, the project is deemed consistent with the AQMP. The project's short-term construction and long-term operational emissions would not exceed the SCAQMD's significance thresholds and implementation of the project will not conflict with the 2016 AQMP.

b) **Less Than Significant with Mitigation Incorporated** – Air pollutant emissions would occur over the short term from construction activities, and would be generated by fugitive dust from site preparation and grading and emissions from equipment exhaust. Long-term regional emissions are associated with project-related vehicular trips and stationary source emissions. Implementation of MM AQ-1 would reduce potential significant impacts to a level less than significant.

c) **Less Than Significant with Mitigation Incorporated –** See III. Air Quality, Environmental Issue Area: b).

d) **Less Than Significant Impact –** Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics, particulate matter, and CO are of particular concern. The majority of the sensitive receptors adjacent to the project site are located to the west and south of the site, and consist of single-family residences. As discussed above, project emissions related to temporary construction and project operations would not exceed SCAQMD thresholds; therefore, sensitive receptors would not experience significant pollutant concentrations as a result of the project.

e) **Less Than Significant Impact –** Construction of the project could result in emission of odors from construction equipment and vehicles (e.g., diesel exhaust). It is anticipated that these odors would be short-term, limited in extent at any given time, and distributed throughout the project site throughout construction, and, therefore, would not affect a substantial number of individuals.

IV. Biological Resources

Environmental Issue Area:	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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact Analysis:

The project site currently consists of a number of vacant lots surrounded by urban development. Although the project site supports no native habitat, several ornamental trees provide suitable habitat.

a) **Less Than Significant with Mitigation Incorporated –** The ornamental trees located on the project site provide suitable nesting habitat for avian species protected by the Migratory Bird Species Act (MBTA) (16 **U.S.C.** 703-712). Direct disturbance of an active nest would be significant. With implementation of MM BIO-1, potential significant impacts would be reduced to a level less than significant. The project site does not provide suitable habitat for any other candidate, sensitive, or special-status species.

MM BIO-1: Migratory Bird Treaty Act Covered Species

If clearing and grubbing is required during the avian breeding season (February 15-August 15), the applicant shall retain the services of a qualified biologist to conduct a pre-construction nest survey (in suitable areas) for migratory birds within 10 days of construction. Should an active nest of any the Migratory Bird Species Act covered species occur within or adjacent to the project impact area, an appropriate buffer, as determined by a qualified biologist, shall be established around the nest and no construction shall occur within this area until a qualified biologist determines the nest is no longer active or the young have fledged.

b) **No Impact –** As noted above, the project site does not support native habitat. The project site does not contain any riparian habitat or sensitive vegetation communities identified in local or regional plans, policies, or regulations or by California Department of Fish and Wildlife and U.S. Fish and Wildlife Service.

c) **No Impact –** As noted above, the project site is located in an urban area. The project site does not contain any natural hydrologic features or federally protected wetlands as defined by Section 404 of the Clean Water Act.

d) **No Impact –** The project site does not provide nursery habitat. The project is located in an urban area and is enclosed by fencing, therefore it provides no wildlife movement function. The redevelopment of the project site would not impact wildlife movement due to the surrounding conditions.

e) **No Impact –** The project site does not provide significant biological resource value identified for conservation and is not located within the Local Coastal Program Planning Areas (City of Long Beach 1973 and 1980, respectively). Therefore, the project is consistent with both the Conservation and Local Coastal Program elements of the General Plan. The project site does not support trees subject to City ordinance.

f) **No Impact –** There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other local, regional, or State habitat conservation plans in the City of Long Beach; therefore the project would not conflict with any such plans.

V. Cultural Resources

Environmental Issue Area:	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?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Impact Analysis:

The following analysis is based on review of geological maps and previous paleontological studies conducted in the area, the Department of Parks and Recreation 523A Form prepared by HDR in September 2018, Archival Research and a Pedestrian Archeological Survey performed by HDR in August 2018, and consultation with the South Central Coastal Information Center by HDR in August 2018.

a) **Less Than Significant with Mitigation Incorporated –** Southern California is home to a number of Native American tribes, with Gabrieleno groups having occupied the Long Beach area prior to the arrival of Europeans. The project area has been subject to extensive development related to both oil and gas extraction and urban growth over the last century.

The project site includes ten parcels which are now vacant, dirt-covered lots. The project site is bordered at the east by a major street (Long Beach Boulevard), at the north and west by side streets, and at the south by commercial and residential and commercial properties. Ground disturbance for the project would occur only in areas that have already been heavily disturbed by prior development and land use activities. Archival research indicates that the project area housed oil wells as part of the Long Beach Oil Field during the first half of the twentieth century. As recently as 2016, the project site was occupied by several commercial structures, oil derricks, above-ground storage tanks, and a single-family residence. Since 2016, however, all of these have been removed.

The South Central Coastal Information Center was consulted regarding the project. Its response indicated that the project area has not been previously surveyed and no resources have been recorded. A pedestrian archaeological survey of the project area was carried out by HDR on August 13, 2018. One resource older than 45 years, the Rocks Cocktail Lounge property located at 3445 Long Beach Boulevard, was identified during the survey. The property includes the lounge building, a small auxiliary office and an open parking area. The lounge is a single-story, 1,822-square-foot building constructed in 1958. It appears to originally have been a store, and has operated as a cocktail lounge since 1985. The auxiliary office was completed by 1963 and includes 330 sq. ft. The lounge property was evaluated and recommended ineligible for listing in the California Register of Historical Resources and the National Register of Historic Places. In accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, the property is not a historical resource for the purposes of CEQA. Thus, no historical resources or

archaeological resources were identified in the project area during survey. The lounge and ancillary building were demolished after the August 2018 pedestrian survey and the project site is currently vacant.

The inadvertent discovery of cultural materials or human remains during project-related ground-disturbing activities could result in significant impacts if not properly managed. Implementation of Mitigation Measures CULT-1 and CULT-2 are proposed to reduce potential impacts to a less than significant level.

MM CULT-1 Inadvertent Discovery of Cultural Materials

If cultural materials (e.g., chipped or ground stone, deposits of marine shell, historic debris, building foundations, or bone) are discovered during ground-disturbing activities, work within 20 meters (66 feet) of the discovery shall be stopped. Per the requirements of CEQA (Title 14 CCR 15064.5 [f]), and the City of Long Beach Planning Bureau, the Planning Bureau shall be notified of the discovery. Work near the archaeological find(s) shall not resume until a professional archaeologist who meets the criteria and qualifications as set forth by the *Secretary of the Interior's Standards and Guidelines* has evaluated the materials and offered recommendations for further action. Any identified cultural resources shall be recorded on Department of Parks and Recreation 523 historic resource recordation forms from the Office of Historic Preservation. If Native American archaeological remains are inadvertently encountered, representatives from local tribes engaged in consultation about the project shall be immediately notified, permitted to observe the findings in the field, and afforded the opportunity to make recommendations for avoiding, minimizing, or mitigating impacts from the proposed development.

MM CULT-2 Inadvertent Discovery of Human Remains

If human remains are discovered during project construction, work within 20 meters (66 feet) of the discovery location, and within any nearby area reasonably suspected to overlie human remains, shall cease (Public Resources Code, Section 7050.5) and the City of Long Beach Planning Bureau shall be notified of the discovery. The Los Angeles County Coroner shall be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws regarding the disposition of Native American burials, which fall within the jurisdiction of the California Native American Heritage Commission (Public Resources Code, Section 5097). In this case, the coroner will contact the California Native American Heritage Commission. The descendants or most likely descendants of the deceased will be contacted, and work shall not resume until they have made a recommendation to the landowner or person responsible for excavation work with direction regarding appropriate means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

b) **Less Than Significant with Mitigation Incorporated** – See V. Cultural Resources, Environmental Issue Area: a).

c) **No Impact** – Review of the California Geological Survey map of the region (Saucedo et al. 2016) and field observations indicate that sediment in the project site consists of artificial fill underlain by *Qom - Old shallow marine deposits on wave-cut surface, undivided (late to middle Pleistocene)*. These poorly consolidated marine deposits are composed mostly of fine- to coarse-grained sand and may locally carry common late Pleistocene molluscan fauna (Addicott 1964). Following Caltrans' (2018b) paleontological sensitivity scale, these units are considered to have low potential to contain significant vertebrate, significant invertebrate, or significant plant fossils. Rock units designated as having low potential generally do not require monitoring and mitigation. Based on review of previous studies (e.g., Delong 1939; Smith 2013), the project would not impact any unique paleontological resources or unique geologic features.

d) **Less Than Significant Impact** – There is no available evidence for the presence of human remains on the project site. Implementation of Mitigation Measure CULT-2, as identified in response Cultural Resources, Environmental Issue Area a). Mitigation Measure CUL-2 would address the inadvertent discovery of human remains during project-related ground-disturbing activities.

VI. Geology and Soils

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction and seiche/tsunami?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in the latest Uniform Building Code, creating substantial risk to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Impact Analysis:

Analysis based on review of existing data from California Geological Survey (CGS 1998).

ai) **No impact –** There are no known active or potentially active faults that have been mapped at the project site, and the site is not located within a State of California Earthquake Fault Zone (formerly known as an Alquist-Priolo Special Studies Zone). However, an Earthquake Fault Zone is located about 600 feet southwest of the project site. See additional discussion in aii, below.

aii) **Less Than Significant Impact** – Although the project site is outside of an Earthquake Fault Zone as described above, it is in relatively close proximity. During design, the project facilities would be designed consistent with the California Building Code.

aiii) **No impact –** CGS (1998) maps the area outside of liquefaction zones. This may be due to relatively dense soils. A site specific geotechnical investigation should be performed to confirm these findings.

aiv) **No impact –** CGS (1998) maps the area outside of a landslide zone. Due to the relatively flat topography of the existing and proposed conditions, landslide risk is considered low.

b) **No impact –** Due to the relatively flat topography described above and the lack of exposed slopes, the risk of substantial erosion or loss of topsoil is considered low.

c) **No impact –** Due to the lack of expected liquefaction at the project site, lateral spreading, subsidence, et cetera are not anticipated to occur at the project site.

d) **No impact** – CGS maps the area within an old alluvial geologic deposit (Qoa) generally described as dense to very dense sand and silty sand deposits that are not prone to expansion.

e) **No impact** – The old alluvial geologic deposits described above are not generally considered incapable of supporting alternative wastewater disposal systems.

VII. Greenhouse Gas Emissions

Environmental Issue Area:	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 an adverse effect on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Impact Analysis:

The following analysis is based on the *Laserfiche Air Quality/Greenhouse Gas Technical Memorandum* (HDR 2018) (Appendix B).

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. The analysis of greenhouse gas (GHG) emissions, unlike air quality analysis, which is a 'per day' threshold, is an aggregate quantity requiring summation over the total estimated number of work days (i.e., the total number of days that any construction grading vehicle would have an engine running).

For the purposes of determining whether or not GHG emissions from affected projects are adverse, SCAQMD specifies that project emissions must include direct, indirect, and, to the extent information is available, life cycle emissions during construction and operation. Based on this direction, construction emissions were amortized over the life of the project (defined as 30 years) added to the operational emissions, and compared to the applicable GHG significance thresholds.

The SCAQMD's interim thresholds for commercial, residential, mixed use and industrial development projects are as follows:

- **Industrial projects** – 10,000 MT of carbon monoxide equivalent (CO_2e) per year
- **Residential, commercial, and mixed use projects** (including parks, warehouses, etc.) – 3,000 MT CO_2e per year

The project is a commercial office building. Thus, for purposes of this analysis, both direct and indirect GHG emissions from the project are discussed in the context of the 3,000 MT threshold levels.

Construction Emissions

Construction of the project would result in temporary emissions associated with diesel engine combustion from mass grading, and site preparation construction equipment will be assumed to occur for engines running at the correct fuel-to-air ratios (the ratio whereby complete combustion of the diesel fuel occurs). Construction-related GHG emissions include site preparation, excavation, and associated construction of the proposed office facilities.

The most recent version of the CalEEMod model (Version 2016.3.2) was used to calculate the construction emissions. Table 8 quantifies the expected GHG emissions from construction activities. As shown, construction of the proposed project would generate 495 MT of CO2e. Amortized over a 30-year period, the approximate life of the project, the yearly contribution to GHG from the construction of the build alternatives with an at-grade concourse would be 16.5 MT of CO_2e per year.

Table 8. Construction Greenhouse Gas Emissions

Year	Pollutant Emissions (Metric Tons/year)			
	CO_2	CH_4	N_2O	CO_2e
2019	493.0	0.07	0.00	494.8

Operational Emissions

The operational GHG emission estimates were also calculated using CalEEMod. The following activities associated with the project could directly or indirectly contribute to the generation of GHG emissions:

Gas, Electricity, and Water Use: Natural gas use results in the emissions of two GHGs: CH_4 (the major component of natural gas) and CO_2 from the combustion of natural gas. Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. Annual electricity emissions were estimated using the reported GHG emissions per kilowatt-hour for Southern California Edison; the supplier would provide electricity for the project.

Solid Waste Disposal: Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 21 times more potent a GHG than CO_2. However, landfill CH_4 can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.

Motor Vehicle Use: Transportation associated with the project would result in GHG emissions from the combustion of fossil fuels in vehicle trips. The project would result in GHG emissions through the vehicular traffic generated.

Combined Emissions: The GHG emission estimates presented in Table 9 show the emissions associated with the level of development at build-out. Appendix A of the *Laserfiche Air Quality/Greenhouse Gas Technical Memorandum* includes the annual CalEEMod calculations for GHG emissions. Table 9 shows that project operations would result in average annual emissions of 2,018 metric tons of CO_2e per year.

The total annual GHG emissions of 2,018 MT of CO_2e is less than the county's screening threshold of 3,000 MT of CO_2e per year. Therefore, the proposed project will have a less than significant individual and cumulative impact for GHG emissions.

Table 9. Annual Greenhouse Gas Emissions

Source	Pollutant Emissions (metric tons/year)					
	Bio-CO2	NBio-CO2	CO2	CH4	N2O	CO2e
Construction Emissions Amortized over 30 Years	0.0	16.4	16.4	0.002	0.00	16.5
Operational Emissions						
Area Sources	0.00	0.01	0.01	0.00	0.00	0.01
Energy Sources	0.00	730.7	730.7	0.03	0.00	733.4
Mobile Sources	0.00	1,078.0	1,078.0	0.06	0.00	1,079.4
Waste Sources	19.4	0.00	19.4	1.15	0.00	48.1
Water Usage	5.8	115.5	121.3	0.60	0.02	140.8
Total Operational Emissions	25.2	1,924.2	1,949.4	1.83	0.02	2,001.7
Total Project Emissions	25.2	1,940.6	1,965.8	1.83	0.02	2,018.2

Table 9. Annual Greenhouse Gas Emissions

Source	Pollutant Emissions (metric tons/year)					
	Bio-CO2	NBio-CO2	CO2	CH4	N2O	CO2e

Note: Columns may not add up due to rounding.

a) **Less Than Significant Impact** – Construction activities would generate greenhouse gas emissions from equipment use and transportation of workers travelling to and from the project site. The amount of greenhouse gas emissions that would be generated is not anticipated to be substantial due to the temporary nature of construction.

b) **Less Than Significant Impact** – See III. Air Quality, Environmental Issue Area: a).

VII. Hazards and Hazardous Materials

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

VII. Hazards and Hazardous Materials

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

Impact Analysis:

The following analysis is based on the *Phase I Environmental Site Assessment* (SCS Engineers 2017a, SCS Engineers 2017b, SCS Engineering 2017c) (Appendix C) and the *Phase II Site Investigation Report* (SCS Engineers 2017a, SCS Engineering 2017b, SCS Engineering 2017c) (Appendix D).

a) **Less Than Significant Impact** – The project would involve the construction of an office building and a separate parking garage, which do not typically involve the use or storage of large quantities of hazardous materials. During construction, the use of potentially hazardous materials such as fuels, lubricants, and solvents would occur. However, the transport, use, and storage of hazardous materials would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Adherence to these requirements would reduce impacts to a less than significant level.

b) **Less Than Significant with Mitigation Incorporated** – The project site has historically been occupied by a residential dwelling and an oil derrick, along with numerous derricks in the vicinity as exploration of the Long Beach Oil Field was underway. However, based on the results of the *Phase II Site Investigation Report*, and the proposed commercial use of the site, there is no evidence of significant impact to the subsurface as a result of the current and historical oil-related activities. Further, the oil storage tanks, pumping units and associated piping on the site has been removed to comply with California Public Resource Code, Section 1766, in order to restore the site to the former natural state. However, additional impacted soil could still be encountered during construction, resulting in a potentially significant impact. Implementation of MM HAZ-1, would be reduce potentially significant impacts related to inadvertent discovery of impacted soil to a level less than significant.

MM HAZ-1 Soil Management Plan

Prior to construction, a General Construction Soil Management Plan shall be prepared that includes general provisions for how soils will be managed on site for the duration of construction. General soil management controls to be implemented by the contractor and the following topics shall be addressed within the Soil Management Plan:

- General worker health and safety procedures
- Encountering Potentially Impacted (Contaminated) Soil
- Disposal of Potentially Impacted Soil
- Dust control
- Management of soil stockpiles
- Traffic control
- Stormwater erosion control using best management practices

c) **Less Than Significant Impact** – The nearest schools are the Parkridge Private School and the Intellectual Virtues Academy of Long Beach, located approximately 0.25 miles north of the site. The project would not

involve the use or storage of large quantities of hazardous materials. These types of uses do not typically emit or involve the handling of hazardous materials and therefore the project would not emit hazardous materials within 0.25 miles of a school.

d) **Less Than Significant Impact** – Pursuant to Government Code Section 65962.5, the following databases were checked for known hazardous materials contamination at the project site:

- Comprehensive Environmental Response, Compensation, and Liability Information System;
- Geotracker (leaking and underground storage tanks)
- Department of Toxic Substances Control's Site Mitigation and Brownfields Database

The CERLCIS database revealed no evidence of toxic substances at the project site.

Geotracker revealed that there are no leaking and underground storage tanks or hazardous waste deposits on the project site nor within 500 feet of the project site.

The Department of Toxic Substances Control Site Mitigation and Brownfields Database revealed no evidence of clean-up programs on the project site.

e) **No Impact** – The project site is located approximately 1.23 miles to the west of the Long Beach Airport. The site is not within the airport land use planning area for the airport. The proposed office building would have a maximum height of four-stories (74 feet) and the garage would have a maximum height of 38 feet. Neither the office building nor the parking garage would interfere with airport operations, alter air traffic patterns, or in any way conflict with established Federal Aviation Administration flight protection zones.

f) **No Impact** – There are no private airstrips located within two miles of the site, therefore no impact would occur.

g) **Less Than Significant Impact** – The project would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project includes design features that would maintain access for emergency vehicles. The design features would be reviewed and approved by the Long Beach Fire Department to ensure that emergency access meets City standards.

h) **No Impact** – The city is an urbanized community and there are no wild lands in the project site vicinity (Los Angeles County Department of Regional Planning 2003). There would be no risk of exposing people or structures to a significant risk of loss, injury, or death involving wild land fires.

VIII. Hydrology and Water Quality

Environmental Issue Area:	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?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	☒

VIII. Hydrology and Water Quality

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Impact Analysis:

a) **Less Than Significant with Mitigation Incorporated** – Construction related activities such as site preparation, grading and paving associated with the project would occur and could result in temporary soil erosion that could subsequently degrade water quality. This is considered a significant impact. MM HWQ-1 would reduce potentially significant impacts to a level less than significant.

MM HWQ-1: National Pollutant Discharge Elimination System ***Compliance***

The contractor shall comply with Chapter 18.95 the Long Beach Municipal Code (LBMC), the National Pollutant Discharge Elimination System as part of Section 402 of the Clean Water Act and Standard Urban Stormwater Mitigation Plan regulations. Provisions for construction-related erosion and sediment control Best Management Practices (BMP) shall be incorporated within the construction plans and specifications.

Because the project would result in increased impervious surface area, the project is subject to compliance with the Low Impact Development (LID) Ordinance (Section 18.74.040 LBMC) and LID BMP Design Manual (Long Beach Development Services 2013). Section 18.74.040 of the LBMC, which requires runoff to be infiltrated, captured and reused, evapotranspired, and/or treated on-site through stormwater BMPs listed in the LID Best Management Practices Manual. The project is designed to meet these requirements, reducing potential water quality impacts during operation of the project. The project would not result in a long-term change in hydrology or water quality.

b) **Less Than Significant Impact** – The City of Long Beach Water Department would provide water service to the project site, and the project would not deplete groundwater supplies. The project would also be required to comply with current stormwater regulations (see VIII. Hydrology and Water Quality, Environmental Issue Area: a) and would not interfere with groundwater recharge.

c) **Less Than Significant Impact** – The project area is heavily urbanized area and the project site has been previously developed. The project is located within the Los Angeles River Watershed. As discussed in Hydrology and Water Quality, Environmental Issue Area: a), the project would be required to comply with the City's urban runoff regulations and design standards, which would reduce both the amount and concentration of pollutants from the sites runoff. The project would not impact the existing drainage patterns, exceed capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff that would degrade water quality.

d) **Less Than Significant Impac**t – See VIII. Hydrology and Water Quality, Environmental Issue Area: c).

e) **Less Than Significant Impact** – See VIII. Hydrology and Water Quality, Environmental Issue Area: c).

f) **Less Than Significant Impact** – See VIII. Hydrology and Water Quality, Environmental Issue Area: c).

g) **No Impact** - The project site is in Federal Emergency Management Agency Flood Zone X, Minimal Flood Hazard, which is outside the 100-year flood plain (FEMA 2018). The project would not place structures in the flood hazard area.

h) **No Impact** – See VIII. Hydrology and Watery Quality, g).

i) **No Impact** – There are three flood control dams that lie more than 30 miles upstream from the City, including Sepulveda Basin, Hansen Basin and Whittier Narrows Basin. In the unlikely event that these damns fail, the waters are expected to dissipate before reaching the City of Long Beach. (City of Long Beach 1975).The project would not expose people to a significant risk of flooding due to levee or dam failure.

j) **Less Than Significant Impact** – The project site is located approximately four miles from the coastline and one mile from the Los Angeles River. The project site is located in a low hazard area for tsunamis, seiches or mudflow and would not expose people to these risks (City of Long Beach 1975).

IX. Land Use and Planning

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

Impact Analysis:

The project site is within the Bixby Knolls community of the City of Long Beach and is not included in any specific planning elements of the City of Long Beach General Plan.

a) **No Impact** – The project site is located within the heavily urbanized community of Bixby Knolls. The project is an infill development on parcels that were previously developed. The project would not physically divide an established community.

b) **Less Than Significant Impact** – The project consists of the construction of a new four-story office building and a new three-story parking garage. The project would require discretionary actions, including Zone Change(s) of four existing lots from a Community Commercial Automobile-Oriented District to a CCN District; Single-Family Residential District (R-N-1) to CCN District in conjunction with a General Plan Amendment from LUD 1 to LUD 8; and a Zoning Code Amendment to permit averaging of setbacks for the office building within the High-Rise overlay (HR-4) District. The project is consistent with the zoning that currently exists immediately surrounding the site, and the Midtown Corridor District Specific Plan for Long Beach Boulevard, in general. The required entitlements are site-specific and an allowable discretionary action and would not conflict with applicable land use plans, policies or regulations; as they would not result in broader changes to the goals, policies and programs.

   The project site is not located in a coastal zone and is not subject to the Local Coastal Program.

c) **No Impact** – There are no existing habitat conservation plans in the project area and the project would not conflict with any habitat conservation plans.

X. Mineral Resources

Environmental Issue Area:	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Impact Analysis:

a) **No Impact** – Oil is a mineral resources found on the project site. The project site has a history for oil production. The City of Long Beach is located in Oil and Gas District 1. The California Department of Conservation Division of Oil, Gas, and Geothermal Resources well finder (California Department of Conservation, 2018) indicates that the project site is located in the Long Beach Oil Field, and contains active oil well sites. However, the applicant has recently removed all oil storage tanks, pumping units, containment walls, and associated piping on the site to comply with California Public Resource Code Section 1766 and current Division of Oil, Gas and Geothermal Resources standards for plugging active wells. The project would not result in the loss of availability of a locally-important mineral. Additionally, the project site is located on the San Gabriel Production-Consumption Region, but is not in an area where significant Portland Cement Concrete-Grade aggregate resources are located (an MRZ-2 area) (Kohler 2010). There are no active mine operations in the project area (Division of Mine Reclamation 2016). Therefore, the project site does not contain significant mineral resources that would cause a loss of value to the region.

b) **No Impact** – See X, Mineral Resources, Environmental Issue Area: a).

XI. Noise

Environmental Issue Area:	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?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Impact Analysis:

The following analysis is based on the *Laserfiche Noise and Vibration Technical Memorandum* (HDR 2018) (Appendix E). The analysis uses the 65 Lmax (A-weighted decibels [dBA]) (District One) nighttime threshold for determining impacts from on-site activities.

Noise

Noise is generally defined as unwanted sound. To account for the large pressure response range of the human ear, noise levels are presented on a logarithmic scale expressed in units of decibels (dB). Because the human ear does not perceive every frequency with equal loudness, sounds are often adjusted with a weighting filter. The A-weighted filter is applied to compensate for the frequency response of the human auditory system, known as dBA. An inherent property of the logarithmic decibel scale is that the sound pressure levels of two separate sources are not directly additive. For example, if a sound of 50 dBA is added to another sound of 50 dBA in the proximity, the result is a 3-decibel increase (or 53 dBA), not an arithmetic doubling to 100 dBA. Additional noise metrics are defined below.

- ***L_{eq}:*** the energy-averaged, A-weighted sound level over a specified time period, also conventionally expressed as dBA.
- ***L_{max}:*** The maximum A-weighted sound level as determined during a specified measurement period.
- ***L_{dn}:*** The L_{dn} is the averaged hourly A-weighted L_{eq} for a 24-hour period with a 10 dB penalty added to sound levels occurring during the evening hours (7:00 p.m. to 10:00 p.m.) to account for individuals' increased sensitivity to noise levels during nighttime hours.
- ***CNEL:*** Community noise equivalent level is another average A-weighted L_{eq} sound level measured over a 24-hour period, adjusted to account for some individuals' increased sensitivity to noise levels during the evening and nighttime hours; adding 5 dB to sound levels occurring during evening hours (7:00 p.m. to 10:00 p.m.) and 10 dB to noise levels occurring during nighttime hours (10:00 p.m. to 7:00 a.m.).

The human ear perceives changes in sound pressure level relative to changes in "loudness," scientific research demonstrates the following general relationships between sound level and human perception for two sound levels with the same or very similar frequency characteristics:

- One dBA is the practical limit of accuracy for sound measurement systems and corresponds to an approximate 10 percent variation in the sound pressure level. A 1 dBA increase or decrease is a non-perceptible change in sound.
- Three dBA increase or decrease is a doubling (or halving) of acoustic pressure level and it corresponds to the threshold of change in loudness perceptible in a laboratory environment. In practice, the average person is not able to distinguish a 3 dBA difference in environmental sound outdoors.
- Five dBA increase or decrease is described as a perceptible change in sound level and is a discernible change in an outdoor environment.
- Ten dBA increase or decrease is a tenfold increase or decrease in acoustic pressure level but is perceived as a doubling or halving in loudness (i.e., the average person will judge a 10 dBA change in sound level to be twice or half as loud).

A dBA increase or decrease is a doubling (or halving) of sound pressure level and it corresponds to the threshold of change in loudness perceptible in a laboratory environment. In practice, the average person is not able to distinguish a 3 dBA difference in environmental sound outdoors. An increase of 3 dBA is considered to be a significant off-site traffic noise impact requiring mitigation. The City has not established an exterior CNEL noise standard for office uses. Therefore, for the purposes of this analysis, a significant on-site noise impact (assumed to be generated from project-related traffic) would occur if the interior noise exceeds 45 dBA CNEL.

Certain land uses are considered more sensitive to noise than others. Examples of these types of land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The project site is located in an urban area. The closest off-site sensitive land uses are the existing residences located to the south and west of the project site across Locust Avenue at a distance of approximately 50 feet.

The LBMC (Chapter 8.80, Noise), establishes exterior and interior noise limits for the generation of sound within the City. The analysis uses the 65 dBA Lmax nighttime threshold for determining the impacts from on-site activities. The levels listed in the table are for events lasting 30 minutes within an hour. The maximum noise levels are 20 dB higher. Exterior noise limits are summarized in Table 10.

Table 10. Exterior Noise Limits

Receiving Land Use District	Time Period	Noise Level (dBA)	L_{max} (dBA)
District One	Night (10 p.m. to 7 a.m.)	45	65
	Day (7 a.m. to 10 p.m.)	50	70
District Two	Night (10 p.m. to 7 a.m.)	55	75
	Day (7 a.m. to 10 p.m.)	60	80

Table 10. Exterior Noise Limits

Receiving Land Use District	Time Period	Noise Level (dBA)	L_{max} (dBA)
District Three	Any time	65	85
District Four	Any time	70	90
District Five	Regulated by other agencies and laws		

Note:
District One: Predominantly residential with other land use types also present
District Two: Predominantly commercial with other land use types also present
District Three and Four: Predominantly industrial with other land use types also present
District Five: Airports, freeways, and waterways regulated by other agencies
District Three and Four limits are intended primarily for use at their boundaries rather than for noise control within those districts

The LBMC forbids any person within the City limits to create outdoor sound that causes the noise levels to exceed:

1) The noise standard for that land use district as specified in Table 10 for a cumulative period of more than 30 minutes in any hour; or
2) The noise standard plus 5 decibels for a cumulative period of more than 15 minutes in any hour; or
3) The noise standard plus 10 decibels for a cumulative period of more than 5 minutes in any hour; or
4) The noise standard plus 15 decibels for a cumulative period of more than 1 minute in any hour; or
5) The noise standard plus 20 decibels or the maximum measured ambient, for any period of time.

Interior noise limits are summarized in Table 11 below.

Table 11. Interior Noise Limits

Receiving Land Use District	Type of Land Use	Time Interval	Allowable Interior Noise Level (dBA)
All	Residential	10 p.m. to 7 a.m. 7 a.m. to 10 p.m.	35 45
All	School	7 a.m. to 10 p.m. (while school is in session	45
Hospital, designated quiet zones, and noise sensitive zones		Any time	40

The LBMC forbids any person within the City limits to create indoor sound that causes the noise levels to exceed:

1) The noise standard for that land use district as specified in Table 11 for a cumulative period of more than 5 minutes in any hour; or
2) The noise standard plus 5 dB for a cumulative period of more than 1 minute in any hour; or
3) The noise standard plus 10 dB or the maximum measured ambient, for any period of time.

Construction Noise Limits

Section 8.80.202 of the LBMC restricts construction activities to weekdays between the hours of 7:00 a.m. and 7:00 p.m. and Saturdays, between 9:00 a.m. and 6:00 p.m., except for emergency work. Construction work on Sundays is prohibited unless the City's Noise Control Officer issues a permit. The permit may allow work on Sundays between 9:00 a.m. and 6:00 p.m.

Vibration

Vibration Annoyance. Ground-borne noise is the vibration of floors and walls that may cause rattling of items such as windows or dishes on shelves, or a rumbling noise. The rumbling is created by the motion of the room surfaces, which act like a giant loudspeaker. The Federal Transit Authority provides criteria for acceptable levels of ground-borne vibration based on the relative perception of a vibration event for vibration-sensitive land uses (Table 12).

Table 12. Groundborne Vibration and Noise Impact Criteria – Human Annoyance

Land Use Category	Max Lv (VdB)[1]	Description
Workshop	90	Distinctly felt vibration. Appropriate to workshops and non-sensitive areas.
Office	84	Felt vibration. Appropriate to offices and non-sensitive areas.
Residential – Daytime	78	Barely felt vibration. Adequate for computer equipment.
Residential – Nighttime	72	Vibration not felt, but ground-borne noise may be audible inside quiet rooms.

Note: [1] As measured in 1/3-octave bands of frequency over the frequency ranges of 8 to 80 Hz

Vibration-Related Structural Damage. The level at which ground-borne vibration is strong enough to cause structural damage has not been determined conclusively. The most conservative estimates are reflected in the Federal Transit Authority standards, shown in Table 13 below. According to the Caltrans' "Transportation Related Earthborne Vibration" (2002), extreme care must be taken when sustained pile driving occurs within 25 feet of any building; the threshold at which there is a risk of architectural damage to normal houses with plastered walls and ceilings is 0.2 in/sec.

Table 13. Groundborne Vibration and Noise Impact Criteria – Structural Damage

Building Category	PPV (in/sec)[1]	VdB
I. Reinforced concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Nonengineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Note: [1] Root Mean Square velocity calculated from vibration level (VdB) using the reference of one microinch/second
PPV: peak particle velocity

The primary existing noise sources in the project area are transportation facilities. Traffic on Long Beach Boulevard, East Wardlow Road, and I-405 is the dominant source contributing to area ambient noise levels. Noise from motor vehicles is generated by engine vibrations, the interaction between the tires and the road, and the exhaust system.

a) **Less Than Significant Impact** – The project consists of construction of an office building and a separate parking garage. Based on the noise analysis, the project-related traffic noise level increase would be 0.2 dBA or less for all analyzed roadway segments. Along East 35th Street the project-related traffic noise level increase would be 3.9 dBA. Although this increase is greater than 3 dBA, the total traffic noise level would remain very low with the 60 dBA CNEL traffic noise contour contained within the roadway right-of- way. Therefore, the project would not result in exposure of persons to excessive noise levels.

   The office building would be located at a distance of approximately 65 feet from the roadway centerline of Long Beach Boulevard. At this distance, the office building would be exposed to an exterior noise level of 70 dBA CNEL. Standard building construction provides 25 dBA of exterior to interior noise attenuation when windows are closed and 15 dBA of exterior to interior noise attenuation when windows are open (EPA 1978). All new

construction requires some form of mechanical ventilation to ensure that proper indoor air quality is maintained even with all windows and doors closed. Therefore, with windows and doors closed, interior noise levels would meet the 45 dBA CNEL standard (i.e., 70 dBA - 25 dBA = 45 dBA). In addition, modern commercial building construction would likely provide more than the standard 25 dBA of noise attenuation. The project would not expose users of the office building to noise levels in excess of applicable noise standards.

Operation of the project would result in some acoustic emissions but would not result in vibration emissions. On-site stationary noise would include building heating, ventilation, and air conditioning systems and parking lot usage, including door closing/slamming, horn honking, and car alarms. Heating, ventilation, and air conditioning systems typically result in noise levels that average between 50 and 60 dBA Lmax at 50 feet from the equipment. Parking lots typically generate noise levels of up to 70 dBA Lmax at 50 feet. The closest sensitive receptors to the project site, the residential uses to the south, are located within 50 feet of the on-site stationary sources. In addition, there are existing residences located to the west at a distance of approximately 80 feet. The safety barriers and proposed landscaping along the edge of the parking structure would reduce the parking lot noise by 5-8 dB to 62 to 65 dBA Lmax. Therefore, the project's stationary source noise impacts would be lower than the City's nighttime threshold of 65 dBA Lmax.

a) **Less Than Significant with Mitigation Incorporated** – Project construction activities would involve the use of typical equipment that would result in ground-borne vibration that may be felt on properties in the vicinity of the project site. Table 14 identifies the vibration source amplitudes for construction equipment. As pile driving is not required, the highest reference Peak Particle Velocity (PPV) is 0.210 per second (in/sec) associated with on-site vibration rollers.

Table 14. Vibration Source Amplitudes for Construction Equipment

Equipment	PPV at 25 feet (in/sec)	Approximate Lv1 at 25 feet (VdB)
Pile Driver (impact) – upper range	1.518	112
Pile Driver (impact) – typical	0.644	104
Pile Drive (sonic) – upper range	0.734	105
Pile Drive (sonic) – typical	0.170	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill (slurry wall) – in soil	0.008	66
Hydromill (slurry wall) – in rock	0.017	75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drilling	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006. Table 12-2

Note: [1] Root Mean Square velocity in decibels (VdB) re 1 micro-inch/second

Project construction activities associated with on-site vibration rollers, would affect the residential structures, located approximately 50 feet to the south of the project site. For sensitive receptors, distance attenuation would reduce the construction vibration levels from the proposed project to 0.074 in/sec. This level is much lower than the 0.12 in/sec threshold for buildings extremely susceptible to vibration damage (See Table 8 in Noise and Vibration Technical Memorandum). For consideration of annoyance or interference with vibration-sensitive

activities, at 50 feet the roller vibration level would be reduced from 94 to 85 VdB. This level would exceed the Federal Transit Authority's daytime annoyance threshold of 78 VdB (See Table 7 in Noise and Vibration Technical Memorandum).

Mitigation Measure NOI-1 would reduce potentially significant impacts from construction vibration impacts to a level less than significant.

MM NOI-1: City Noise Construction Compliance

Construction shall be limited to the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and Saturdays, between 9:00 a.m. and 6:00 p.m., in accordance with City standards. No construction activities shall occur outside of these hours or on Sundays and federal holidays.

The following measures shall be implemented by the contractor to reduce potential construction noise impacts on nearby sensitive receptors.

- During all site excavation and grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

Operational noise is not predicted to result in an increase in received noise levels at nearby noise sensitive receptors.

b) **Less Than Significant Impact** – Noise associated with operation of the project would primarily be due an increase in traffic on local roadways. Project-related long-term vehicular trip increases are anticipated to be small when distributed to adjacent street segments. The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate highway traffic-related noise conditions along the roadway segments in the project vicinity. The typical vehicle mix for Southern California was used. Table 15 shows project traffic volumes.

Table 15. 2020 With Project Traffic Volumes

Roadway Segment	Average Daily Travel	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Project Related Increase CNEL (dBA)
Long Beach Boulevard between NB 405 off-ramp and Wardlow Road	24,780	55.4	175.1	553.6	68.7	0.1
Long Beach Boulevard between Wardlow Road and 35th	26,460	59.1	186.9	591.2	69.0	0.2
Long Beach Boulevard between 35th and 36th	24,650	55.1	174.2	550.7	68.7	0.0
Long Beach Boulevard between 36th and Bixby	24,740	55.3	174.8	552.7	68.7	0.0
Wardlow Road between NB 405 on-ramp and Long Beach Boulevard	26,460	59.1	186.9	591.2	69.4	0.0

Table 15. 2020 With Project Traffic Volumes

Roadway Segment	Average Daily Travel	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Project Related Increase CNEL (dBA)
Wardlow Road east of Long Beach Boulevard	19,680	<50	139.0	439.7	68.1	0.0
35th west of Long Beach Boulevard	1,950	<50	<50	<50	54.0	3.9

As shown in Table 15, with the exception of the roadway segment along East 35th Street, the project-related traffic noise level increase would be 0.2 dBA or less for all analyzed roadway segments. Along East 35th Street the project-related traffic noise level increase would be 3.9 dBA. Although this increase is greater than 3 dBA the total traffic noise level would remain very low with the 60 dBA CNEL traffic noise contour contained within the roadway right-of-way.

On-site operations would also involve typical noise from office buildings and would be consistent with surrounding uses in the area. Therefore, development of the project would not create a substantial permanent increase in ambient noise levels above levels existing without the project.

c) **Less Than Significant with Mitigation Incorporated** – Project construction would generate a temporary increase in noise levels near the project site. The nearest sensitive receptors to the project site are the existing residences to the south and west of the project site. At its closest point, the construction activity would be located within 25 feet of these land uses. On average, the distance between the on-site construction activities and the sensitive receptors is approximately 100 feet. Table 16 shows project noise levels based on anticipated equipment to be used.

Table 16. Project Construction Noise Levels by Phase

Phase	Equipment[1]			Composite Sound Level[3]	
	Type	Quantity	L_{max} at 50 feet	L_{max} at 25 feet	L_{eq} at 100 feet
Site Preparation	Grader	1	85.0	91.0	78.0
	Scraper	1	83.6		
	Loader	1	79.1		
Grading	Grader	2	85.0	91.0	79.8
	Loader	1	79.1		
	Tractor	1	84.0		
Building Construction	Crane	1	80.6	91.0	78.9
	Forklift	2	74.7		
	Generator	1	80.6		
	Loader	1	79.1		
	Welder	3	74.0		
Paving	Mixer	1	78.8	90.0	77.5
	Paver	1	77.2		

Table 16. Project Construction Noise Levels by Phase

Phase	Equipment[1]			Composite Sound Level[3]	
	Type	Quantity	L_{max} at 50 feet	L_{max} at 25 feet	L_{eq} at 100 feet
	Paving Equipment	1	77.2		
	Roller	2	80.0		
	Tractor	1	84.0		
Architectural Coating	Compressor	1	77.7	83.7	67.7

Note:

1 *Equipment mix obtained from the CalEEMod emission calculations prepared for the Air Quality Assessment, July 2018.*

2 *Measured Lmax at given reference distance obtained from the FHWA Roadway Construction Noise Model, FHWA 2006.*

3 *Distance factor determined by the inverse square law defined as 6 dBA per doubling of distance as sound travels away from an idealized point.*

As shown in Table 16 above, during the loudest construction phase the maximum noise level is projected to be 95.6 dBA Lmax and the average level is projected to be 79.8 dBA Leq. Construction noise would attenuate with increased distance from the noise sources.

Project-related traffic noise during construction is not anticipated to be a significant source of noise because traffic levels would not double or cause traffic noise on adjacent roadways to increase by 3 dBA. The project's construction traffic on adjacent roadways would increase hourly traffic volumes by much less than a factor of two; therefore, the increase in construction related traffic noise would be less than 3 dBA.

Construction noise would cause an increase in existing ambient noise levels in the area and may cause temporary disturbance to nearby residents, causing a potentially significant impact. Mitigation Measure NOI-1 is proposed to reduce temporary construction noise impacts to a level less than significant.

d) **Less Than Significant Impact** – The project site is located approximately 1.5 miles west of the Long Beach Airport. Although located within 2 miles of the airport, based on the Long Beach Airport Influence Area, the project site would be located outside of the 65 dBA CNEL noise contour.

e) **Less Than Significant Impact** – See Noise, Environmental Issue Area: e).

XII. Population and Housing

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis:

a) **No Impact** – The project consists of an office building and separate parking garage. The project would not directly impact population growth through the increase in office and parking space. Additionally, the project would not indirectly add population since the facilities would service employees from the existing community.

b) **No Impact** – There is no existing housing on the project site and the project would not cause displacement or necessitate construction of replacement housing elsewhere.

c) **No Impact** – See XII. Population and Housing, Environmental Issue Area: b).

XIII. Public Services

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☒	☐
i) Fire Protection?	☐	☐	☒	☐
ii) Police Protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☒	☐

Impact Analysis:

ai) **Less Than Significant Impact** – The project site is within the jurisdiction of the Long Beach Fire Department and the Los Angeles County Fire Department, which would provide fire protection, medical, paramedic and other first aid rescue services. The Long Beach Fire Department fire station nearest to the site is Fire Station 9, located at 3917 Long Beach Boulevard, approximately 0.66 miles from the site. The Los Angeles County Fire Department station nearest to the site is Station 60 located approximately 1.87 miles from the site at 2300 E 27th Street. Prior to project approval, the Long Beach Fire Department would be required to review and approve project activities. Applicable Fire Code requirements, California Fire Code and the Uniform Building Code requirements would be relevant to the proposed project. The project would not result affect community fire protection services or result in the need for construction of additional fire protection facilities.

aii) **Less Than Significant Impact** – Police protection is provided by the Long Beach Police Department (LBPD). The LBPD nearest to the project site is Long Beach Police North Division, located at 4891 Atlantic Ave, approximately 1.0 mile from the project site. Although the project would increase the number of buildings and individuals on site during daytime working hours, it would be an incremental increase that would not require additional police presence or demand on site.

aiii) **Less Than Significant Impact** – The project does not include any housing that would directly add students to the Long Beach Unified School District. The applicant would be required to pay school impact fees. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998).

aiv) **No Impact** – The project consists of building an office building and parking lot, which would not directly add residents to the area and increase the demand for parks.

av) **Less Than Significant Impact** – The closest public library branch is the Long Beach Public Library – Dana Branch, approximately 1.0 mile away, located at 3680 Atlantic Ave. The project would develop an office building, of which would not generate a demand for libraries.

XIV. Recreation

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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?	☐	☐	☐	☒

Impact Analysis:

a) **No Impact** – The project includes development of an office building and a parking garage and would not result in a substantial increase demand for recreational uses.

b) **No Impact** – The project does not include recreational facilities and would not require the construction or expansion of recreational facilities.

XV. Transportation/Traffic

Environmental Issue Area:	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?	☐	☒	☐	☐
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?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Impact Analysis:

The following analysis is based on the *Laserfiche Office Project Traffic Impact Analysis* (Iteris 2018) (Appendix F).

Analysis of traffic operations are conducted according to the traffic impact analysis guidelines used by the City of Long Beach. At signalized intersections within the City's jurisdiction, LOS analysis is performed using Intersection Capacity Utilization operations methodology per the City's guidelines utilizing the Traffix software. In addition, analysis of traffic operations of intersections operated under Caltrans' jurisdiction and unsignalized intersections is conducted utilizing the Highway Capacity Manual (HCM) methodology, which uses vehicular delay criteria to determine LOS. A brief description of each level of service letter grade, as well as the range of delays or V/C ratios associated with each grade for signalized and unsignalized intersections is presented in Table 17.

Table 17. Intersection Level of Service Definitions – Intersection Capacity Utilization and Methodologies

Level of Service	Description	Volume to Capacity (V/C) Ratio	HCM Average Delay (sec) – Signalized Intersections	HCM Average Delay (sec) – Unsignalized Intersections
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000-.0600	≤ 10	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>0.600-0.700	>10-20	>10-15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>0.700-0.800	>20-35	>15-25
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>0.800-0.900	>35-55	>25-35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>0.900-1000	>55-80	>35-50
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	>1.000	>80	>50

The City of Long Beach Traffic Impact Guidelines considers LOS D as the limit for acceptable intersection operations. Furthermore, an impact is considered significant when the resulting level-of service with the project traffic is E or F and project related traffic contributes a V/C of 0.02 or more to the critical movements. Note the local streets are not defined in the City's General Plan. Thus, significant impact criteria does not apply to local streets.

a) **Less Than Significant with Mitigation Incorporated** – During construction, construction-related traffic, such as deliveries of equipment and materials and construction worker traffic, would be generated. However, construction

traffic would be temporary and would not substantially interfere with the existing traffic load and capacity of the street system.

During operation, the project would generate traffic. Based on the Laserfiche Office Project Traffic Impact Analysis, anticipated trips for an office complex are approximately 1,008 per day, with 120 new a.m. peak hour trips and 119 new p.m. peak hour trips, as displayed in Table 18.

Table 18. Proposed Project Trip Generation

Land Use (ITE Code)	Size	Trip Generation Rates							Trip Generation						
		AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total	
General Office (710)	103.456 tsf	86%	14%	1.16	16%	84%	1.15	9.74	103	17	120	19	100	119	1,008
								Total	**103**	**17**	**120**	**19**	**100**	**119**	**1,008**

The increase in the amount of trips due to the project has the potential to affect existing intersections and streets around the project site. As shown below in Table 19**Error! Reference source not found.**, a significant impact would occur at the Long Beach Boulevard/Wardlow Avenue intersection in the existing condition and opening year (2020) condition. Increases in average delay are anticipated at unsignalized intersections, though are not considered significantly impacted per the City's thresholds of significance. Mitigation Measure TR-1 would reduce impacts to a level less than significant.

MM TR-1: Long Beach Boulevard / Wardlow Avenue Left Turn Lane

The applicant shall add a second northbound left-turn lane along Long Beach Boulevard. Due to two northbound left turn lanes, the existing traffic signal shall also be modified from protected plus permitted to protected-only at the northbound approach.

Table 19. Existing Plus Project Intersection Peak Hour Level of Service

Intersection	Time Period	Existing Conditions LOS	Existing Plus Project Conditions LOS	Change V/C or Delay		Significant Impact?
				AM Peak Hour	PM Peak Hour	
Long Beach Boulevard/ Bixby Rd	AM	A	A	0.003	0.003	No
	PM	A	A			
Long Beach Boulevard/ 36th St	AM	B	B	0.007	0.006	No
	PM	B	B			
Long Beach Boulevard/ 35th St	AM	B	C	6.8	29.7	No**
	PM	C	F			
Crest Dr/ Wardlow Rd	AM	C	C	1.3	0.3	No
	PM	C	C			
I-405 NB On-ramp/Wardlow Rd	AM	A	A	0.0	0.0	No
	PM	A	A			
Long Beach Boulevard/Wardlow Rd	AM	E	E	0.023	0.020	Yes
	PM	E	E			
Crest Dr/I-405 SB Ramps	AM	F	F	-6.2	1.8	No
	PM	D	D			
Long Beach Boulevard/I-405 NB Off-ramp	AM	D	D	2.9	6.6	No
	PM	F	F			
Long Beach Boulevard/Crest Dr	AM	B	B	0.0	0.6	No
	PM	C	C			

Note:
*** Local streets are not defined in the City's General Plan. Thus, significant impact criteria does not apply to this location.*
V/C = Volume to Capacity Ratio, LOS = Level of Service
Dr: Drive; St: Street; Rd: Road; NB: northbound; SB: Southbound

b) **Less Than Significant Impact** – The Congestion Management Program (CMP) was created statewide as a result of Proposition 111 and has been implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro), requiring that the traffic impact of individual development projects of potential regional significance be analyzed. The project's trip generation is forecast to be higher than 50 trips. However, based to the proposed project trip distribution, the dispersal of project traffic onto multiple routes would result in the actual number of trips expected to pass through these intersections at less than the 50 trip threshold. The proposed project is in close proximity to Interstate 405 (I-405). Based on incremental project trip generation estimates, the proposed project would not add more than 150 peak hour trips; therefore, a CMP mainline freeway segment analysis is not required. Therefore, the project would not conflict with an applicable congestion management program.

c) **No Impact** – As discussed in Section VIII, Hazards and Hazardous Materials and Section XII, Noise, the project site is located approximately 1.23 miles to the west of the Long Beach Airport. The proposed office building would have a maximum height of four-stories (74 feet) and the garage would have a maximum height of 38 feet. Neither the office building nor the parking garage would interfere with airport operations, alter air traffic patterns, or in any way conflict with established Federal Aviation Administration flight protection zones.

d) **No Impact** – See XV. Transportation/Traffic, Environmental Issue Area: c).

e) **Less Than Significant Impact** – The project includes partially closing the alley between Locust Avenue and Long Beach Boulevard for connectivity of the parking garage and office building. Emergency vehicle access would be maintained by installing a gate at each end of the closure. Therefore, the project would not impact emergency access.

   Vehicular access to and from the project site would be provided by a driveway located on 35th Street. Since the only site access is through 35th Street, 100 percent of the calculated exiting volumes was assigned to eastbound approach at the Long Beach Boulevard/35th Street intersection. Given the heavy traffic conditions already on Long Beach Boulevard, additional left northbound turning movements could be hazardous, resulting in a potentially significant impact. A Manual on Uniform Traffic Control Devices signal warrant analyses was conducted for the Long Beach Boulevard/35th Street intersection, to determine if traffic volume forecasts are high enough to justify the installation of a traffic signal in opening year 2020. The traffic signal warrants 1 (eight-hour vehicular volume), 2 (four-hour vehicular volume) and 3 (peak hour) are met for opening year 2020 volumes at the Long Beach Boulevard/35th Street intersection. As part of the project features, the applicant will be responsible for the off-site improvement to modify 35th Street intersection from a stop-controlled intersection to a signalized intersection, allowing for an improved LOS during operation.

f) **Less Than Significant Impact** – The project site is currently served by public transportation and bicycle programs. Sidewalks and parkways along Locust Avenue, 35th Street and Long Beach Boulevard would be improved to comply with the City of Long Beach guidelines and standards. The project includes bicycle parking. The project site is located in between two bus stops and served by multiple bus lines, all of which would not be affected by implementation of the project. The project would not affect or conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities.

XVI. Tribal Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in 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:				
g) 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)?	☐	☒	☐	☐
h) 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 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?	☐	☒	☐	☐

Impact Analysis:

The analysis provided in this section is based on the results of the Assembly Bill (AB) 52 consultation process completed in support of the project. Consultation letters and responses are included in Appendix G of this document.

a) **Less than Significant with Mitigation Incorporated** – AB 52 consultation letters were sent to five tribes based on a list provided by the Native American Heritage Commission. The letters were sent via both email and certified mail on July 17, 2018. Copies of the letters are on file with the City of Long Beach Planning Bureau. A response letter was received from Andrew Salas of the Gabrieleno Band of Mission Indians on July 23, 2018. The letter requested consultation under Public Resources Code Section 21080.3.1. The City of Long Beach responded by email on August 6, 13, and 15, 2018 requesting a meeting to initiate consultation. On November 30, 2018, Mr. Salas responded to the City by email and indicated the project site is within the ancestral land of the Gabrieleno Band of Mission Indians - Kizh Nation. Therefore the following mitigation measures would be required to reduce impacts on tribal cultural resources to a level less than significant.

MM TCR-1: Native American Monitoring

Prior to the issuance of any Grading Permit for the project, the City of Long Beach Development Services Department shall ensure that the construction contractor provide access for Native American monitoring during ground-disturbing activities. This provision shall be included on project plans and specifications. The site shall be made accessible to any Native American tribe requesting to be present, provided adequate notice is given to the construction contractor and that a construction safety hazard does not occur. The monitor(s) shall be approved by a local tribal representative and shall be present on-site during the construction phases that involve any ground disturbing activities. The monitor(s) shall possess Hazardous Waste Operations and Emergency Response (HAZWOPER) certification. In addition, the monitor(s) shall be required to provide insurance certificates, including liability insurance, for any archaeological resource(s) encountered during grading and excavation activities pertinent to the provisions outlined in the CEQA, California Public Resources Code Division 13, Section 21083.2 (a) through (k). Neither the City of Long Beach, project applicant, nor construction contractor shall be financially

obligated for any monitoring activities. If evidence of any tribal cultural resources is found during ground-disturbing activities, the monitor(s) shall have the capacity to halt construction in the immediate vicinity of the find, in order to recover and/or determine the appropriate plan of recovery for the resource. The recovery process shall not unreasonably delay the construction process. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archaeological resources.

MM TCR-2: Recovery Procedures

All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and Native American monitor. If the resources are Native American in origin, the tribe shall coordinate with the landowner regarding treatment and curation of these resources. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) shall be the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

b) **Less than Significant with Mitigation Incorporated** – See XVI. Tribal Cultural Resources, Environmental Issue Area: a).

XVII. Utilities and Service Systems

Environmental Issue Area:	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?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Impact Analysis:

Primarily, the Los Angeles County Sanitation District, Joint Water Pollution Control Plant receives the City's wastewater. Secondarily, the Long Beach Water Reclamation Plant of the Sanitation Districts of Los Angeles County also receives the City's wastewater. The Joint Water Pollution Control Plant provides advanced primary and partial secondary treatment for 260 million gallons of wastewater per day (mgd), with a permitted capacity for 400 mgd of wastewater (Sanitation Districts of Los Angeles County 2016). The Long Beach Water Reclamation Plant provides primary, secondary, and tertiary treatment for 25 mgd of wastewater (Sanitation Districts of Los Angeles County 2016).

Generation rates based on the project uses is based on wastewater generation rates developed by the Sanitation Districts of Los Angeles County (2006). As shown in Table 20, the project would generate an estimated net total of 5,715 gallons of wastewater per day (gpd).

Table 20. Generation Rates

Land Use	Quantity	Generation Factor	Amount (gpd)*
Office Building	28,578	200 gal/1,000 sf	5,715

Source: Sanitation Districts of Los Angeles County
Note:
**gpd = gallons per day*
Parking lot uses are not included as a facility that would generate wastewater.

a) **Less Than Significant Impact** – As described above, the projects contribution to the wastewater capacity would be less than 0.1 percent. The increase associated with the percent of the available daily capacity, which would not cause the wastewater treatment limits to be exceeded.

b) **Less Than Significant Impact** – See XVII. Utilities and Service Systems, Environmental Issue Area a).

c) **Less Than Significant Impact** – As discussed in Section IX. Hydrology and Water Quality, the project would comply with State and Local storm water regulations and would not increase runoff, requiring new or expanded stormwater facilities.

d) **Less Than Significant Impact** – According to the City of Long Beach's 2015 Urban Water Management Plan, the total citywide water demand for 2015 was 55,206 acre feet and will increase by 3,900 acre feet in 2040. The City of Long Beach's 2015 Urban Water Management Plan identifies water supply as adequate to meet the needs of planned development in the City. The projects incremental contribution to the future demand would not result in the need for new sources of water supply.

e) **Less Than Significant Impact** – See XVII, Utilities and Service Systems, Environmental Issue Area a).

f) **Less Than Significant Impact** – The project involves construction of an office building. Approximately 120 individuals were assumed to be employed in the building. CalRecycle maintains a waste characterization list of waste generation rates. The most recent information for employee disposal rates indicates a waste generation rate of 11.4 pounds of waste per employee per day (CalRecycle 2016). Based on this rate, the 120 employees would generate approximately 1,368 pounds of solid waste per day. This increase would be within the capacity of Scholl Canyon Landfill, which currently receives 1,400 tons per day, with 2,000 tons per day of capacity available (City of Glendale 2014; FEMA 2008). Based on the disposal capacity of landfills serving the project site, this incremental increase in solid waste generation would not affect the availability of solid waste disposal capacity.

g) **No Impact** – Construction debris would be generated and disposed of in accordance with all federal, state and local requirements for solid waste disposal.

XVIII. Mandatory Findings of Significance

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) 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)?	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact Analysis:

a) **Less Than Significant with Mitigation Incorporated** – As discussed in Section IV, Biological Resources, the project site is currently disturbed and located in an urban area. There is no native vegetation on the project site and no open body of water that serves as a natural habitat in which fish could exist. The non-native ornamental vegetation provides suitable nesting habitat for avian species protected by the Migratory Bird Species Act. Direct disturbance of an active nest would be significant. With implementation of MM BIO-1, potential significant impacts would be reduced to a level less than significant and fish or wildlife species would not drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. The project site does not provide suitable habitat for any other candidate, sensitive, or special-status species.

Additionally, as discussed in V. Cultural Resources ground disturbance for the project would occur only in areas that have already been heavily disturbed by prior development and land use activities. Archival research indicates that the project area housed oil wells as part of the Long Beach Oil Field during the first half of the twentieth century. As recently as 2016, the project site was occupied by several commercial structures, oil derricks, above-ground storage tanks, and a single-family residence. Since 2016, however, all of these have been removed. The inadvertent discovery of cultural materials or human remains during project-related ground-

disturbing activities could result in significant impacts if not properly managed. Implementation of MM CULT-1 and CULT-2 are proposed to reduce potential impacts to a less than significant level. Additionally, MM TCR-1 and MM TCR-2 would be implemented to reduce impacts on tribal cultural resources that may present in the project site. With the implementation of the mitigation measures, the project is not anticipated to eliminate important examples of the major periods of California history or prehistory.

b) **Less Than Significant Impact** – The project site is currently disturbed and is located in an urban area of the City of Long Beach. The proposed project would rely on and can be accommodated by the existing road system, public parks, public services, and utilities. As discussed in XVIII Mandatory Findings of Significance, Environmental Issue Area a), the proposed project would not result in or contribute to a significant biological or cultural impact. Based on the project description and the preceding analysis, impacts related to the proposed project are less than significant or can be reduced to less than significant levels with incorporation of mitigation measures. Therefore, the proposed project's contribution to any significant cumulative impacts would be less than cumulatively considerable.

c) **Less Than Significant with Mitigation Incorporated** – The project site is currently vacant located in an urbanized area. The proposed project involves the construction of a 102,848 sf office building and separate parking structure. The proposed project would require a zoning change, zoning code amendment. The proposed project would result in less than significant impacts with respect to air quality and GHG emissions with the implementation of MM AQ-1, which would minimize the effects of fugitive dust on nearby receptors. As stated previously, the project would also result in less than significant impacts with respect to biological, archeological, paleontological and tribal cultural resources with implementation of MM BIO-1, MM CULT-1, MM CULT-2, MM TCR-1, and MM TCR-2. Additionally the proposed project would result in less than significant impacts with respect to hazardous materials with implementation of MM HAZ-1 and would reduce impacts from noise with the implementation of MM NOI-1. Based on the project description and the preceding analysis, development of the proposed project would not cause substantial adverse effects to human beings because of all potentially significant impacts of the proposed project would be mitigated to a less than significant level.

Mitigation Monitoring and Reporting Program

Public Resources Code Section 21081.6 (enacted by the passage of AB 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a Responsible Agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the Lead Agency or a Responsible Agency, prepare and submit a proposed reporting or monitoring program.
- The Lead Agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based. A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- Prior to the close of the public review period for a draft EIR or Mitigated Negative Declaration, a Responsible Agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the Lead Agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the Responsible Agency or agency having jurisdiction over natural resources affected by the project, or refer the Lead Agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a Lead Agency by a Responsible Agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources that are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a Responsible Agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the Responsible Agency or agency having jurisdiction over natural resources affected by a project, or the authority of the Lead Agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

Table 21. Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
Air Quality		
MM AQ-1: Fugitive Dust Control. During clearing, grading, earthmoving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the SCAQMD Rule 403. All material excavated or graded shall be sufficiently watered in sufficient quantities to prevent the generation of visible dust plumes. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on-site or off-site shall be securely covered to prevent excessive amounts of dust. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized so as to prevent excessive amounts of dust.	Designee/Construction Contractor	During construction

Table 21. Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
These control techniques shall be indicated in project specifications.		
Biological Resources		
MM BIO-1: Migratory Bird Treaty Act Covered Species. If clearing and grubbing is required during the avian breeding season (February 15–August 15), the applicant shall retain the services of a qualified biologist to conduct a pre-construction nest survey (in suitable areas) for migratory birds within 10 days of construction. Should an active nest of any the Migratory Bird Species Act covered species occur within or adjacent to the project impact area, an appropriate buffer, as determined by a qualified biologist, shall be established around the nest and no construction shall occur within this area until a qualified biologist determines the nest is no longer active or the young have fledged.	City of Long Beach Director of Development Services, or designee/ Construction Contractor	Three (3) days prior to commencement of construction activities/February 15–August 15
Cultural Resources		
MM CULT-1: Inadvertent Discovery of Cultural Materials. If cultural materials (e.g., chipped or ground stone, deposits of marine shell, historic debris, building foundations, or bone) are discovered during ground-disturbing activities, work within 20 meters (66 feet) of the discovery shall be stopped. Per the requirements of CEQA (Title 14 CCR 15064.5 [f]), and the City of Long Beach Planning Bureau, the Planning Bureau shall be notified of the discovery. Work near the archaeological find(s) shall not resume until a professional archaeologist who meets the criteria and qualifications as set forth by the *Secretary of the Interior's Standards and Guidelines* has evaluated the materials and offered recommendations for further action. Any identified cultural resources shall be recorded on Department of Parks and Recreation 523 historic resource recordation forms from the Office of Historic Preservation. If Native American archaeological remains are inadvertently encountered, representatives from local tribes engaged in consultation about the project shall be immediately notified, permitted to observe the findings in the field, and afforded the opportunity to make recommendations for avoiding, minimizing, or mitigating impacts from the proposed development.	City of Long Beach Director of Development Services, or designee	In the event that archaeological resources are discovered during excavation, grading, or construction activities/ prior to commencement of grading activities
MM CULT-2: Inadvertent Discovery of Human Remains. If human remains are discovered during project construction, work within 20 meters (66 feet) of the discovery location, and within any nearby area reasonably suspected to overlie human remains, shall cease (Public Resources Code, Section 7050.5) and the City of Long Beach Planning Bureau shall be notified of the discovery. The Los Angeles County Coroner shall be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws regarding the disposition of Native American burials, which fall within the jurisdiction of the California Native American Heritage Commission (Public Resources Code, Section 5097). In this case, the coroner will contact the California Native American Heritage Commission. The	City of Long Beach Director of Development Services, or designee	Prior to the commencement of ground-disturbing activities /In the event that human remains are encountered on the project site

Table 21. Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
descendants or most likely descendants of the deceased will be contacted, and work shall not resume until they have made a recommendation to the landowner or person responsible for excavation work with direction regarding appropriate means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.		
Hazards and Hazardous Materials		
MM HAZ-1. Soil Management Plan. Prior to construction, a General Construction Soil Management Plan shall be prepared that includes general provisions for how soils will be managed on site for the duration of construction. General soil management controls to be implemented by the contractor and the following topics shall be addressed within the Soil Management Plan: • General worker health and safety procedures • Encountering Potentially Impacted (Contaminated) Soil • Disposal of Potentially Impacted Soil • Dust control • Management of soil stockpiles • Traffic control • Stormwater erosion control using best management practices	City of Long Beach Director of Development Services, or designee/ Construction Contractor	Prior to commencement of construction activities
Hydrology and Water Quality		
MM HWQ-1: National Pollutant Discharge Elimination System **Compliance.** The contractor shall comply with Chapter 18.95 the Long Beach Municipal Code (LBMC), the National Pollutant Discharge Elimination System as part of Section 402 of the Clean Water Act and Standard Urban Stormwater Mitigation Plan regulations. Provisions for construction-related erosion and sediment control BMPs shall be incorporated within the construction plans and specifications. Because the project would result in increased impervious surface area, the project is subject to compliance with the Low Impact Development (LID) Ordinance (Section 18.74.040 LBMC) and LID BMP Design Manual (Long Beach Development Services 2013). Section 18.74.040 of the LBMC, which requires runoff to be infiltrated, captured and reused, evapotranspired, and/or treated on-site through stormwater BMPs listed in the LID Best Management Practices Manual. The project is designed to meet these requirements, reducing potential water quality impacts during operation of the project. The project would not result in a long-term change in hydrology or water quality.	City of Long Beach Director of Development Services, or designee/ Construction Contractor	Prior to commencement of construction activities
Noise		
MM NOI-1: City Noise Construction Compliance. Construction shall be limited to the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and Saturdays, between 9:00	City of Long Beach, its designee, or its contractor	Prior to issuance of building permits/during construction activities/

Table 21. Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
a.m. and 6:00 p.m., in accordance with City standards. No construction activities shall occur outside of these hours or on Sundays and federal holidays.		during all project area excavation and on-site grading
Transportation/Traffic		
MM TR-1: Long Beach Boulevard/Wardlow Avenue Left Turn Lane. The applicant shall add a second northbound left-turn lane along Long Beach Boulevard. Due to two northbound left turn lanes, the existing traffic signal shall also be modified from protected plus permitted to protected-only at the northbound approach.	City of Long Beach Director of Public Works, or designee	Prior to issuance of a certificate of occupancy
Tribal Cultural Resources		
MM TCR-1: Native American Monitoring. Prior to the issuance of any Grading Permit for the project, the City of Long Beach Development Services Department shall ensure that the construction contractor provide access for Native American monitoring during ground-disturbing activities. This provision shall be included on project plans and specifications. The site shall be made accessible to any Native American tribe requesting to be present, provided adequate notice is given to the construction contractor and that a construction safety hazard does not occur. The monitor(s) shall be approved by a local tribal representative and shall be present on-site during the construction phases that involve any ground disturbing activities. The monitor(s) shall possess Hazardous Waste Operations and Emergency Response (HAZWOPER) certification. In addition, the monitor(s) shall be required to provide insurance certificates, including liability insurance, for any archaeological resource(s) encountered during grading and excavation activities pertinent to the provisions outlined in the CEQA, California Public Resources Code Division 13, Section 21083.2 (a) through (k). Neither the City of Long Beach, project applicant, nor construction contractor shall be financially obligated for any monitoring activities. If evidence of any tribal cultural resources is found during ground-disturbing activities, the monitor(s) shall have the capacity to halt construction in the immediate vicinity of the find, in order to recover and/or determine the appropriate plan of recovery for the resource. The recovery process shall not unreasonably delay the construction process. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archaeological resources.	City of Long Beach Director of Development Services Department, or designee	Prior to commencement of any ground-disturbing activities/throughout ground-disturbing activities
MM TCR-2: Recovery Procedures. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and Native American monitor. If the resources are Native American in origin, the tribe shall coordinate with the landowner regarding treatment and curation of these resources. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e.,	City of Long Beach Director of Development Services Department, or designee	In the event that Tribal cultural resources are discovered during excavation, grading, or construction activities

Table 21. Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
avoidance) shall be the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.		

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References

888-5 Partners, LLC. 2018. City Application: Site Plan.

Addicott, W. O. 1964. Pleistocene Invertebrates from the Dume Terrace, Western Santa Monica Mountains, California. Bulletin of the Southern California Academy of Sciences 63(3):141-150.

California Geological Survey (CGS, formerly CDMG). 1998. Seismic Hazard Zone Report.

California Department of Conservation. 2016. Farmland Mapping and Monitoring Program. Website: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/ora16.pdf (Accessed December 2018)

_____. 2017. "Williamson Act/Land Conservation Act." Website: http://www.conservation.ca.gov/dlrp/lca (Accessed July 2018)

_____. 2018. Well Finder. Website: https://www.conservation.ca.gov/dog/Pages/WellFinder.aspx (Accessed December 2018)

California Department of Resources Recycling and Recovery (CalRecycle). 2016. California's 2016 Per Capita Disposal Rate Estimate. Website: https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/mostrecent (Accessed August 2018)

California Department of Transportation (Caltrans). 2002. Transportation Related Earthborne Vibrations. Technical Advisory. Website: http://www.dot.ca.gov/hq/env/noise/pub/TRANSPORTATION_RELATED_EARTHBORNE_VIBRATIONS.pdf (Accessed August 2018)

_____. 2018a. California Scenic Highway Mapping System, Orange County. Website: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm (Accessed December 2018)

_____. 2018b. "Paleontology." Standard Environmental Reference, Environmental Handbook, Volume 1, Chapter 8. Website: http://www.dot.ca.gov/ser/vol1/sec3/physical/Ch08Paleo/chap08paleo.htm (Accessed December 2018)

City of Glendale. 2014. Draft Environmental Impact Report for the Scholl Canyon Landfill Expansion, Volume 1 of 2. March. Prepared by Sanitation Districts of Los Angeles County, Whittier.

City of Long Beach, Long Beach Planning Department (City of Long Beach). 1973. Long Beach General Plan Program, Conservation element. Website: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=4092 (Accessed August 2018)

_____. 1975 (Reprint 2004). Long Beach General Plan Program, Public Safety Element. Website: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=2545 (Accessed August 2018)

_____. 1975. City of Long Beach. General Plan Program, Scenic Routes Element. Website: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=5920 (Accessed December 2018)

_____. 1980. Long Beach General Plan Program, Local Coastal Program element. Website: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3795 (Accessed August 2018)

_____. 2018. City of Long Beach Zoning. Website: https://www.arcgis.com/home/webmap/viewer.html?layers=4c54ad877a704fab9add29b4bd07bbff (Accessed December 2018)

DeLong, James H. 1939. The Paleontology and Stratigraphy of the Pleistocene at Signal Hill, California. Master's thesis, California Institute of Technology. Website: http://resolver.caltech.edu/CaltechTHESIS:03082010-073543309 (Accessed August 2018)

Division of Mine Reclamation. 2016. Mines Online. Website: http://maps.conservation.ca.gov/mol/index.html (Accessed December 2018)

Federal Emergency Management Agency (FEMA). 2008. Map No. 06037C190F. Date 9/26/2008. Website: https://www.lacsd.org/solidwaste/swfacilities/default.asp. (Accessed August 2018)

_____. 2018. FEMA Flood Map Service Center. Website: https://msc.fema.gov/portal/home (Accessed December 2018)

Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment Guidelines. May 2006.

HDR. 2018a. Draft Air Quality and Greenhouse Gas Technical Memorandum for Laserfiche Office Park. City of Long Beach. December.

_____. 2018b. Draft Noise and Vibration Technical Memorandum for Laserfiche Office Park. City of Long Beach. December.

Iteris. 2018. Laserfiche Office Project Traffic Impact Analysis Draft Report. City of Long Beach. November.

Kohler, S. L. 2010. *Update of Mineral Land Classification for Portland Cement Concrete Grade Aggregate in the San Gabriel Valley Production-Consumption Region*: California Geological Survey Special Report 209

Long Beach Development Services. 2013. Low Impact Development (LID) Best Management Practices (BMP). Website: http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3855 (Accessed December 2018)

Los Angeles County Department of Regional Planning. 2003. Long Beach Airport: Airport Influence Area. Website: http://planning.lacounty.gov/assets/upl/project/aluc_airport-long-beach.pdf (Accessed July 2018)

Sanitation Districts of Los Angeles County. 2016. Service Area. Website: https://www.lacsd.org/aboutus/gis/default.asp (Accessed August 2018)

Saucedo, George J., H. Gary Greene, Michael P. Kennedy, and Stephen P. Bezore. 2016. Geologic Map of the Long Beach 30' x 60' Quadrangle, California. Version 2.0. California Geological Survey, California Department of Conservation.

SCS Engineers. 2017a. Phase I Environmental Site Assessment, Four Parcels, Southeast Corner of East 35th Street and Locust Avenue, Long Beach, California 90807, Assessor’s Parcel Numbers (7141-004-028, -029, -030, and -031). September.

_____. 2017b. Phase I Environmental Site Assessment, Two Parcels at 3445 Long Beach Boulevard, Long Beach, California 90807, Assessor's Parcel Numbers (7141-004-019 and -020). May.

_____. 2017c. Phase I Environmental Site Assessment, 3455 and 3459 Long Beach Boulevard, Long Beach, California 90807, Assessor's Parcel Numbers (7141-004-033 and -034). February.

_____. 2017d. Phase II Site Investigation Report, Four Parcels, Southeast Corner of East 35th Street and Locust Avenue, Long Beach, California 90807, Assessor's Parcel Numbers (7141-004-028, -029, -030, and -031). October.

_____. 2017e. Phase II Site Investigation Report, 3455 and 3459 Long Beach Boulevard, Long Beach, California 90807, Assessor's Parcel Numbers (7141-004-033 and -034). March.

_____. 2017b. Phase II Site Investigation Report, Two Parcels at 3445 Long Beach Boulevard, Long Beach, California 90807, Assessor's Parcel Numbers (7141-004-019 and -020). July.

Smith, Brooks. 2013. Paleontological Resources Assessment, California State University Long Beach Foundation Project. Prepared by LSA Associates for the City of Long Beach.

South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook.

_____. 2008. Final Localized Significance Threshold Methodology. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf (Accessed August 2018)

_____. 2016. Final 2016 Air Quality Management Plan. Website: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf (Accessed August 2018)

United States Environmental Protection Agency (EPA). 1978. *Protective Noise Levels: Condensed Version of EPA Levels Document*. Accessed September 2018

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Appendix A – Laserfiche Site Plan Review

Appendix B – Air Quality/Greenhouse Gas Technical Memorandum

Appendix C – Phase I Environmental Site Assessment Report

Appendix D – Phase II Environmental Site Assessment Report

Appendix E – Noise Technical Memorandum

Appendix F – Traffic Impact Analysis

Appendix G – Assembly Bill 52 Consultation Correspondence

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