DRAFT
Initial Study/Mitigated Negative Declaration
270 E. Central Avenue Distribution Center
City of San Bernardino, San Bernardino County, California

Prepared for:

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Date: February 24, 2016

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SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to identify any potential environmental impacts from implementation of the 270 E. Central Avenue Distribution Center Project in the City of San Bernardino, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of San Bernardino (City) is the Lead Agency in the preparation of this IS/MND and any additional environmental documentation required for the project. The City has discretionary authority over the proposed project. The intended use of this document is to determine the level of environmental analysis required to adequately prepare the project IS/MND and to provide the basis for input from public agencies, organizations, and interested members of the public.

The remainder of this section provides a brief description of the project location and the characteristics of the project. Section 2 includes an environmental checklist giving an overview of the potential impacts that may result from project implementation. Section 3 elaborates on the information contained in the environmental checklist, along with justification for the responses provided in the environmental checklist.

1.2 - Project Location

The proposed 270 E. Central Avenue Distribution Center would be located on approximately 5.24 acres, located on the north side of Central Avenue, 200 feet west of Waterman Avenue, in the City of San Bernardino. On a regional scale, the project site is generally located approximately 1.25 miles east of Interstate 215 (I-215) and 1 mile north of the Santa Ana River (see Exhibit 1).

The project site is located in an urban area characterized by a mixture of light industrial, warehouse facilities, commercial, public, and residential land uses. Three warehouses are located to the north, a single-family residence and church are located to the south; a business park with small commercial, warehousing, and light industrial tenants is located to the east; and commercial businesses are located to the west. The project site's location corresponds to Section 15 of Township 1 South, Range 17 West, of the San Bernardino County, California, Quadrangle 7.5-minute Series Topographical Map published by the United States Geological Survey (USGS); see Exhibit 2 and Exhibit 3. The project site consists of one parcel, Assessor's Parcel Number 0136-401-11-0-000. The project site has an elevation ranging from 1,008 to 1,015 feet above mean sea level.

1.3 - Environmental Setting

The project site is currently vacant and undeveloped. The project site is located in an urban area of Southern California that is characterized by light industry, warehousing, small businesses, churches, and single-family dwellings. Historical use of the site includes some agricultural production. Much of the time, however, the project site lie fallow or was otherwise not used. The northeastern portion

of the project site contained several small buildings that were possibly associated with a farmhouse from the 1930s until the late 1970s.

1.3.1 - Site Background

According to the project's Phase I Environmental Site Assessment (ESA) prepared by Hazard Management Consulting, Inc. in October 215. Aerial photographs covering the site were obtained from Environmental Data Resources, Inc. (EDR). Photographs were available from the period 1938 through 2012. A summary of the observations noted from the aerial photographs is detailed below.

1938–1975

The photographs from this period show the site as undeveloped vacant land. The majority of the site vicinity appeared to be vacant and residential.

1985–2012

The photographs from this period show the site as undeveloped vacant land. The majority of the site vicinity appeared to be commercial.

Land Use and Zoning

The City of San Bernardino General Plan's Land Use Map designates the project site as Industrial Light, while the City's Zoning Map identifies the project site as Industrial Light (0.75 floor-area ratio [FAR]). Table 1 provides a summary of the land uses surrounding the project site, along with the zoning and land use designations associated with each of these neighboring uses.

Table 1: Surrounding Land Uses

Land Use	Zoning	General Plan Land Use Designation
North		
Industrial	Industrial Light (0.75 FAR)	Industrial Light
East		
Strip Mall	Office Industrial Park (1.0 FAR)	Office Industrial Park
South		
Saint Marks Missionary Baptist Church; and Residential	Industrial Light (0.75 FAR)	Industrial Light
West		
Industrial	Industrial Light (0.75 FAR)	Industrial Light
Source: City of San Bernardino, Zoning Map, ND; City of San Bernardino, General Plan Land Use Map, 2016.		

Source: Census 2000 Data, The CaSIL, FCS GIS 2013.

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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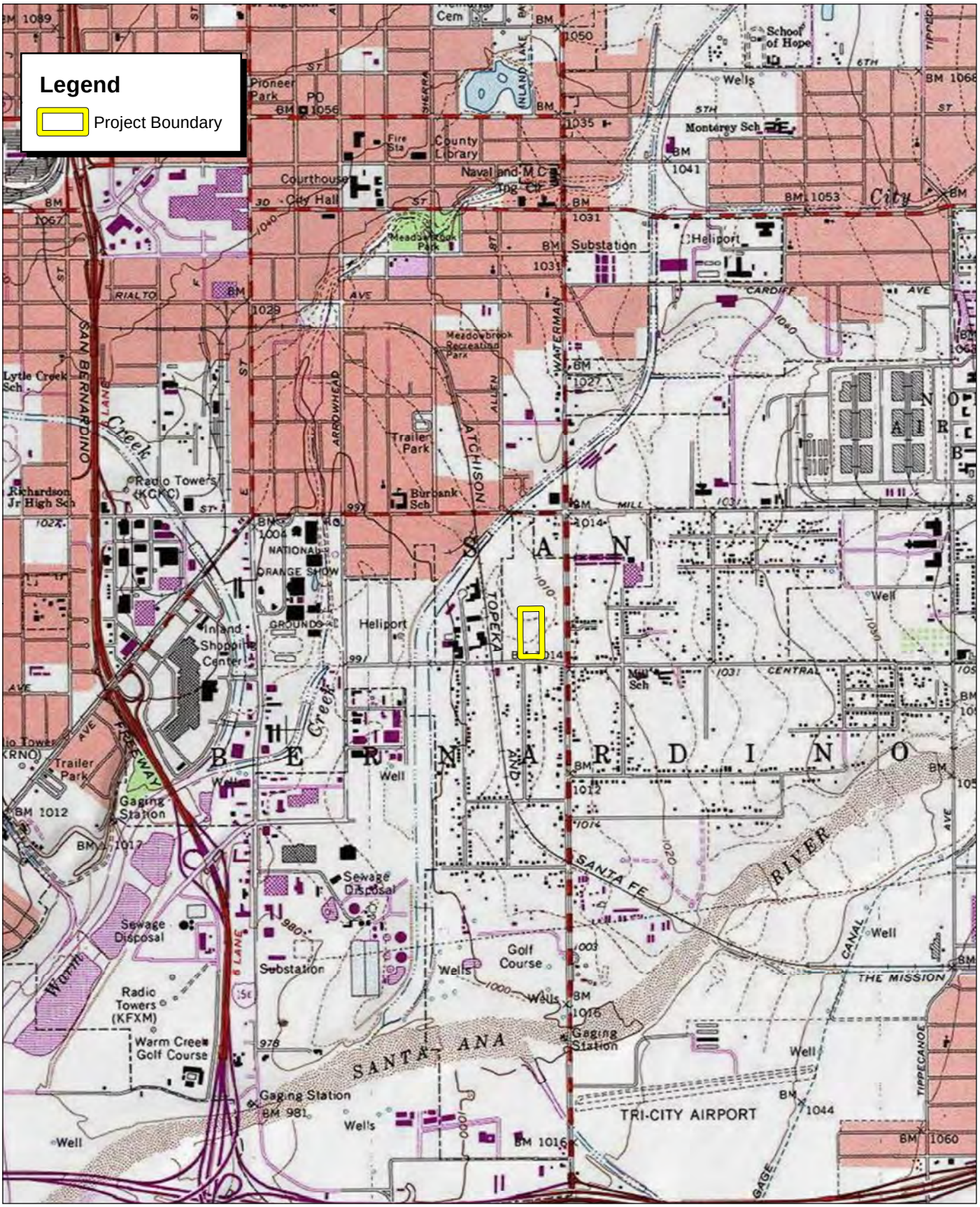

Source: USGS San Bernardino South (1980) 7.5' Quadrangle

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2,000 1,000 0 2,000 Feet

Exhibit 2
Local Vicinity Map
Topographic Base

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Source: ESRI Imagery, 2014

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1,000 500 0 1,000 Feet

Exhibit 3
Local Vicinity Map
Aerial Base

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1.4 - Project Description

The project includes the construction and operation of approximately 127,327 net square feet of warehouse use with associated office spaces. The project would consist of one building containing 127,327 square feet of ground-floor warehouse operations and supporting office spaces. Offices would be located at the northeast and northwest corners of the building, totaling 10,000 square feet each and will provide administrative spaces for the principle use, and approximately 40 feet of internal clear height would be provided inside the building (see Exhibit 4).

To facilitate truck and passenger car traffic, the project site would have direct access to Central Avenue. Two driveways connecting to Central Avenue would serve the project. The warehouse building's truck bays (approximately 105 in total) would be oriented to face west and north, away from Central Avenue. Typical daily activities on the project site would include operating forklifts and other lift equipment, driving large tractor-trailers throughout the site, and backing trucks into loading docks.

In addition to the site-specific development, the project would also include the construction of off-site improvements, including requisite water, sewer, and storm drain facilities that will serve the project, and street frontage improvements along Central Avenue. The project will be screened from Central Avenue and surrounding properties by landscaping. Project lighting will consist of building-mounted exterior light fixtures as well as pole lighting along the perimeter of the site. Lighting will designed to provide code required foot-candle levels, and all lighting fixtures will include shielding to prevent light transmittance to adjacent uses.

The project is consistent with the property's current zoning designation of Light Industrial (IL) and with the existing General Plan designation of Industrial; as such, it will not require a conditional use permit, zone change, or general plan amendment.

The project site currently houses a truck parking and solid waste container storage yard, and currently generates truck traffic within the project area during operational hours. The existing truck parking and solid waste container storage yard has been in operation for over 10 years. Implementation of the proposed project will generate a marginal increase in truck traffic over the existing truck parking and solid waste container storage yard. The proposed project's traffic increase will be offset by the existing truck traffic from the solid waste container storage yard

1.5 - Required Discretionary Approvals

The proposed project would require the following discretionary approvals:

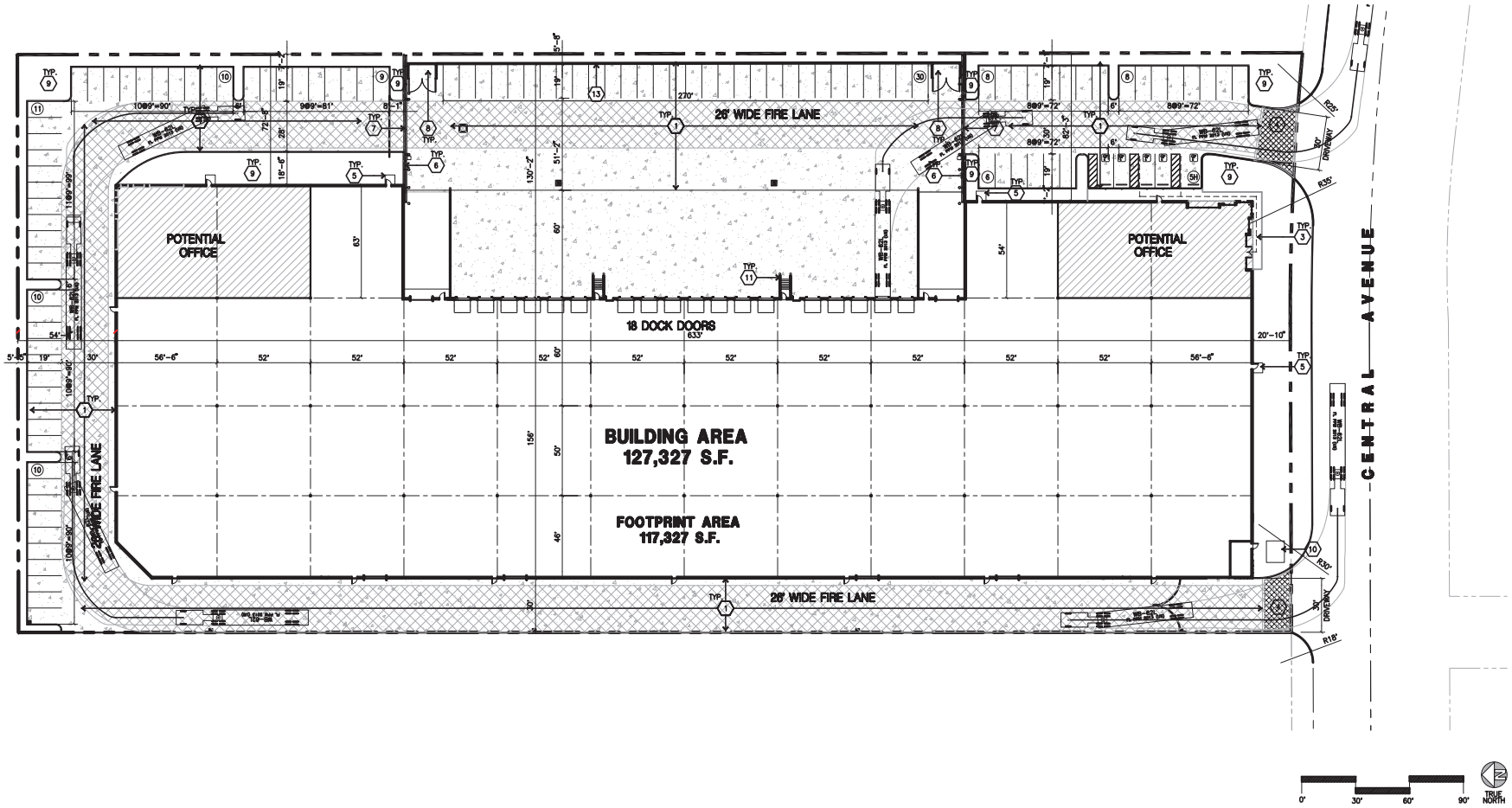
- City Council Approval of the Initial Study/Mitigated Negative Declaration

Other non-discretionary approvals would be required, such as grading and building permits.

1.6 - Intended Uses of this Document

This IS/MND has been prepared to determine the appropriate scope and level of detail required in completing the environmental analysis for the proposed project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be circulated for a minimum of 20 days, during which comments concerning the analysis contained in the IS/MND should be sent to:

Chantal Power, Assistant Planner
City of San Bernardino
Community Development—Planning Division
300 N. "D" St. 3rd Floor
San Bernardino, CA 92418
Phone: 909.384.7272
Email: power_ch@sbcity.org



Source: HPA Architecture, 2016

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Exhibit 4
Site Plan

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SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected					
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.					
☐	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	☐	Utilities/Services Systems	☐	Mandatory Findings of Significance

Environmental Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions 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 is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all 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, nothing further is required.

Date: _____ Signed: _____

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Aesthetics *Would the project:*				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. The General Plan does not designate the project site as a scenic vista corridor; however, the San Bernardino Mountains represent scenic vistas that can be seen throughout the entire San Bernardino Valley. The proposed project will alter the local visual environment; currently, immediate views into and across the vacant site are of adjacent light industrial and commercial facilities. The project is compatible with the existing pattern of light industrial, commercial, and warehouse land uses that dominate the surrounding area. As required, the project will be constructed to meet City codes (for example, so it does not exceed maximum heights), the project will not have an adverse impact on a scenic vista.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?

No impact. The proposed project is not near a state scenic highway, or any other designated scenic highways, and will not substantially damage scenic resources within a state scenic highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than significant impact. The project will produce short-term visual impacts during construction. Views of the site will include heavy construction equipment and machinery preparing the land (e.g., grading) and eventually the construction of the 126,995-square-foot warehouse structure and associated land uses (parking area, lighting standards, etc.). Dust may temporarily diminish views of the area during grading and construction activities.

The development of the proposed project will convert a vacant lot to a warehouse changing the views onto the property. Though the project would alter the existing visual character, the project would be consistent with other development within the vicinity. Additionally, the development is consistent with the General Plan land use designations.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact. The proposed project would result in new light source for the area during nighttime hours, and the windows of the buildings may create a glare during the day that is currently not present on the vacant site. Parking area lighting will be provided for the parking areas. Parking lot lighting is a potential source of glare and sky glow if not properly designed. The City of San Bernardino Development Code includes requirements that will minimize sky glow and reduce unwanted glare.

Additionally, the proposed lighting and the anticipated glare from the building windows would be consistent with the existing lighting and glare of the surrounding area. The proposed project would have a less than significant impact related to new sources of light and glare.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2. Agriculture and Forestry Resources *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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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?	☐	☐	☐	☒

Environmental Evaluation

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. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project;

and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (ARB).

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?

No impact. The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) identifies the project site and the immediate project area as Urban and Built-up Land (California Department of Conservation 2012). The nearest property designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is a parcel designated as Prime Farmland located approximately 3 miles southeast of the project site. Because of the distance between the project site and this property, the proposed project will not impact existing Prime Farmland, Unique Farmland, or Farmland of Local or State Importance, and will not result in conversion of such property to non-agricultural uses. Therefore, no impacts associated with conversion of Important Farmland will occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No impact. The California Department of Conservation's Williamson Act Map identifies the project site and the project area as Non-Williamson Act Land, Urban and Built-up Land. Therefore, no impacts associated with agricultural zoning or Williamson Act contracts would occur.

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))?

No impact. The City of San Bernardino General Plan does not identify the project site or the project area as either forest land or timberland. The nearest forested areas are located more than 8 miles north of the project site. Furthermore, the project site is zoned for industrial uses, and as such, is not zoned for forest land or timberland uses. Therefore, no impacts associated with forest land or timberland zoning would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. The proposed project is located within a developed area, along the intersection of Central Avenue and Waterman Avenue. Neither the project site nor the project vicinity contains any land identified by the City of San Bernardino General Plan as forest land. Therefore, no impacts associated with conversion of forest land will occur.

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?

No impact. The project site is identified as Urban and Built-up Land by the California Department of Conservation FMMP (California Department of Conservation 2012). The nearest property designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) is a parcel designated as Prime Farmland located approximately 3 miles southeast of the project site. Based on this distance and the nature of the proposed project, the project would not result in the conversion of this Prime Farmland property to non-agricultural use. Therefore, no impacts associated with the conversion of Farmland or forest land would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Air Quality *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?	☐	☐	☒	☐

Environmental Evaluation

An Air Quality Technical Report was prepared by Urban Crossroads (January 2016) to evaluate air quality impacts associated with the proposed project. The report is provided in Appendix A; the results and conclusions of the report are summarized herein.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact. The project site is located within the South Coast Air Basin, which is characterized by relatively poor air quality. The South Coast Air Quality Management District (SCAQMD) has jurisdiction over an approximately 10,743-square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the Basin. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

The Final 2012 AQMP was adopted by the AQMD Governing Board on December 7, 2012. The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories.

Similar to the 2007 AQMP, the 2012 AQMP was based on assumptions provided by both ARB and SCAG in the 2014 EMFAC model for the most recent motor vehicle and demographics information, respectively. The air quality levels projected in the 2012 AQMP are based on several assumptions. For example, the 2012 AQMP has assumed that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2012 Regional Transportation Plan (RTP). The 2012 AQMP also has assumed that such development projects will implement strategies to reduce emissions generated during the construction and operational phases of development. The project's consistency with the 2012 AQMP is discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993) (13). These indicators are discussed below.

- Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Construction Impacts

The violations that Consistency Criterion No. 1 refers to are the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). CAAQS and NAAQS violations would occur if localized significance thresholds (LSTs) or regional significance thresholds were exceeded. As evaluated as part of the project analysis (previously presented), the project's localized and regional construction-source emissions will not exceed applicable LSTs and regional thresholds, respectively. Thus, a less than significant impact is expected.

Operational Impacts

The violations to which Consistency Criterion No. 1 refers are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs or regional significance thresholds were exceeded. As evaluated in the Air Quality Analysis, the project's localized and regional construction-source emissions will not exceed applicable LSTs and regional thresholds, respectively. Thus, a less than significant impact is expected.

On the basis of the preceding discussion, the project is consistent with the first criterion.

- Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP based on the years of project buildout phase.

Overview

The 2012 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City's General Plan is considered to be consistent with the AQMP.

Construction Impacts

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities.

Operational Impacts

The City of San Bernardino designates the project site as "Industrial (I)". According to the Development Code, the primary purpose of areas designated "Industrial (I)" is to accommodate enterprises engaged in manufacturing, processing, creating, repairing, renovating, painting, cleaning, or assembling of goods, merchandise, or equipment.

The project is currently zoned as "Light Industrial (LI)," which is intended to retain, enhance, and intensify existing uses and provide for the new development of lighter industrial uses along vehicular, rail, and air transportation routes serving the City.

The project site is consistent with the existing zoning and land use designation. Additionally, project operational emissions will not exceed the applicable daily thresholds established by the SCAQMD. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion

The project would not result in or cause NAAQS or CAAQS violations. The project's proposed land use designation for the subject site is consistent with the development intensities as reflected in the adopted General Plan. The project is therefore considered to be consistent with the AQMP.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant impact. The Air Quality Analysis conducted a localized significance impact analysis for the project's construction and operation activity, and is summarized below.

Background on Localized Significance Threshold Development

The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (LST Methodology) (31). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as LSTs.

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below State standards. In the case of carbon monoxide (CO) and nitrogen dioxide (NO_2), if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} and $PM_{2.5}$; both of which are non-attainment pollutants.

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4. 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 at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the SCAQMD LST Methodology.

Emissions Considered

SCAQMD's Methodology clearly states that "off-site mobile emissions from the project should NOT be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis only emissions included in the California Emissions Estimator Model (CalEEMod™) "on-site" emissions outputs were considered.

Sensitive Receptors

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage

in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors."

The nearest sensitive receptor is the residential community located approximately 95 feet (29 meters) southeast of the project site. As a conservative measure, LSTs for receptors located at 25 meters were utilized.

Applicability of LSTs for the Project

For this project, the appropriate Source Receptor Area (SRA) for the LST is the Central San Bernardino Valley 2 monitoring station (SRA 34). LSTs apply to CO, NO_2, particulate matter less than or equal to (≤) 10 microns (PM_{10}), and particulate matter ≤ 2.5 microns ($PM_{2.5}$). The SCAQMD produced look-up tables for projects less than or equal to 5 acres in area.

In order to determine the appropriate methodology for determining localized impacts that could occur as a result of project-related construction, the following process is undertaken:

- The CalEEMod™ model is utilized to determine the maximum daily on-site emissions that will occur during construction activity.
- The SCAQMD's Fact Sheet for Applying CalEEMod™ to Localized Significance Thresholds is used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod™.
- If the total acreage disturbed is less than or equal to five acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a project has the potential to result in a significant impact (the SCAQMD recommends that projects exceeding the screening look-up tables undergo dispersion modeling to determine actual impacts). The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared with CalEEMod™ outputs.
- If the total acreage disturbed is greater than five acres per day, then the SCAQMD recommends dispersion modeling to be conducted to determine the actual pollutant concentrations for applicable LSTs in the air. In other words, the maximum daily on-site emissions as calculated in CalEEMod™ are modeled via air dispersion modeling to calculate the actual concentration in the air (e.g., parts per million or micrograms per cubic meter) in order to determine if any applicable thresholds are exceeded.

Construction-Source Emissions LST Analysis

The project is modeled after AQMD's Summary of Five Acre Site Example Results By Phase and Equipment and client specifications. Therefore, the maximum daily disturbed-acreage of 5 acres is used in determining the applicability of the SCAQMD's LST look-up tables. This methodology is consistent with recent recommendations made by SCAQMD planning staff.

Impacts Summary

Table 3-6 of the Air Quality Analysis identifies the localized construction impacts at the nearest receptor location in the vicinity of the project. As outlined within Table 3-6 of the Air Quality

Analysis, construction-source emissions will not exceed SCAQMD's LSTs. Therefore, a less than significant impact will occur and no mitigation measures are required.

Localized Significance—Long-Term Operational Activity

Table 3-7 of the Air Quality Analysis shows the calculated emissions for the project's operational activities compared with the applicable LSTs. The LST analysis includes on-site sources only; however, the CalEEMod™ model outputs do not separate on-site and off-site emissions from mobile sources. In an effort to establish a maximum potential impact scenario for analytic purposes, the emissions shown on Table 3-7 of the Air Quality Analysis represent all on-site project-related stationary (area) sources and 5 percent of the project-related mobile sources. Considering that the weighted trip length used in CalEEMod™ for the project is approximately 16.6 miles for passenger cars and 40 miles for trucks, 5 percent of this total would represent an on-site travel distance of approximately 0.83 mile/4,382 feet for each passenger car and approximately 2 miles/10,560 feet for each truck. Thus, the 5 percent assumption is conservative and would tend to overstate the actual impact. Modeling based on these assumptions demonstrates that even within broad encompassing parameters, Project operational-source emissions would not exceed applicable LSTs.

As noted previously, the nearest sensitive receptor land use (where an individual could remain for 24 hours) is located approximately 29 miles southeast of the project site. Accordingly, LSTs for receptors at 25 meters are utilized in this analysis and provide for a "health protective" (conservative) standard of care.

Localized Thresholds for Operational Activity

Applicable localized thresholds from the SCAQMD's mass-rate LST lookup tables for a 5-acre project site are as follows:

- NO_X: 270 pounds per day;
- PM_{10}: 4 pounds per day;
- $PM_{2.5}$: 2 pounds per day; or
- CO: 1,746 pounds per day.

If emissions exceed the LST for a 5-acre site, then additional dispersion modeling needs to be conducted to determine if there is an actual exceedance of the AAQS. Use of the LSTs for a 5-acre site for operational activities is appropriate since this would result in more stringent LSTs, because emissions would occur in a more concentrated area and closer to the nearest sensitive receptor than in reality.

As shown on Table 3-8 of the Air Quality Analysis, operational emissions will not exceed the LST thresholds for the nearest sensitive receptor. Therefore, the project would have a less than significant localized impact during operational activity.

Carbon Monoxide Hot Spot Analysis

As discussed below, the project would not result in potentially adverse CO concentrations or hotspots. Further, detailed modeling of project-specific carbon monoxide (CO) hotspots is not needed to reach this conclusion.

It has long been recognized that adverse localized CO concentrations (hotspots) are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentrations in the air basin have steadily declined, as indicated by historical emissions data presented in Table 2-7 of the Air Quality Analysis.

A CO "hotspot" would occur if an exceedance of the state one-hour standard of 20 ppm or the 8-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, the South Coast Air Basin was designated nonattainment under the California AAQS and National AAQS for CO.

As identified within SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the South Coast Air Basin were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. To establish a more accurate record of baseline CO concentrations affecting the South Coast Air Basin, a CO hotspot analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue.

(Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards, as shown on Table 3-8 of the Air Quality Analysis. Traffic volumes generating the CO concentrations for the analysis are shown on Table 3-9 of the Air Quality Analysis. It can therefore be reasonably concluded that projects (such as the proposed Moreno Valley Logistics Center) that are not subject to the extremes in vehicle volumes and vehicle congestion that was evidenced in the 2003 Los Angeles hot spot analysis would similarly not create or result in CO hot spots.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact. The proposed project considered herein would not produce the volume of traffic required to generate a CO hotspot either in the context of the 2003 Los Angeles hotspot study, or based on representative BAAQMD CO threshold considerations.

Therefore, CO hotspots are not an environmental impact of concern for the proposed project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

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)?

Less than significant impact. The project area is designated as an extreme non-attainment area for ozone and a nonattainment area for PM_{10} and $PM_{2.5}$. The SCAQMD has recognized that there typically is insufficient information to quantitatively evaluate the cumulative contributions of multiple projects because each project applicant has no control over nearby projects. Related projects could contribute to an existing or projected air quality exceedance because the Basin is currently nonattainment for ozone, PM_{10}, and $PM_{2.5}$. The AQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. In this report, the AQMD clearly states (page D-3):

> . . . the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.
>
> Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered cumulatively significant.

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project specific impacts would also not cause a commutatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment. Therefore, the individual project would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the project will not exceed the applicable SCAQMD regional threshold for construction and operational-source emissions. As such, the project will not result in a cumulatively significant impact for construction or operational activity.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact.

Exposure to Criteria Pollutants

The potential impact of project-generated air pollutant emissions at sensitive receptors has also been considered. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors.

Results of the LST analysis indicate that the project will not exceed the SCAQMD LSTs during construction. Therefore, sensitive receptors would not be subject to a significant air quality impact during Project construction.

Results of the LST analysis indicate that the project will not exceed the SCAQMD LSTs during operational activity. The proposed project would not result in a CO hotspot as a result of project-related traffic during ongoing operations, nor would the project result in a significant adverse health impact as discussed in Impact 3 (b). Thus, a less than significant impact to sensitive receptors during operational activity is expected.

Exposure to Toxic Air Contaminants

Construction Activity

Construction activities would include operation of diesel-fueled off-road equipment, resulting in emissions of diesel particulate matter (DPM), a recognized toxic air contaminant (TAC). However, because carcinogenic DPM health risk is estimated using the annual average concentration over long exposure periods (40 to 70 years), estimating carcinogenic health risk for exposure periods less than 9 years is not typical. Construction activity associated with the project would occur over an estimated duration of less than 1 year, and would be less than the 9-year exposure period that would necessitate further evaluation. The most conservative distance to evaluate exposure to sensitive receptors is 25 meters (80 feet). As discussed above, emissions generated during construction of would not exceed the LSTs and, therefore, would not substantially affect nearby receptors. As such, the projects potential health risk impact associated with DPM during construction activity would be less than significant.

Operational Activity

Operational activities would include operation of diesel-fueled trucks resulting in emissions of DPM, a recognized TAC. The ARB published the Air Quality and Land Use Handbook on April 28, 2005 (referred to herein as the ARB Handbook), to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of ARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet

of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

According to the City of San Bernardino Zoning Map, the areas adjacent to the project site to the north, west, and south of the project site are zoned Industrial Light (IL) and the area adjacent east of the project site is zoned Office Industrial Park (OIP). The nearest zoned residential area is located approximately 3,000 feet north of the project site.

Notwithstanding, the nearest sensitive receptors to the project site are located approximately 95 feet southeast of the project site; these sensitive receptors are nonconforming residential uses in an area zoned OIP. As such, for the purposes of this evaluation, the nearest sensitive receptor distance of approximately 95 feet is utilized in determining the potential health risk impacts associated with DPM.

Although there are sensitive receptors in the project vicinity located nearer than the ARB-recommended 1,000-foot buffer distance, the project generates less than 100 trucks per day (per the project's traffic impact analysis it would generate only 93 trucks per day). Based on the ARB guidance document, if the project generates more than 100 trucks per day additional analysis would be warranted. Since the project does not generate more than 100 trucks per day, pursuant to ARB guidance, no additional analysis is necessary and the projects potential health risk impact associated with DPM during operational activity is presumed to be less than significant.

e) Create objectionable odors affecting a substantial number of people?

Less than significant impact. The potential for the project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The project does not contain land uses typically associated with emitting objectionable odors. Consequently, with buildout of the proposed project, impacts to the landfill will not occur under existing condition, thus eliminating any existing potential odors. Potential odor sources associated with the proposed project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical

solid waste (refuse) associated with the proposed project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed project construction and operations would be less than significant and no mitigation is required.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Biological Resources *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?	☐	☒	☐	☐

Environmental Evaluation

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?

Less than significant with mitigation incorporated. FirstCarbon Solutions (FCS) conduct a biological resources due diligence analysis for the approximate 5.24-acre site located at 270 E. Central Avenue.

The purpose of the Biological Resources Due-Diligence Report is to describe on-site vegetation communities, identify potentially jurisdictional waters of the U.S., and to assess the potential for occurrence of special-status plant and wildlife species within the project. The Biological Resources Due-Diligence Report is located in Appendix B of this IS/MND.

The proposed project is not within a potential habitat for sensitive wildlife, as denoted on Figure NRC-1 of the City General Plan and it is not within a biological resource area as denoted on Figure NRC-2 (SAN 2005). Suitable habitat for raptors and other birds protected by the Migratory Bird Treaty Act (MBTA) occurs within and adjacent to the project. Most native, breeding birds are protected under Section 3503 of the Fish and Game Code (FGC), and raptors specifically are protected under Section 3503.5 of the FGC. Additionally, both Section 3513 of the FGC and the federal MBTA prohibit the killing, possession, or trading of migratory birds. Section 3800 of the FGC prohibits the taking of nongame birds and fully protected species. Most raptors nest in mature, large coniferous or deciduous trees and use twigs and branches as nesting material. Smaller raptors may nest in cavities in anthropogenic structures and trees. The nesting period for raptors generally occurs between February 15 and August 31.

Potential impacts could occur to resident and migratory species during project construction, which would render the project temporarily unsuitable for birds due to the noise, vibrations, and increased activity levels associated with various construction activities. These activities could potentially subject birds to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual birds by displacing them into adjacent territories belonging to other individuals.

Construction activities that occur during the nesting season (generally March 1 to August 31) would disturb nesting sites for birds protected by the MBTA and FGC. No action is necessary if construction occurs during the non-breeding season (generally September 1 through February 14). Therefore, Mitigation Measure BIO-1 is required pursuant to the MBTA and the FGC, for the removal of vegetation or any potential nesting habitat to be conducted outside of the avian nesting season, which generally occurs generally March 1 to August 31.

The project site did not contain any waters jurisdictional to the United States Army Corps of Engineers (USACE). Therefore, no consultation between the USACE and the USFWS is necessary under Section 7 of the Endangered Species Act.

The project site is not anticipated to contain any sensitive species, or habitat for sensitive species, and, therefore, the proposed project would have a less than significant impact on sensitive biological resources.

Mitigation Measures

MM BIO-1 To prevent impacts to MBTA-protected birds and their nests removal of trees shall be limited to only those necessary to construct the proposed project.

- If any tree removal is necessary, then it shall occur outside the nesting season between September 1 and February 14. If trees cannot be removed outside the

nesting season, preconstruction surveys shall be conducted three days prior to tree removal to verify the absence of active nests a maximum of 14 days prior to construction.

- If an active nest is located during pre-construction surveys, USFWS and/or CDFW (as appropriate) shall be notified regarding the status of the nest. Construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or the agencies deem disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100 feet around an active raptor nest and a 50-foot radius around an active migratory bird nest) or alteration of the construction schedule.
- A qualified biologist shall delineate the buffer using Environmentally Sensitive Area fencing, pin flags, and or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

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?

No impact. The proposed project does not contain any riparian habitat. Additionally, no sensitive natural communities are located on the project site.

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?

No impact. No wetlands are located on the project site. Because there are no wetlands on-site, the proposed project will not have a significant impact as it related to federally protected wetlands.

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?

Less than significant impact. The proposed project site is in a highly urbanized area that with the exception of a single residence and a church, the area supports light industrial, commercial, and warehouse facility land uses. Project implementation will alter the site; however, it is not a recognized wildlife corridor, and site development will not impede the movement of fish or wildlife. The project site and the surrounding area are not native wildlife nursery sites and project development will not impede the use of a wildlife nursery site. Because the proposed project will not impede the movement of wildlife or impede the use of a wildlife nursery site, the project will not create a significant impact in respect to this threshold.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No impact. The proposed project site is not within the Biological Resource Management Area as described in the City General Plan, Figure NRC-2 (SAN 2005). In addition, the proposed project is consistent with the current land use designation and zoning, and it is not within a formally established habitat conservation plan or natural communities conservation plan. Therefore, the project will not conflict with an adopted conservation plan.

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?

Less than significant with mitigation incorporated. As previously discussed in Impact 4a), the proposed project is not within a potential habitat for sensitive wildlife, as denoted on Figure NRC-1 of the City General Plan and it is not within a biological resource area as denoted on Figure NRC-2 (SAN 2005). Additionally, the project site has been disked in the past for weed abatement, and only non-native grasses and three laurel sumac trees remain on the project site. There is no local ordinance to preserve the trees; however, the trees may contain suitable habitat for nesting avian species. Therefore, Mitigation Measure BIO-1 is required pursuant to the MBTA and the California Department of Fish and Game Code, for the removal of vegetation or any potential nesting habitat to be conducted outside of the avian nesting season, which generally occurs September 1 through February 14.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
5. Cultural Resources *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?	☐	☒	☐	☐

Environmental Evaluation

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No impact. A cultural resource analysis has been prepared for the project site. Associated appendices to the analysis is located within Appendix C of this IS/MND. On December 14, 2015, a cultural resource records search was conducted by FCS at the South Central Coastal Information Center (SCCIC) for the proposed project. The records search included the project area and a one-mile search radius. It included a review of the National Register of Historic Places (NR), the California Register of Historical Resources (CR), the California Inventory of Historic Resources, the California Historical Landmarks, the California Points of Historical Interest listing, the Historic Property Data File (OHP current computer list, 2015), historic maps, and other pertinent historic data.

The results of the records search indicate that 27 survey reports are on file for the 1-mile search radius, none of which include the project area. In addition, 15 previously recorded cultural resources are on file for the 1-mile search radius, none of which are located within the project area. Of the 15 previously recorded resources, all are historic with the closest, two concrete building pads, being located approximately 500 feet to the northeast of the project area. The results of this records search can be found in confidential Appendix C.

A review of the historic 15-minute USGS maps (San Bernardino 1896, 1943) indicated that in 1896 there was a network of railways surrounding the project area, but that few improved roads or structures were present. By 1943, approximately seven improved roads and 20 independent

structures are represented. There are no features or structures illustrated within the project area on the above referenced historic maps.

A review of historic aerials dating back to 1938 indicated that the project area itself has never been developed, but that it once housed ancillary structures associated with an adjacent historic farmstead. All remnants of those structures, which appear to have been livestock housing sheds, were completely demolished prior to 1980. The project area appears to have been regularly cleared of vegetation and occasionally tilled or lightly graded throughout the proceeding decades.

The following historic sources have been reviewed and the results are listed below:

- The California Point of Historical Interest (2014) of the Office of Historic Preservation, Department of Parks and Recreation: Lists one property within the 1-mile search radius. This resource, the National Orange Show and Events Center (P-36-017818/SPHI-SBR-007), is not within the project area and is located approximately 1,300 feet to the west.
- The California Historical Landmarks (2014) of the Office of Historic Preservation, Department of Parks and Recreation: lists no properties within a mile radius of the project area.
- The California Register of Historical Resources: lists one property within the 1-mile search radius. This resource—the Atchison, Tokepa, & Santa Fe Railroad Bridge (CA-SBR-0103H)—has been determined as potentially eligible for the CR although ineligible for the NR. The resource is not within the project area and is located approximately 3,800 feet to the southeast.
- The National Register of Historic Places: lists no properties within a mile radius of the project area.
- The California Historic Resources Inventory System: lists 15 properties that have been evaluated for historic significance within the 1-mile search radius, none of which are located within the project area.

Project implementation will not affect any previously recorded historic resources. Furthermore, due to the fact that the project area itself has never been developed and only contained historic-age ancillary structures, the project area has been determined to have a low potential to yield historic resources during construction-related ground-disturbing activities.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than significant with mitigation incorporated. See the discussion in Impact 5a. The December 2015 records search concluded that no prehistoric cultural resources were identified within the project or within the 1-mile search radius though the area has been thoroughly documented in previously conducted studies. The results of the pedestrian survey indicated that no previously unrecorded prehistoric resources were observed. Project area photographs detailing the current environmental conditions can be found in Appendix C.

On December 6, 2015, FCS sent a letter to the Native American Heritage Commission (NAHC) in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project area. The response from NAHC, received on December 24, 2015, noted that the record search of the NAHC Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate project area. A list of 12 Native American tribal members who may have additional knowledge of the project area was included with the results. These tribal members were sent letters by mail on January 4, 2016, asking for any additional information they might have concerning the project area. An additional outreach attempt through follow-up emails, phone calls, and additional mailed letters was conducted on January 21, 2016. As of the date of this report, no responses have been received. The NAHC Sacred Lands File search and subsequent tribal outreach correspondence examples can be found in Appendix C.

On January 6, 2016, FCS Archaeologist Coral A. Eginton, MA, RPA, conducted a pedestrian survey of the proposed project area utilizing 10 meter transects and covering the entire site. Ground visibility ranged from 10 percent to 40 percent, due to an abundance of native and non-native grasses as well as noxious weeds. Significant bioturbation due to gopher activity revealed recently disturbed patches of topsoil throughout the project area. Although some modern refuse was observed, no historic or prehistoric resources were identified.

Although the survey results and literature review indicate a low probability of encountering prehistoric resources during construction efforts, the following mitigation measures should be observed to guarantee a less than significant impact to any previously unrecorded prehistoric resources.

MM CUL-1 Should grading at the site expose subsurface archaeological, paleontological, historical remains, work shall halt immediately and the City of San Bernardino shall retain a qualified archaeologist/paleontologist/historian to assess the finding and determine appropriate mitigation. All grading activities within the immediate area of the finding shall cease and diverted elsewhere until appropriate personnel has completed salvage.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant with mitigation incorporated. On December 4, 2015, FCS requested that Dr. Samuel A. McLeod of the Los Angeles Natural History Museum conduct a paleontological literature review and localities database search for the proposed project area. A Vertebrate Paleontology Records Check letter report was received from Dr. McLeod on January 14, 2016 indicating that there are no known fossil localities within the project area, and that shallower ground disturbances within the project area would be unlikely to yield fossilized materials as the entire underlying formation is composed of younger Quaternary Alluvium. The closest vertebrate fossil locality (LACM4540) uncovered from somewhat similar deposits is located far to the southeast on the northeastern side of San Jacinto Valley.

Dr. McLeod concluded that shallower excavations within the project area would be in younger Quaternary Alluvium and would be unlikely to yield fossilized materials, but that deeper excavations

into older deposits may be more paleontologically sensitive. He recommended that any substantial excavations below the uppermost layers be monitored by a qualified paleontologist in order to quickly and professionally recover and inadvertently encountered fossils. Dr. McLeod also suggested that sediment samples be taken sporadically in order to small fossil potential within the general area. A copy of the paleontological letter report can be found in Appendix C.

MM CUL-2 Prior to the start of construction activities that involve subsurface excavation greater than 10 feet in depth, an San Bernardino County Certified Paleontologist acceptable to the Client shall be retained to produce a Mitigation Monitoring Plan or Paleontological Resource Impact Management Plan, as needed, for the project. The mitigation plan shall identify areas of the project site where excavations would occur in excess of 10 feet where on-site monitoring would be required.

MM CUL-3 If subsurface excavation greater than 10 feet in depth is expected, the paleontologist shall attend the pre-grade meeting to discuss the monitoring, collecting and safety procedures for the project and shall provide paleontological monitoring during excavations greater than 10 feet.

MM CUL-4 In the event unknown paleontological resources are encountered during construction operations, the Client shall be notified immediately and all construction operations within the vicinity of the find shall cease until the time the project paleontologist can assess the find to determine its significance and recovery plan.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant with mitigation incorporated. Potential effects on human remains was evaluated through a review of historic maps and aerial photography as well as correspondence with the Native American Heritage Commission. As a review of historic sources indicates a low potential to encounter human remains, and no responses have yet been received from Native American outreach letters expressing knowledge otherwise, the project area has been evaluated to have a low potential to encounter unknown buried human remains. However, the following mitigation measure should be observed to guarantee a less than significant impact to any previously unknown buried human remains resources.

MM CUL-5 In the event of an accidental discovery or recognition of any human remains, work shall immediately halt and the County Coroner and Project Archaeologist must be contacted. California State Health and Safety Code § 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and Public Resources Code (PRC) § 5097.98.

If buried human remains are determined to be Native American, the following actions pursuant to Public Resources Code (PRC) § 5097.98 will take place: the Native American Heritage Commission (NAHC) must be contacted within 24 hours. The NAHC will make a determination of the Most Likely Descendent (MLD). After

this determination is made, the MLD must contact the property owner or representative to confer and arrange treatment of the remains. See PRC § 5097.98 for additional details regarding specific treatment and recourse.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. Geology and Soils *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?	☐	☒	☐	☐
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 Table 18-1-B of the Uniform Building Code (1994), creating substantial risks 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?	☐	☐	☐	☒

Environmental Evaluation

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.

Less than significant impact. A Geotechnical Engineering Investigation Report was prepared for the project site in October 2015 by Southern California Geotechnical, Inc. The report is provided in Appendix D and is summarized in this Initial Study section. The Alquist-Priolo Earthquake Fault Zoning Act (Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Alquist-Priolo (AP) Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet). According to the Geotechnical Engineering Investigation, the project site is not located within an AP Earthquake Fault Zone. According to the report, there are no known active or potentially active faults trending towards or through the site and the potential for damage due to direct fault rupture is considered very remote. The possibility of significant fault rupture on the project site is considered less than significant.

ii) Strong seismic ground shaking?

Less than significant impact. The site is located in an area of high regional seismicity. Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults. The proposed project would be required to be in conformance with the 2013 California Building Code (CBC), city regulations, and other applicable standards. Conformance with standard engineering practices and design criteria would reduce the effects of seismic groundshaking to a less than significant level.

iii) Seismic-related ground failure, including liquefaction?

Less than significant with mitigation incorporated. The Liquefaction generally occurs as a "quicksand" type of ground failure caused by strong groundshaking. The primary factors influencing liquefaction potential include groundwater, soil type, relative density of the sandy soils, confining pressure, and the intensity and duration of groundshaking. The Geotechnical Engineering Investigation's liquefaction evaluation indicated that some of the on-site soils are subject to liquefaction during the design seismic event. The liquefaction analysis indicated total dynamic settlements on the order of 3.13 to around 3.19 inches at two borings conducted at the site. The

liquefaction-induced differential settlements within the building area are expected to be on the order of about 1.5 inches. Assuming that this settlement occurs across a distance of approximately 50 feet, a maximum angular distortion of around 0.0025 inch per inch would result. Standard practice dictates that the proposed building can be supported on a shallow foundation system, with the understanding that some cosmetic distress could occur due to liquefaction. Such distress will be typical of buildings of this type, in this area, in the event of a large earthquake. The report includes recommendations to ensure that soils are appropriate for development. Implementation of Mitigation Measure GEO-1 would reduce potential impacts to a less than significant level.

MM GEO-1 All grading and construction of the project site shall comply with the geotechnical recommendations contained in the Geotechnical Engineering Investigation prepared by Southern California Geotechnical dated October 2015. All recommendations contained in the report shall be incorporated into all final and engineering and grading plans.

iv) Landslides?

No impact. Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. The project site is relatively flat and is not located within an area susceptible to landslides. Therefore, there would be no impact from landslides on the proposed project.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. Grading for the project does have the potential to expose soils that would be subject to erosion by wind and water. However, the City Development Code contains strict erosion control procedures, and the Regional Water Quality Control Board requires the implementation of a variety of Best Management Practices (BMPs) on construction and operation of the project which will minimize potential erosion from the site over the short- and long-term. Therefore, this potential impact would remain less than significant levels.

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?

Less than significant with mitigation incorporated.

On- or off-site landslide

As previously discussed in Impact 6a) iii, the project site does not contain features typically associated with landslides. Additionally, the project site is not located in areas of steep slopes. Therefore, there would be no impact from landslides on the proposed project.

General

The near surface soils consist of artificial fill materials and native alluvial soils. Artificial fill materials extend to depths of 2.5 to around 5 feet at the boring locations. The near-surface fill and alluvium

possess variable strengths and densities and are therefore not considered suitable for support of the proposed structure in their current state. Additionally, based on the results of consolidation/ collapse testing, the undocumented fill soils possess a moderate potential for collapse. Based on these conditions, remedial grading is considered warranted within the proposed building area in order to remove the artificial fill in its entirety and replace the upper portion of the alluvial soils as compacted structural fill. The report includes recommendations to ensure that soils are appropriate for development. Implementation of Mitigation Measure GEO-1 would reduce potential impacts to a less than significant level.

Liquefaction

As discussed in Impact 6 a) iii), the Geotechnical Engineering Investigation's liquefaction evaluation indicated that some of the on-site soils are subject to liquefaction during the design seismic event. Standard practice dictates that the proposed building can be supported on a shallow foundation system, with the understanding that some cosmetic distress could occur due to liquefaction. Such distress will be typical of buildings of this type, in this area, in the event of a large earthquake. The report includes recommendations to ensure that soils are appropriate for development. Implementation of Mitigation Measure GEO-1 would reduce potential impacts to a less than significant level.

Settlement

The recommended remedial grading outlined within the Geotechnical Engineering Investigation will remove the collapsible, variable density, undocumented fill soils and a portion of the near-surface variable strength alluvial soils. These materials will be replaced as compacted structural fill. The native soils that will remain in place below the recommended depth of over-excavation generally possess favorable consolidation characteristics and will not be subject to significant load increases from the foundations of the new structure. Provided that the recommended remedial grading is completed, the post-construction static settlement of the proposed structure is expected to be within tolerable limits. Therefore, implementation of Mitigation Measure GEO-1 will remove the collapsible, variable density, undocumented fill soils and a portion of the near-surface variable strength alluvial soils, ultimately reducing potential impacts to a less than significant level.

Expansion

The results of Geotechnical Engineering Investigation's expansion index testing indicated that the near-surface soils possess a very low expansion potential. Based on these test results, no design considerations related to expansive soils are considered warranted for this site. All imported fill soils should have very low expansive characteristics. No mitigation is required, and impacts would be less than significant.

Soluble Sulfates

The results of the Geotechnical Engineering Investigation's soluble sulfate testing indicated that the selected samples of the on-site soils contain negligible concentrations of soluble sulfates, in accordance with American Concrete Institute (ACI) guidelines. Therefore, specialized concrete mix designs are not considered necessary, with regard to sulfate protection purposes. However, it is

recommended that additional soluble sulfate testing be conducted at the completion of rough grading to verify the soluble sulfate concentrations of the soils which are present at pad grade within the building area. Therefore, implementation of Mitigation Measure GEO-1 will require an additional soluble sulfate testing ducted at the completion of rough grading, ultimately reducing potential impacts to a less than significant level.

Shrinkage/Subsidence

According to the Geotechnical Engineering Investigation, removal and recompaction of the near surface native soils is estimated to result in an average shrinkage of 10 to 15 percent. Minor ground subsidence is expected to occur in the soils below the zone of removal, due to settlement and machinery working. The subsidence is estimated to be approximately 0.1 foot. This estimate may be used for grading in areas that are underlain by native alluvial soils. These estimates are based on previous experience and the subsurface conditions encountered at the boring locations. The actual amount of subsidence is expected to be variable and will be dependent on the type of machinery used, repetitions of use, and dynamic effects, all of which are difficult to assess precisely. However, with implementation of Mitigation Measure GEO-1 potential impacts would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less than significant with mitigation incorporated. The proposed project would be required to be in conformance with the 2013 CBC, city regulations, and other applicable standards. Conformance with standard engineering practices, design criteria and Mitigation Measure GEO-1 would reduce impacts related to expansive soil potential to a less than significant level.

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?

No impact. The proposed project would connect to the City's sewer collection system, which provides service to the surrounding vicinity and would not require an alternative method of wastewater conveyance. Therefore, no impacts associated with septic or alternative wastewater disposal systems would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Greenhouse Gas Emissions *Would the project:*				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

A Greenhouse Gas Technical Report was prepared by Urban Crossroads (January 2016) for the project to addresses greenhouse gas (GHG) emissions. The results and conclusions of the report are summarized herein (Appendix E).

The criteria used to determine the significance of potential project-related greenhouse gas impacts are taken from the Initial Study Checklist in Appendix G of the CEQA Guidelines (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin has not been established by the South Coast Air Quality Management District (SCAQMD) for projects where it is not the lead agency. As an interim threshold based on guidance provided in the California Air Pollution Control Officers Association's CEQA and Climate Change handbook, the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD using this method is 10,000 metric tons carbon dioxide equivalent ($MTCO_2e$) per year for industrial projects.

This threshold is based on the review of 711 CEQA projects. This threshold has also been adopted by the SCAQMD for industrial projects where it is the lead agency. This threshold will be utilized herein to determine if emissions of greenhouse gases from this project will be significant.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant impact. The total amount of project-related GHG emissions when accounting for applicable regulatory developments and the existing land use GHG emissions would total 2,649.28 million $MTCO_2e$ as shown on Table 2. The proposed project will not exceed the SCAQMD's interim threshold of 10,000 $MTCO_2e$ per year.

Table 2: Total Project Greenhouse Gas Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2e
Annual construction-related emissions amortized over 30 years	14.35	3.06E-03	—	14.41
Area	6.18E-03	2.00E-05	—	6.54E-03
Energy	108.85	5.67E-03	1.35E-03	109.38
Mobile Sources (Trucks)	1,748.12	0.01	—	1,748.41
Mobile Sources (Passenger Cars)	595.97	0.03	—	596.52
Waste	24.23	1.43	—	54.31
Water Usage	98.73	0.96	0.02	126.24
Total CO_2e (All Sources)	**2,649.28**			
Source: Urban Crossroads, 2016.				

Therefore, the proposed project would not generate a significant amount of GHG emissions; impacts would be less than significant.

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact. ARB's Scoping Plan identifies strategies to reduce California's greenhouse gas emissions in support of Assembly Bill (AB) 32. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the project, such as energy efficiency. Finally, while some measures are not directly applicable, the project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

1. California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions. Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and

economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.

2. California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
3. Energy Efficiency. Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
4. Renewables Portfolio Standards. Achieve 332 percent renewable energy mix statewide.
5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.
6. Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
9. Million Solar Roofs Program. Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.
10. Medium- and Heavy-Duty Vehicles. Adopt medium- (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010. Future, yet to be determined improvements, includes hybridization of MD and HD trucks.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
12. High Speed Rail. Support implementation of a high speed rail system.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
14. High Global Warming Potential Gases. Adopt measures to reduce high warming global potential gases.
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.

16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million $MTCO_2e$/YR.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Table 3-2 of the Greenhouse Gas Analysis analyzes the project's consistency with the State Scoping Plan. As summarized, the project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories through energy efficiency, water conservation, recycling, and landscaping. Additionally, the project is consistent with or otherwise not in conflict with, the recommended measures and actions listed in the ARB Scoping Plan. The ARB Scoping Plan identifies strategies and measures that development projects can implement in order to achieve the GHG reductions goals set forth in AB 32. Therefore, the proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases; impacts would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
8. Hazards and Hazardous Materials *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 release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter 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 two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. A significant impact may occur if the project would involve the use or disposal of hazardous materials as part of its routine operations, or would have the potential to generate toxic or otherwise hazardous emissions that could adversely affect sensitive receptors.

Construction

Construction of the project would involve the use of those hazardous materials that are typically necessary for construction of commercial developments (paints, building materials, cleaners, fuel for construction equipment, etc.). Therefore, construction of the project would involve routine transport, use, and disposal of these types of hazardous materials throughout the duration of construction activities. However, the transport, use, and disposal of construction-related hazardous materials would occur in conformance with all applicable local, state, and federal regulations governing such activities. For example, the project would be required to comply with standard BMPs set forth by the City and the Regional Water Quality Control Board, which would ensure that wastes generated during the construction process are disposed of properly. Therefore, short-term construction-related impacts would be less than significant.

Operation

Other than typical cleaning solvents used for janitorial purposes, landscaping, and maintenance materials, which could be considered hazardous if used inappropriately, no hazardous materials would be used, transported, or disposed of in conjunction with the routine day-to-day operations of the project. No significant hazards to the public or the environment are anticipated as long as common sense and good housekeeping practices are implemented to ensure the proper handling, storage, and transport of these items. The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, impacts related to transport and disposal of hazardous materials would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. The proposed project is not anticipated to result in a release of hazardous materials into the environment. The proposed warehouse/industrial facility would be expected to use hazardous materials and substances limited to cleaners, paints, solvents; and fertilizers and pesticides for site landscaping. All materials and substances would be subject to applicable health and safety requirements. A less than significant impact would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No impact. No schools are presently located within one-quarter mile of the project site. The closest school site is San Bernardino Valley College, which is located approximately 1.5 miles west of the project site. Any future school developed within the surrounding area will be subject to the oversight of the California Department of Toxic Substances Control (DTSC), as required by state law.

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?

No impact. Hazard Management Consulting, Inc. prepared a Phase I Environmental Site Assessment for the project site (October 2015), conducted a records search using the California DTSC's EnviroStor database. According to the records search, the project site is not identified as a hazardous materials site. Additionally, no such site is located adjacent to the project site or within the general project area. Therefore, no impacts associated with hazardous materials sites would occur.

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

Less than significant impact. The project site is not within an Airport Land Use Plan. However, the project site is located within the San Bernardino International Airport Influence Area. The Federal Aviation Administration (FAA) regulations included in Federal Aviation Regulations Title 14 Part 77 determine restrictions to obstructions and height limitations for structures taller than 200 feet or within 20,000 feet of an airport. The project is located approximately 1.5 miles (8,000 feet) west of the San Bernardino International Airport. Therefore, the project would have to comply with safety requirements established by Title 14 Part 77 where applicable.

Specifically, Federal Aviation Regulations Title 14 Part 77 establishes standards and notification requirements for objects that have the potential to affect navigable airspace. These standards are intended to (1) evaluate the effect of construction or alteration of structure on airport operating procedures; (2) determine if there is a potential hazard to air navigation; and (3) identify measure to enhance safety. The FAA requires notification through the filing of FAA form 7460-1, Notice of Proposed Construction of Alteration, if any of the following criteria are met with regard to a proposed action (Title 14 Part 77.13):

- Any construction or alteration of more than 200 feet in height.

The height of the project site is proposed at 40 feet in height, which is significantly below the 200-foot restriction. Therefore, this criterion does not apply to the project.

- Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:

- 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport with at least one runway more than 3,200 feet in actual length, excluding heliports.
- 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified with its longest runway no more than 3,200 feet in actual length, excluding helicopters.
- 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport.

The height of the project site is proposed at 40 feet in height and is located approximately 8,000 feet west of the San Bernardino International Airport. Therefore, the first two bullet points are not applicable to the project, because it will not exceed the 100-foot and 50-foot criteria. In addition, the third bullet point criterion does not apply to the project, because it is over 8,000 feet from the nearest landing and takeoff area of a heliport.

- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed the standards presented above.

The project does not propose the development of a highway, railroad, or other traverse. Therefore, the project does not meet this criterion.

- When requested by the FAA.

The FAA has not requested criterion for the project. Therefore, the project does not meet this criterion.

- Any construction or alteration located on a public use airport or heliport regardless of height or location

The project is not proposing construction or alteration of a structure located on a public use airport or heliport. Therefore, the project does not meet this criterion.

The proposed project would be consistent with the surrounding area and would not create a safety hazard for people residing or working in the project area. In addition, the project will not result in a safety hazard related to its location in relation to an airport. Thus, impacts to an airport land use plan would be less than significant.

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?

No impact. There are no private airstrips located within the project vicinity. Therefore, no impact associated with private airstrip hazards would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The City of San Bernardino has adopted an Emergency Management Plan to identify evacuation routes, emergency facilities, and city personnel and equipment available to effectively deal with emergency situations. No revisions to the adopted Emergency Management Plan would be required as a result of the proposed project. The project would provide access via Central Avenue, and would contain adequate access and circulation for emergency equipment on-site. Thus, impacts to an emergency response plan would be less than significant.

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?

No impact. The project site is in a developed urban area and it is not adjacent to any wildland areas. The City of San Bernardino General Plan has mapped fire hazard areas (Figure S-9). Within the City, fire hazard areas are located predominately in the foothills of the San Bernardino Mountains. According to the City of San Bernardino Genera Plan Figure S-9, the proposed project site is not located within a fire hazard area. Therefore, the proposed project would not expose people or structures to a risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. Hydrology and Water Quality *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 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 pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Short-Term Construction Impacts

Less than significant impact. A majority of the currently undeveloped project site would be disturbed during grading and other similar construction activities. These short-term activities are of particular concern because they can contribute to erosion and sedimentation via wind and water. Excess sediments in receiving waters, including the Santa Ana River, can contribute to water quality impairments. The Santa Ana River, which is located south of the project site, is included on the Clean Water Act Section 303(d) list of impaired water bodies because of bacteria indicators and pathogens.

Under the State of California's General Permit for Construction Activities, since the project site is greater than one acre, the proposed project would be required to obtain a National Pollutant Discharge Elimination System (NPDES) Permit. To comply with the NPDES Permit, the proposed project would implement BMPs both during and following construction activities. BMPs would reduce the amount of sediments and other pollutants conveyed off-site via surface runoff or windy conditions. In addition, a Stormwater Pollution Prevention Plan (SWPPP) would also be required, which would identify appropriate structural and non-structural BMPs to be implemented during construction activities.

Long-Term Operation Impacts

Less than significant impact. The County of San Bernardino's Storm Water Program Water Quality Management Plan (WQMP) Guidance document (County of San Bernardino 2005) defines the proposed project as a "Category Project." As such, the proposed project is required to develop a Preliminary WQMP. Accordingly, a Preliminary WQMP was prepared for the project and is include in Appendix F. The Preliminary WQMP recommends BMPs and other operational features, both structural and non-structural, which would reduce the quantity of sediments and pollutants conveyed off-site.

To minimize pollutants of concern in stormwater discharges, the Preliminary WQMP includes provisions for site design BMPs, source control BMPs, and structural treatment control BMPs. All planned on-site improvements would reduce the existing amount of surface runoff currently conveyed off-site. On-site drainage patterns would be designed to incorporate landscaped areas to remove contaminants, to incorporate detention and infiltration basin to contain runoff and promote groundwater recharge, and re-direct runoff into local flood control channels to reduce flooding hazards on nearby roadways such as Central Avenue.

The County of San Bernardino's WQMP Guidance document recommends on-site storm drain systems, coupled with infiltration and detention basins, to collect and/or to treat nutrients, trash and debris, oxygen-demanding substances, and oil and grease with a medium to high level of effectiveness. Source control BMPs may also include common area landscape design and efficient

irrigation, velocity dissipation devices, oil/grease separators, inlet trash racks, and catch basin stenciling. Non-structural BMPs may include education for property owners, tenants, and occupants, activity restrictions, common area landscape management, litter control, catch basin inspection, and street sweeping.

According to the Preliminary WQMP prepared for the project, the project will develop an on-site storm drain system, infiltration, and detention basin, and stormwater management features, along with the implementation of the structural and non-structural BMPs to ensure that both the quantity and quality of on-site surface runoff would be deemed acceptable by the County of San Bernardino.

In addition, the proposed project falls under the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB) and, with implementation of those features outlined in the Preliminary WQMP, would meet all Santa Ana RWQCB waste discharge requirements. The proposed project would also comply with all local regulations, including the City of San Bernardino Municipal Code Chapter 13.32, which ensures compliance with San Ana RWQCB discharge requirements, as well as all state and federal regulations associated with wastewater discharge and treatment.

Overall, compliance with all federal, state, and local regulations, including but not limited to those discussed above, would ensure that the proposed project would not violate any water quality standards or waste discharge requirements. Specific BMPs included in the WQMP for the project site would ensure that runoff pollutants will be adequately controlled. Therefore, potential impacts associated with water quality standards and requirements would be less than significant.

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?

Less than significant impact. The project does not propose to use groundwater. Although the project would result in additional impervious surfaces on-site, the project would construct one on-site infiltration basin, located in the east-central area of the site. The bottom of the infiltration system will be approximately 8 feet below the existing site grades and would capture stormwater runoff from the site. In addition, as outlined within the Geotechnical Investigation Report prepared for the project (Appendix D), static groundwater table detected at this site is considered to be present at a depth in excess of approximately 50 feet and perched groundwater was present at depths greater than approximately 32 feet. Consequently, groundwater is not expected to be impacted from grading or foundation construction activities. Therefore, the proposed project would not significantly impact local groundwater recharge. A less than significant impact would occur.

c) Substantially alter the existing drainage pattern of 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?

No impact. The site topography dips gently downward to the west at an estimated gradient of less than 1 percent. There is less than approximately 4 feet of elevation differential across the project site. The project site does not contain any discernable streams, rivers, or other drainage features.

Consequently, the site does not include any streams or rivers, which could be altered by the proposed project.

In addition, by constructing the warehouse building, parking areas, and associated improvements, the proposed project would add impermeable surfaces to a substantial portion of the project site, preventing on-site erosion over a large portion of the site. The remaining pervious portions of the project site, including landscaped areas, would also slow and convey surface runoff while discouraging on-site erosion. Construction of an on-site storm drain system would be required during development of the proposed project. This system would include a combination of storm drains, underground infiltration basin, and other improvements that would contain all surface runoff to the project site. Consequently, the project does not propose to discharge off-site; rather, it would construct a storm drain system to capture all site drainage. Therefore, the proposed project would not cause significant erosion or siltation on- or off-site, and would have a less than significant impact.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less than significant impact. As addressed in Impact 9c), the project would not involve significant changes in the site's drainage patterns and does not involve altering a discernable drainage course. Consequently, implementation of the proposed project is not expected to cause flooding. Since the project does not involve alteration of a discernable watercourse and post-development runoff discharge rates are required not to exceed pre-development rates, the proposed project does not have the potential to alter drainage patterns or increase runoff that would result in flooding. Therefore, the proposed project would not cause flooding, and would have a less than significant impact.

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?

Less than significant impact. The on-site storm drain system and underground infiltration basin outlined within the Preliminary WQMP were designed in accordance to the procedures and methodologies outlined in the San Bernardino County Flood Control District Standard Plans and Detention Basin Design Criteria for San Bernardino County (1987). The proposed on-site storm drain system and underground infiltration basin have been sized to capture and retain the 100-year storm event. No impacts to the capacity of planned stormwater drainage system would occur as a result of the project.

The proposed project would also be required to prepare a SWPPP under the NPDES General Construction Permit to implement BMPs to minimize stormwater runoff during construction. Adherence with the recommendations of the Preliminary WQMP prepared for the project, in addition to the preparation of a SWPPP would reduce possible impacts related to the stormwater drainage system to less than significant.

f) Otherwise substantially degrade water quality?

Less than significant impact. As previously discussed, the proposed project would not violate any water quality standards or waste discharge requirements. Compliance with all of the provision of the NPDES Permit, SWPPP, and the Preliminary WQMP, together with implementation of the recommended BMPs, would ensure that the proposed project would not substantially degrade water quality.

As currently planned, the proposed project should not contain any special or unique characteristics or circumstances that would otherwise result in substantial degradation of water quality. Therefore, potential impacts associated with water quality would be less than significant.

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?

No impact. The project site is covered by Map Number 06071C8684H of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for San Bernardino County, California and Incorporated Areas. According to FEMA Map Number 06071C8684H, the project site is located within Zone X, which identifies areas outside the 0.2 percent annual chance floodplain. According to FEMA's National Flood Insurance Program, Zone X is an area of minimal flood hazard that has been determined to be outside the 500-year flood and is protected by levee from the 100-year flood. In addition, the proposed project does not include residential uses and would not place housing anywhere on the project site. Therefore, the project will not place housing within a 100-year flood hazard area and will not have a related impact.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less than significant impact. As discussed in Impact 9g), the project site is located within Zone X, which identifies areas outside the 0.2 percent annual chance floodplain. According to FEMA's National Flood Insurance Program, Zone X is an area of minimal flood hazard that has been determined to be outside the 500-year flood and is protected by levee from the 100-year flood. Therefore, the project would not impede or redirect flood flows, and impacts would be less than significant.

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?

No impact. According to the City of San Bernardino's General Plan Safety Element, the project site is located within the Seven Oaks Dam Inundation area. The Seven Oaks Dam is located in unincorporated San Bernardino County approximately 10.5 miles to the northeast of the project site. Figure S-2 in the General Plan notes that the inundation shown represents events of an extremely remote nature. The General Plan includes policies to prohibit development within the 100-year flood plan. As discussed in Impact 9g), the project site is located within Zone X, which identifies areas outside the 0.2 percent annual chance floodplain. According to FEMA's National Flood Insurance Program, Zone X is an area of minimal flood hazard that has been determined to be outside the 500-year flood and is protected by levee from the 100-year flood. In addition, the project does not propose any habitable structures.

Adherence to federal, state, and local flood control requirements regarding flooding would reduce the potential impacts to less than significant.

j) Inundation by seiche, tsunami, or mudflow?

No impact. The project site is located approximately 75 miles east of the Pacific Ocean and, as referenced above, is approximately 10.5 miles downstream from the Seven Oaks Dam. There is no risk of exposure to inundation by seiche or tsunami. The project site is relatively flat so the potential for a mudflow is unlikely. Thus, no impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. Land Use and Planning *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?	☐	☒	☐	☐

Environmental Evaluation

Would the project:

a) Physically divide an established community?

Less than significant impact. The surrounding land uses are characterized by light industrial operation, warehouse facilities, commercial businesses, a vacant lot, a church, and one single-family residence. Implementation of the project will not displace or physically divide an established community. All construction activities proposed in association with this project would occur on vacant land. In addition, the project site will not limit access nor otherwise divide the existing individual residence located northeast of the project site. Therefore, implementation of the project would have a less than significant impact on physically dividing 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?

Less than significant impact. The project site is designated for Light Industrial. The immediate surrounding land uses are designated for Light Industrial, Heavy Commercial and Office Industrial Park uses in the City General Plan. The proposed project includes a 127,327-square-foot warehouse facility, parking area, and associated improvements. The subject building will be designed primarily to accommodate distribution-related and complementary office activities, which is consistent with the current General Plan land use designation. The proposed project will not conflict with the land use plan found in the City General Plan, and would not create a significant impact related to land use.

c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?

Less than significant with mitigation incorporated. As previously discussed in Impact 4a), the proposed project is not within a potential habitat for sensitive wildlife, as denoted on Figure NRC-1 of the City General Plan and it is not within a biological resource area as denoted on Figure NRC-2 (SAN 2005). Additionally, the project site has been disked in the past for weed abatement, and only non-native grasses and three laurel sumac trees remain on the project site. There is no local ordinance to preserve the trees; however, the trees may contain suitable habitat for nesting avian species. Therefore, Mitigation Measure BIO-1 is required pursuant to the MBTA and the California Department of Fish and Game Code, for the removal of vegetation or any potential nesting habitat to be conducted outside of the avian nesting season, which generally occurs September 1 through February 14.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Mineral Resources *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?	☐	☐	☐	☒

Environmental Evaluation

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?

No impact. The General Plan designates areas in the City that are within mineral resource zones (MRZ). The project site is located in an area designated as MRZ-1, which is defined as an area where available geologic information indicates no significant mineral deposits or a minimal likelihood of mineral deposits. Development of the project site does not represent a significant loss of mineral resources or a mineral resource zone.

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?

No impact. The project site is not mapped by the City as an area containing mineral resources. Therefore, the proposed project would not result in the loss of availability of a known mineral resource.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Noise *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 two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Evaluation

Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The standard unit of measurement of the loudness of sound is the decibel (dB). The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments, while a change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was derived to relate noise to the sensitivity of humans. The scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Furthermore, the A-weighted sound level is the basis for a number of various sound level metrics, including the day/night sound level (L_{dn}) and the Community Noise Equivalent Level (CNEL), both of which represent how humans are more sensitive to sound at night.[1] In addition, the equivalent continuous sound level (L_{eq}) is the average sound energy of time-varying noise over a sample period and the L_{max} is the maximum instantaneous noise level occurring over a sample period.

Existing Noise Sources

The proposed is located at 270 E. Central Avenue, located on the north side of Central Avenue, 200 feet west of Waterman Avenue, in the City of San Bernardino. The project site is located in an urban area characterized by a mixture of light industrial, warehouse facilities, commercial, public, and residential land uses. Three warehouses are located to the north; a single-family residence and church are located to the south; a business park with small commercial, warehousing, and light industrial tenants is located to the east; and commercial businesses s located to the west.

The existing noise levels on the project site were documented through short-term ambient noise measurements taken on or near the project site in order to determine the existing ambient noise environment in the project vicinity.

The noise measurements were taken on Thursday, December 23, 2015 between 11:00 a.m. and 12:00 p.m. The noise measurement locations are shown in Exhibit 5; and the noise measurement data sheets are provided in Appendix G of this document. The noise monitoring locations were selected to document existing daytime ambient noise levels on the project site and to determine compatibility of the proposed residential land use development with the City's land use compatibility standards. A summary of the results of the noise level measurements is provided below in Table 3.

Table 3: Noise Monitoring Summary

Site Location	Location Description—Primary Noise Sources	dBA L_{eq}	dBA L_{max}	dBA L_{min}
ST-1	Adjacent Central Avenue in front of church land use south of the project site—traffic on Central Avenue	67.8	88.6	44.4
ST-2	Western project property line—traffic on Central Avenue	46.7	62.3	40.9
ST-3	Adjacent to northeast corner of project boundary—cars in parking lot, traffic on Central Avenue	50.3	69.2	43.8
Source: FirstCarbon Solutions, 2014.				

[1] L_{dn} is the 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m. CNEL is the 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 decibels to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m. Source: Harris, Cyril M. 1998. Handbook of Acoustical Measurement and Noise Control.

Regulatory Framework

The City of San Bernardino addresses noise in the Noise Element of the General Plan and in the Noise Control chapter of the Municipal Code. Applicable policies of the Noise Element include policies that prohibit the development of new industrial or commercial uses that would generate noise levels in excess of 65 dBA L_{dn} as measured at any residential, school, health care facilities, or other sensitive land use. Furthermore, the Noise Element requires that appropriate mitigation be incorporated into any new development that increase the ambient noise levels at adjacent noise-sensitive land uses. The Noise Element also includes the State's Land Use Compatibility for Community Noise Exposure standards for new land use development. For example, environments with noise levels of up to 75 dBA L_{dn} are considered "normally acceptable" for new industrial and manufacturing types of land use development.

The noise standards of the Municipal Code prohibits the creation of excessive noise adjacent to any school, court, or library while the same is in use which would unreasonably interfere with the workings of such institutions. The standards also restrict hours of operations to 8:00 a.m. to 8:00 p.m. for loading or unloading activities of any vehicle that causes any impulsive sound, raucous, or unnecessary noise within 1,000 feet of a residence. The noise ordinances also restrict noise from construction activities. For example, the ordinance prohibits the operation or use between the hours of 10:00 p.m. and 8:00 a.m. of any pile driver, steam shovel, pneumatic hammers, derrick, steam or electric hoist, power driven saw, or any other tool or apparatus, the use of which is attended by loud and excessive noise, except with the approval of the City. The noise performance standards further restrict noise-producing operations from any work of construction to the hours of 7:00 a.m. to 8:00 p.m.

Impact Analysis

Would the project result in:

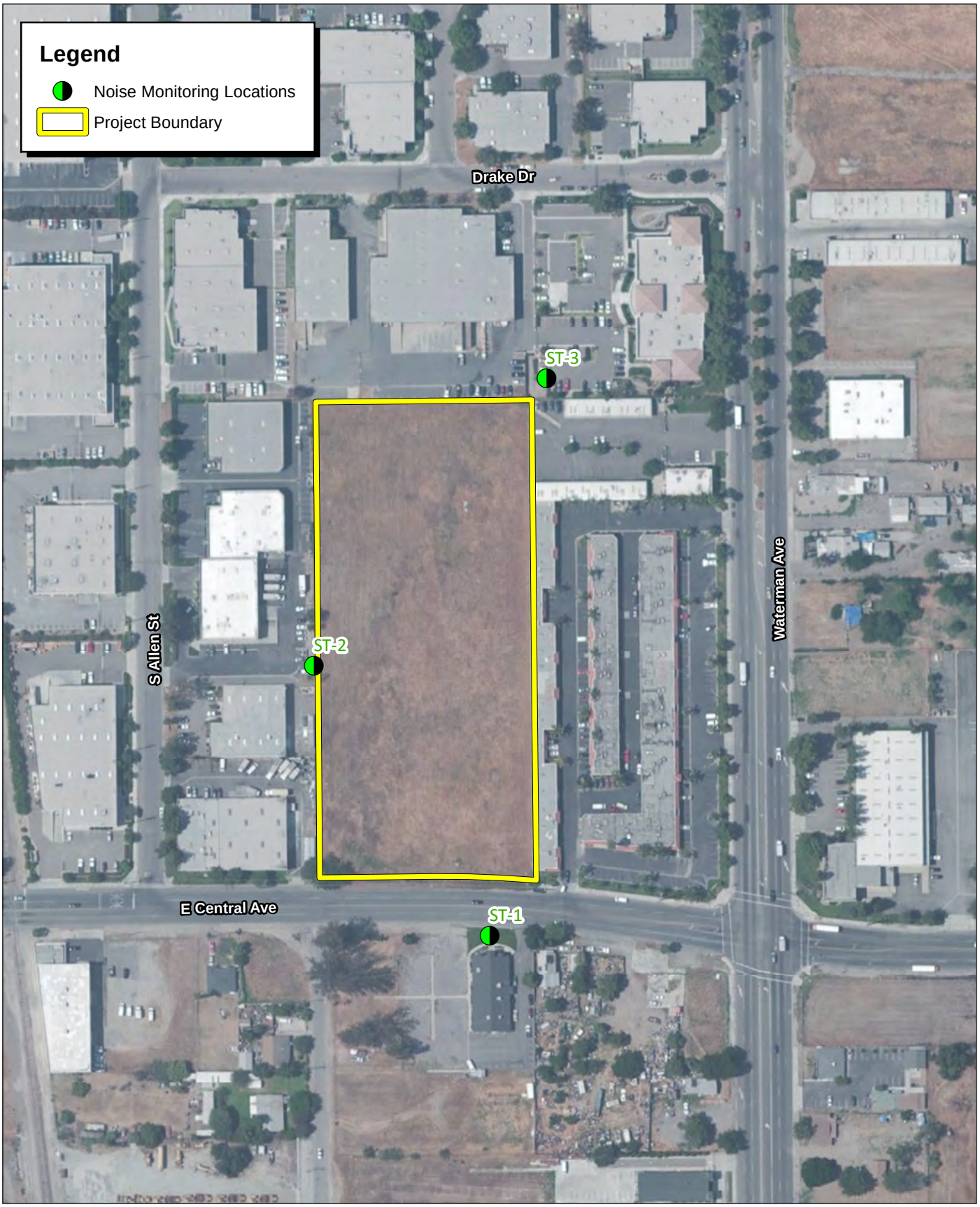
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Noise levels in the project area would be influenced by construction activity in the short term, during the projected construction period. Long-term operational noise impacts of the project would result from project vehicular trips, parking lot activities and delivery loading/unloading activities.

Short-Term Construction Impacts

Less than significant with mitigation incorporated. Noise levels in the project area would be influenced by construction activities and from the ongoing operation of the project.

Two types of short-term noise impacts could occur during the construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the project site. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance, the effect on longer-term (hourly or daily) ambient noise levels would be small. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.



Source: ESRI Imagery, 2014

FirstCarbon SOLUTIONS

200 100 0 200 Feet

Exhibit 5
Noise Monitoring Locations

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The second type of short-term noise impact is related to noise generated during construction on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction related noise ranges to be categorized by work phase. Table 4 lists typical construction equipment noise levels, based on a distance of 50 feet between the equipment and a noise receptor. Because the noisiest construction equipment is earthmoving equipment, the site preparation phase is expected to be the loudest phase of construction. The site preparation construction phase is expected to require the use of front-end loaders, compactors, hydraulic backhoes, and haul trucks. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings. Impact equipment such as pile drivers is not expected to be used during construction of this project.

Table 4: Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Impact Device? (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Pickup Truck	No	55
Pumps	No	77
Air Compressors	No	80
Backhoe	No	80
Front-End Loaders	No	80
Portable Generators	No	82
Dump Truck	No	84
Tractors	No	84
Auger Drill Rig	No	85
Concrete Mixer Truck	No	85
Cranes	No	85
Dozers	No	85
Excavators	No	85
Graders	No	85
Jackhammers	Yes	85
Man Lift	No	85
Paver	No	85
Pneumatic Tools	No	85
Rollers	No	85
Scrapers	No	85

Table 4 (cont.): Typical Construction Equipment Maximum Noise Levels, L_{max}

Type of Equipment	Impact Device? (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Concrete/Industrial Saws	No	90
Impact Pile Driver	Yes	95
Vibratory Pile Driver	No	95

Note:
Impact devices such as jackhammers and pile drivers are examples of construction equipment that create high levels of noise and vibration.
Source: FHWA 2006.

The site preparation phase is expected to use rubber tired dozers, tractors, front-end loaders, and backhoes. The grading phase of the project is expected to require the use of graders, skiploaders, rubber tired dozers, scrapers, tractors, front-end loaders and backhoes. The building construction phase is expected to require the use of cranes, forklifts, portable generators, skiploaders, tractors, front-end loaders, backhoes, and welder torches. The paving phase of construction is expected to require the use of concrete mixer trucks, pavers, rollers, tractors, front-end loaders, and backhoes.

The Federal Highway Administration's (FHWA's) Roadway Construction Noise Model was used to calculate construction noise levels at nearby sensitive receptors surrounding the project site during each phase of construction. The modeled receptor locations represent the closest residential, church, and commercial units to the west, south, east, and north of the project site. The modeled receptor locations are shown in Exhibit 5. The modeled construction phases included the site preparation phase, the grading phase, the building construction phase, and the paving of the internal roadways phase. Construction equipment assumptions are based on the default construction equipment list from the air quality impact analysis for this project. A worst-case scenario was modeled assuming each piece of modeled equipment would operate simultaneously at the nearest reasonable locations to each modeled receptor. Overall average daily project construction noise levels would be much lower than this worst-case scenario as all equipment would not always operate simultaneously and would also be lower as the equipment operates toward the center of the project site further from off-site receptors. A summary of the modeling results are shown in Table 5. The construction noise modeling assumptions and outputs are provided in Appendix G of this report.

Table 5: Construction Noise Model Results Summary (dBA)

Receptor Location	Site Preparation Phase		Grading Phase		Building Construction Phase		Paving Phase	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
R-1: Closest Residence to southwestern border	70.4	70.4	74.0	72.1	71.0	70.0	69.2	68.4
R-2: Closest Church to southern border	74.4	74.5	77.8	76.7	74.4	73.4	72.8	71.5

Table 5 (cont.): Construction Noise Model Results Summary (dBA)

Receptor Location	Site Preparation Phase		Grading Phase		Building Construction Phase		Paving Phase	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
R-3: Closest Residence to southeastern border	73.1	73.1	76.5	75.2	73.3	72.3	71.7	70.6
R-4: Closest Commercial Building to eastern border	72.8	72.9	76.3	74.9	73.1	72.1	71.5	70.4
R-5: Closest Commercial Building to northern border	72.2	72.2	75.7	74.1	72.6	71.6	70.8	69.8
R-6: Closest Commercial Building to the western border	78.0	78.0	81.2	80.9	77.2	76.5	75.9	74.7

Note:
L_{max} is the loudest value of any single piece of equipment as measured at the modeled receptor location.
Source: FirstCarbon Solutions, 2015.

Construction noise levels could range up to 81.2 dBA L_{eq} and 80.9 dBA L_{max} during the loudest phase of construction at the nearest receiving residential land use. These levels could result in sleep disturbance if such activities are not restricted to nighttime hours. The City of San Bernardino's Noise Ordinance outlines the City's standards for noise-producing construction activities. The ordinance noise performance standards restrict noise-producing construction operations to the hours of 7:00 a.m. to 8:00 p.m. Therefore, restricting construction activities to these stated time periods, as well as implementing the best management noise reduction techniques and practices outlined in Mitigation Measure NOI-1, would ensure that potential short-term construction noise impacts on sensitive receptors in the project vicinity would be reduced to less than significant.

MM NOI-1 Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts:

- Noise-generating construction activities, including truck traffic coming to and from the construction site for any purpose, shall be limited to between the hours of 7:00 a.m. and 8:00 p.m.
- The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
- The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited.
- The construction contractor shall utilize "quiet" models of air compressors and other stationary noise sources where technology exists.
- At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as

practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences.

- The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.

Long-Term Operational Impacts

Mobile-Source Noise Impacts

Less than significant impact. Implementation of the project would result in a significant impact if it would generate noise levels in excess of the "normally acceptable" land use compatibility standard of 75 dBA L_{dn} for new industrial land use developments; or if the project would generate nose levels in excess of 65 dBA L_{dn} as measured at any residential, school, health care facilities or other sensitive land use.

The existing ambient noise environment was documented through the short-term ambient noise measurement effort. Measured average ambient noise levels at the project site ranged from 46.7 dBA to 67.8 dBA L_{eq}, with maximum levels of approximately 62.3 dBA to 88.6 dBA L_{max}. There are no major noise sources in the project vicinity that would substantially affect the nighttime noise levels above those measured during the daytime peak noise hours. Nighttime noise levels are expected to be 5 dBA to 10 dBA lower than these midday peak noise hour noise levels. Therefore, the existing noise levels are well below the "normally acceptable" land use compatibility standard of 75 dBA L_{dn} for new industrial land use developments.

The FHWA highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate existing and future traffic noise conditions in the vicinity of the project site. Traffic data used in the model was obtained from the traffic impact analysis report for the project prepared by Kunzman Associates, Inc. (January 18, 2016). The resultant noise levels were weighed and summed over a 24-hour period in order to determine the L_{dn} values. The traffic noise modeling input and output files are included in Appendix G of this document. Table 6 shows a summary of the traffic noise levels for existing conditions and for conditions that would occur under General Plan buildout without and with the project as measured at 50 feet from the centerline of the outermost travel lane.

The modeling results show that traffic noise levels along the modeled roadway segment of E. Central Avenue adjacent to the project site would range up to 60.3 dBA L_{dn} at 50 feet from the centerline of the nearest travel lane under existing plus project traffic conditions. Under General Plan full buildout conditions, traffic noise levels along this segment would range up to 61.2 dBA L_{dn} under with the project conditions. These traffic noise levels are well below the "normally acceptable" land use compatibility standard of 75 dBA L_{dn} for new industrial land use developments. Therefore, project-related traffic noise would result in a less than significant impact on the proposed project. Substantial traffic noise increases potentially impacting off-site receptors is discussed under section 12.c) below.

Table 6: Traffic Noise Model Results Summary

Roadway Segment	Existing No Project (dBA) L_{dn}	Existing Plus Project (dBA) L_{dn}	Increase over Existing No Project (dBA)	General Plan Buildout No Project (dBA) L_{dn}	General Plan Buildout Plus Project (dBA) L_{dn}	Increase over General Plan Buildout No Project (dBA)
Central Avenue—Arrowhead Avenue to West Project West Driveway	62.2	62.4	0.2	62.7	62.8	0.1
Central Avenue—West Project West Driveway to East Project Driveway	60.3	60.3	0.0	60.9	61.2	0.3
Central Avenue—East Project Driveway to Waterman Avenue	60.3	60.3	0.0	60.9	61.2	0.3
Arrowhead Avenue—north of Central Avenue	65.4	65.5	0.1	65.9	65.9	0.0
Arrowhead Avenue—south of Central Avenue	65.0	65.1	0.1	65.4	65.5	0.1
Waterman Avenue—north of Central Avenue	68.8	68.8	0.0	69.2	69.3	0.1
Waterman Avenue—south of Central Avenue	68.7	68.7	0.0	69.3	69.3	0.0

Note:
L_{dn} (dBA) is stated as measured at 50 feet from the centerline of the outermost travel lane.
Source: FirstCarbon Solutions, 2016.

Stationary-Source Noise Impacts

Less than significant impact. Implementation of the project would result in a significant impact if it would generate noise levels in excess of 65 dBA L_{dn} as measured at any residential, school, health care facilities or other sensitive land use. Impacts would also occur if operational noise levels would result in the creation of excessive noise adjacent to any school, court, or library while the same is in use which would unreasonably interfere with the workings of such institutions. Implementation of the project would result in a significant impact if it would result in loading or unloading activities that would occur between 8:00 p.m. and 8:00 a.m. that causes any impulsive sound, raucous, or unnecessary noise within 1,000 feet of a residence.

The project site is bordered to the north, east, and west by commercial and light industrial land uses. To the south of the project site are a few single-family residential land uses and one church land use, along with other commercial and light industrial land uses. The church land use is located approximately 130 feet from the proposed project footprint. The closest residential structure to the project site is located to the southeast, approximately 155 feet from the proposed project footprint.

Typical parking lot activities such as people conversing, doors slamming or vehicles idling generate noise levels of approximately 60 dBA to 70 dBA L_{max} at 50 feet. The closest noise-sensitive land use

to the proposed parking areas is the church land use south of the project site across Central Avenue, located approximately 130 feet from the nearest parking lot area. At this distance, maximum noise levels from parking lot activities could range up to approximately 62 dBA L_{max} at this receptor. These activities would be expected to occur sporadically throughout the day, as visitors and staff arrive and leave the parking lot areas. As a result, noise from these activities, when averaged over an hour, would not result in an exceedance of the City's daytime exterior noise performance threshold of 65 dBA L_{dn}. In addition, although there would be occasional high single-event noise exposure of up to 62 dBA L_{max} from parking lot activities, such activities spread out over the project site parking areas would not result in an increase above existing ambient noise levels as measured at any off-site sensitive land use. (Table 6 shows existing noise levels range from 62.3 dBA to 88.6 dBA L_{max} in the project vicinity.) Therefore, project-related parking lot activities would not result in exposure of persons to noise levels in excess of existing noise levels nor result in noise levels that would exceed established standards.

Typical delivery truck loading/unloading activities can result in noise levels from 75 dBA to 85 dBA L_{max} at 50 feet. The closest noise-sensitive receptors to the proposed loading docks are a church and a single-family residential land use south of the project site, located approximately 340 and 350 feet, respectively, from the nearest proposed loading dock area. At this distance, with a direct line of sight from the residence to the loading dock activity, the maximum noise levels from loading/ unloading activities could range up to approximately 68 dBA L_{max}. However, based on the current project design, the proposed structure would block the line of sight to the project's loading dock areas for land uses south of the project site. This design feature would reduce noise levels from loading/unloading activities by a minimum 8 dBA as measured at the nearest noise sensitive receptors south of the project site, resulting in a maximum noise level of 60 dBA L_{max} from the loudest delivery truck activities as measured at the nearest façade of these closest receptors. This is well below the maximum noise levels 88.6 dBA L_{max} currently experienced at these receptors from traffic noise on Central Avenue, as documented by the noise monitoring effort. Therefore, with the design feature of the proposed structure blocking the line of sight to these nearest sensitive receptors, loading and unloading operations would not result in any impulsive sound, raucous, or unnecessary noise between 8:00 p.m. and 8:00 a.m. as measured at any residential land use in the project vicinity. In addition, when averaged over a 24-hour period, these operational noise levels would not exceed the City's noise performance standard of 65 dBA L_{dn} as measured at any receiving noise sensitive land use in the project vicinity.

At the time of preparation of this analysis, details pertaining to mechanical ventilation systems were not available; therefore, a reference noise level for typical rooftop mechanical ventilation systems was used. Noise levels from typical rooftop mechanical ventilation equipment are anticipated to range up to approximately 60 dBA L_{eq} at a distance of 25 feet. The closest sensitive receptors to the proposed building structure are the church and a single-family residential land uses south of the project site, located approximately 130 and 150 feet, respectively, from the proposed building façade. At these distances, under a worst-case scenario with rooftop mechanical ventilation equipment being located at the closest feasible point to these receptors, noise generated by rooftop mechanical ventilation equipment would attenuate to below 46 dBA L_{eq}. If such equipment operated for a full 24-hour period, the resulting noise level would be approximately 52 dBA L_{dn} as measured at these nearest noise sensitive land uses. Thus, noise levels from rooftop mechanical equipment

operation would be well below the City's noise performance standard of 65 dBA L_{dn} for receiving noise sensitive land uses.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include construction activities such as operating heavy earthmoving equipment. Construction vibration impacts on building structures are generally assessed in terms of peak particle velocity (PPV). Typical vibration source levels from construction equipment are shown in Table 7.

Table 7: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	RMS Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer-small	0.003	58
Jackhammer	0.035	79
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (Mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer-Large	0.089	87
Caisson drilling	0.089	87
Vibratory Roller (small)	0.101	88
Compactor	0.138	90

Table 7 (cont.): Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	RMS Velocity in Decibels (VdB) at 25 Feet
Clam shovel drop	0.202	94
Vibratory Roller (large)	0.210	94
Pile Driver(impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112
Source: Compilation of scientific and academic literature, generated by FTA and FHWA.		

Propagation of vibration through soil can be calculated using the vibration reference equation of

*PPV = PPV ref * (25/D)^n (in/sec)*

Where:

PPV = reference measurement at 25 feet from vibration source
D = distance from equipment to property line
n = vibration attenuation rate through ground

According to Chapter 12 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (2006), an "n" value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.

The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment document (FTA 2006). The FTA guidelines include thresholds for construction vibration impacts for various structural categories as shown in Table 8.

Table 8: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced—Concrete, Steel or Timber (no plaster)	0.5	102
II. Engineered—Concrete and Masonry (no plaster)	0.3	98
III. Non Engineered—Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90
Note: VdB=Velocity in Decibels Source: FTA, 2006.		

Of the variety of equipment used during construction, the vibratory rollers that are anticipated to be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Impact equipment such as pile drivers is not expected to be used during construction of this project. Vibratory rollers produce groundborne vibration levels ranging up to 0.210 inches per second (in/sec) peak particle velocity (PPV) at 25 feet from the operating equipment.

Based on the tentative site plan available at the time of this analysis, the nearest off-site structure to the proposed construction areas where heavy construction equipment would operate would be the commercial structures located east of the project site, approximately 80 feet from the proposed construction footprint where heavy equipment would operate. At this distance groundborne vibration levels could range up to 0.037 PPV from operation of a vibratory roller. This is well below the industry standard vibration damage criteria of 0.3 PPV for engineered concrete and masonry (see Table 8, above) of which these buildings are constructed. Therefore, construction-related groundborne vibration impacts would be considered less than significant.

Upon completion of construction, the project would not include any permanent sources of groundborne vibrations. As such, implementation of the proposed project would not expose persons within the project vicinity to excessive groundborne vibration levels. Therefore, project-related groundborne vibration impacts would be considered less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact. Audible increases in noise levels generally refer to a change of 3 dBA or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. In general, a doubling of sound sources with equal strength is required to result in a 3 dBA increase in noise level. A change of 5 dBA is considered the minimum change considered readily perceptible to the human ear in outdoor environments. Therefore, for purposes of this analysis, an increase of 5 dBA or greater would be considered a substantial permanent increase in ambient noise levels. In addition, the Noise Element requires that appropriate mitigation be incorporated into any new development that increase the ambient noise levels at adjacent noise-sensitive land uses.

The results of the FHWA highway traffic noise prediction model for existing and General Plan buildout year traffic conditions, without and with the project, on roadway segments in the project site vicinity are shown in Table 6. As shown in the modeling results, implementation of the proposed project would generate slight increases in traffic noise levels along modeled roadway segments in the project vicinity above conditions existing without the project. The greatest increase would occur under General Plan Buildout Plus Project conditions along the portions of E. Central Avenue from the project's western entrance, to the eastern entrance, and then to Waterman Avenue. Under with project conditions, this roadway segment would experience an increase of up to 0.3 dBA compared with conditions existing without the project. This is well below what is considered a substantial increase. Thus, existing receptors in the project vicinity would not experience a substantial increase in traffic noise levels with implementation of the proposed project. Therefore, project-related traffic noise level increases would be considered less-than-significant.

The proposed project would include new stationary noise sources, such as truck delivery (loading/unloading) activities, parking lot activities, and typical rooftop mechanical ventilation equipment. As is shown in the Impact 12.a) discussion, these stationary operational noise sources would not result in a substantial increase in noise levels at nearby receptors compared with noise levels existing without the project. Therefore, the contribution of project-related stationary operational noise sources to a significant permanent increase in ambient noise levels would be less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than significant impact. As addressed in Impact 12a), project-related construction activities could result in potential single event noise exposure causing intermittent noise nuisance at the closest noise sensitive land uses surrounding the project site. However, the effect on longer-term (hourly or daily) ambient noise levels would be small and would not be expected to result in a perceptible increase in ambient noise levels at off-site receptors in the project vicinity. In addition, implementation of Mitigation Measure NOI-1, restricting construction activities to these stated time periods as well as implementing the best management noise reduction techniques and practices, would ensure that potential short-term construction noise impacts on sensitive receptors in the project vicinity would be reduced to less than significant. Therefore, since project construction activities would be conducted between 7:00 a.m. and 8:00 p.m., potential short-term construction noise impacts on sensitive receptors in the project vicinity would be reduced to less than significant.

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

Less than significant impact. The San Bernardino International Airport lies approximately 0.75 mile east of the project site. However, the project site lies outside of the 65 dBA CNEL noise contours of this airport, as shown in Figure LU-4 of the General Plan. Therefore, the project would not expose persons to excessive noise levels from aircraft operations. This impact would be less than significant.

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?

No impact. The proposed project site is not in the vicinity of any private or public airstrip, heliport, or helistop and therefore, will not expose people residing/working in the area to excessive aircraft noise levels associated with private airstrip operations.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Population and Housing *Would the project:*				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Environmental Evaluation

Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than significant impact. The project proposes the development of a warehouse center and does not propose residential development. Although development of the facility would create additional job opportunities, it would not substantially induce growth in the area. Roads and infrastructure are already in place to serve the project site, and no additional roadway extensions or infrastructure would be required. As the project does not propose new residences or additional roads, there would be no substantial population growth induced by the proposed project.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No impact. The project site does not currently contain any housing. Therefore, development of the project would not result in the displacement of residential units necessitating the construction of replacement housing elsewhere. No impact would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No impact. As discussed above, development of the project would not result in the displacement of residential units from the project site. The project would not displace substantial numbers of people necessitating the construction of replacement housing. No impact would occur.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Public Services *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☐	☒

Environmental Evaluation

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

a) Fire protection?

Less than significant impact. Fire protection services would be provided to the project site by the City of San Bernardino Fire Department. The Fire Department has 161 Emergency Operations Personnel. The Fire Department staffs 12 fire engine companies, two aerial truck companies, one heavy rescue, five 4-wheel drive brush engines, one hazardous material response rig, and one medic squad housed in 12 stations in the City (City of San Bernardino 2016). The closest fire station to the project site is Station #231 located at 450 E. Vanderbilt Drive, approximately 1 mile southeast of the project site. This station houses one type 1 fire engine and the Fire Department's hazardous materials unit. The San Bernardino Fire Department response times are determined by the type of activity reported. The project site is located within the city limits and within the service area of the Fire Department. Increased development on the project site as proposed by the project may incrementally increase the demand for fire protection services to the project site; consequently, the proposed project is subject to fire suppression development impact fees. However, development will not increase to a substantial level considering the site's location and surrounding area of similar uses. Therefore, impacts would be less than significant.

b) Police protection?

Less than significant impact. Police protection services would be provided by the City of San Bernardino Police Department. The Police Department has 312 sworn officers and 150 non-sworn employees. The closest police station is located at 710 North D Street approximately 1.8 miles northwest of the project site. Although a new warehouse/manufacturing building would be constructed and will operate on the project site, the proposed project would be located in an urbanized area and would not result in a substantial increase in demand on police services. It is not anticipated to increase response times to the project site or vicinity. As required for a development of this type, the proposed project is subject to law enforcement development impact fees as determined by the City of San Bernardino. The project does not propose new or physically altered police protection facilities. Therefore, impacts would be less than significant.

c) Schools?

No impact. The proposed project is a non-residential land use. Implementation of the proposed project would not directly result in an increased population in the City and therefore would not increase the need for the construction of additional school facilities. Furthermore, the San Bernardino City Unified School District requires development impact fees be paid by the project applicant based on the square footage of the proposed project. Upon payment of the required fees, no significant impact to school services or facilities would occur.

d) Parks?

Less than significant impact. The proposed project is a warehouse/manufacturing building and does not include a residential component. The proposed project would not create a significant increased demand or need for the construction of park facilities. As required for a development of this type, the proposed project is subject to parks development impact fees to be paid by the project applicant as determined by the City of San Bernardino. Therefore, impacts would be less than significant.

e) Other public facilities?

No impact. The proposed project would not result in an increase in population within the City; therefore, no impacts to other public facilities would occur with project implementation.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Recreation				
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?	☐	☐	☐	☒

Environmental Evaluation

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?

No impact. The project proposes the development of a warehouse facility. Implementation of the proposed project would not generate an increase in demand on existing public or private parks or other recreational facilities that would result in or increase physical deterioration of the facility. Thus, no impact would result from the proposed project.

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?

No impact. Implementation of the proposed project would not include recreational facilities, nor would it require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. Thus, no impact would result from the proposed project.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Transportation/Traffic *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 a 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?	☐	☐	☒	☒

Environmental Evaluation

A Traffic Impact Analysis (TIA) was prepared by Kunzman Associates (February 4, 2016) to assess the potential traffic impacts of the proposed project. The findings of the TIA is summarized in this Initial Study and is provided as Appendix H.

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?

Less than significant with mitigation incorporated. The traffic study methodology and traffic study area were defined by the City and Kunzman Associates. The traffic study area includes seven intersections as identified below.

- E Arrowhead Avenue (NS) at Central Avenue (EW)—#1
- Arrowhead Avenue (NS) at Orange Show Road (EW)—#2
- West Project Driveway (NS) at Central Avenue (EW)— #3
- East Project Driveway (NS) at Central Avenue (EW)—#4
- Waterman Avenue (NS) at Central Avenue (EW)—#5
- Waterman Avenue (NS) at Orange Show Road (EW)—#6

Morning and evening peak-hour traffic conditions were analyzed for the following scenarios:

- Existing Conditions
- Existing Plus Project Conditions
- Opening Year Base Conditions
- Opening Year Base Plus Other Development Conditions
- Opening Year Base Plus Other Development Plus Project Conditions
- General Plan Buildout Without Project Conditions
- General Plan Buildout With Project Conditions

Intersection operations were evaluated in accordance with City of San Bernardino Traffic Impact Study Guidelines (June 2015).

Significance Criteria

In accordance with the City-approved scoping agreement, the technique used to assess the performance of an intersection is known as the intersection delay method based on the procedures contained in the 2010 Highway Capacity Manual (Transportation Research Board 2010). The methodology compares the volume of traffic using the intersection to the capacity of the intersection to calculate the delay associated with associated with the traffic control at the intersection. The intersection delay is then correlated to a performance measure known as Level of Service based on the following thresholds located within Table 9, below:

Table 9: Level of Service

Level of Service	Intersection Control Delay (Seconds/Vehicle)	
	Signalized	Unsignalized
A	0 to 10.00	0 to 10.00
B	10.00 to 20.00	10.00 to 15.00
C	20.00 to 35.00	15.00 to 25.00
D	35.00 to 55.00	25.00 to 35.00
E	55.00 to 80.00	35.00 to 50.00
F	80.00 and up	50.00 and up
Source: Kunzman Associates 2016.		

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure).

Intersection analysis input parameters for Highway Capacity Manual calculations were used in accordance with Appendix C of the Congestion Management Program for San Bernardino County.

Performance Standards

The City of San Bernardino General Plan Circulation Element has established Level of Service D as the minimum acceptable Level of Service for the City's transportation system. Therefore, any intersection operating at Level of Service E or F will be considered deficient.

Thresholds of Significance

Based on the City of San Bernardino Traffic Impact Study Guidelines (2015), a traffic impact is considered significant if the project related increase in the volume to capacity ratio equals or exceeds the thresholds (see Table 10, below).

Table 10: Volume to Capacity Ratio Thresholds

Significant Impact Threshold for Intersections		
Level of Service	Volume/Capacity	Incremental Increase
C	0.71 to 0.80	0.04 and up
D	0.81 to 0.90	0.02 and up
E/F	0.91 and up	0.01 and up
Source: Kunzman Associates 2016.		

To reduce a potential impact to a less than significant level, feasible mitigation measures should be identified that will maintain the acceptable Level of Service. If a project is forecast to worsen a

facility already operating at Level of Service E or F under pre-project conditions, proposed mitigation measures should maintain operation of the impacted facility at pre-project conditions. Mitigation measures can be in many forms, including addition of lanes, traffic control modification, or demand management measures. If no feasible mitigation measures can be identified for a significantly impacted facility, the impact will remain significant and unavoidable.

Existing Traffic Volumes

Existing peak-hour traffic volumes are based upon morning peak period and evening peak period intersection turning movement counts conducted in June through December 2015 during typical weekday conditions. Typically, there are two peak periods in a weekday: the morning peak period was counted between 7:00 a.m. and 9:00 a.m. and the evening peak period was counted between 4:00 p.m. and 6:00 p.m. The actual peak hour within the peak period is the four consecutive 15-minute periods with the highest total volume when all movements are added together. Thus, the weekday evening peak hour at one intersection may be 4:45 p.m. to 5:45 p.m. if those four consecutive 15-minute periods have the highest combined volume.

The peak-hour traffic counts were converted into Passenger Car Equivalents (PCEs) in accordance with the City of San Bernardino Traffic Impact Study Guidelines (2.0 PCEs for 2-axle trucks, 2.5 PCEs for 3-axle trucks, and 3.0 PCEs for trucks with 4 or more axles). The peak-hour traffic volumes were adjusted to peak 15-minute volumes for analysis purposes using the existing measured peak-hour factors for existing and opening year conditions. A peak-hour factor of 0.95 was applied for long-range (general plan buildout) traffic conditions.

The existing average daily traffic volumes have been factored from peak-hour volumes using the following formula for each intersection leg based on measured daily traffic counts at a sample location in the project vicinity:

PM Peak Hour (Approach Volume + Exit Volume) x 12.8 = Leg Volume.

Traditionally, the peak hour to daily factor is estimated at 11.5 for the San Bernardino Valley region; therefore, this is a conservative estimate and may overestimate the average daily traffic volumes.

Existing Intersection Delay and Levels of Service

The morning and evening peak-hour Levels of Service for existing traffic conditions have been calculated and are shown in Table 11. The study area intersections currently operate within acceptable Levels of Service during the peak hours for existing traffic conditions.

Table 11: Existing Intersection Delay and Level of Service

Intersection	Traffic Control	Peak Hour					
		Morning			Evening		
		Delay	LOS	VOC	Delay	LOS	VOC
Arrowhead Ave(NS)at:							
Central Ave (EW)-#1	TS	13.8	B	0.259	13.7	B	0.363
Orange Show Rd (EW) - #2	TS	30.5	C	0.458	29.8	C	0.700

Table 11 (cont.): Existing Intersection Delay and Level of Service

Intersection	Traffic Control	Peak Hour					
		Morning			Evening		
		Delay	LOS	VOC	Delay	LOS	VOC
Waterman Ave (NS) at:							
Central Ave (EW)-#5	TS	12.5	B	0.351	10.8	B	0.282
Orange Show Rd (EW)-#6	TS	22.8	C	0.498	28.2	C	0.718
Source: Kunzman Associates 2016.							

Trip Generation

Trip generation rates were determined for daily trips, morning peak-hour inbound and outbound trips, and evening peak-hour inbound and outbound trips for the proposed land uses. The number of trips forecast to be generated by the proposed project are determined by multiplying the trip generation rates by the land use quantities. Table 12 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012 and truck percentages obtained from the Truck Trip Generation Study, City of Fontana, August 2003.

The project trip generation has been adjusted for Passenger Car Equivalents (PCEs) in accordance with the City of San Bernardino Traffic Impact Study Guidelines (2.0 PCEs for 2-axle trucks, 2.5 PCEs for 3-axle trucks, and 3.0 PCEs for trucks with 4 or more axles).

Table 12: Existing Intersection Delay and Level of Service

Descriptor	Quantity	Units[1]	Type of Vehicle					
			Passenger Car	2-axle Truck	3-axle Truck	4+ axle Truck	Total Trucks	Total
Land Use: Warehouse	127.327	TSF	79.6%	3.5%	4.6%	12.3%	20.4%	100%
Traffic Generation Rates in Trips per TSF								
Daily	—		2.834	0.125	0.164	0.438	0.726	3.56
Morning Peak Hour			0.239	0.011	0.014	0.037	0.061	0.30
Evening Peak Hour			0.255	0.011	0.015	0.039	0.065	0.32
Traffic Generation in Vehicles								
Daily	—		361	16	21	56	93	454
Morning Peak Hour	—							
Inbound	—		24	1	1	4	6	30
Outbound			6	—	—	1	1	7
Total			30	1	1	5	7	37

Table 12 (cont.): Existing Intersection Delay and Level of Service

Descriptor	Quantity	Units[1]	Type of Vehicle					
			Passenger Car	2 Axle Truck	3 Axle Truck	4+ Axle Truck	Total Trucks	Total
Evening Peak Hour								
Inbound **Outbound** **Total**	—		8 24 32	— 1 1	— 1 1	1 4 5	1 6 7	9 30 39
Passenger Car Equivalent's (PCEs) Factor[2]	—		1.00	2.00	2.50			
Traffic Generation in PCEs								
Daily	—		361	32	53	168	253	614
Morning Peak Hour	—							
Inbound **Outbound** **Total**	—		24 6 30	2 — 2	3 — 3	12 3 15	17 3 20	41 9 50
Evening Peak Hour	—							
Inbound **Outbound** **Total**	—		8 24 32	— 2 2	— 3 3	3 12 15	3 17 20	11 41 52

Notes:
Source: Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012, Land Use Category 150 and Truck Trip Generation Study, City of Fontana, August 2003.
[1] TSF = Thousand Square Feet
[2] Passenger Car Equivalent factors are recommended by City of San Bernardino Traffic Impact Study Guidelines (2015).
Source: Kunzman Associates 2016.

As shown in Table 12, the proposed project is forecast to generate a total of approximately 614 daily vehicle trips in Passenger Car Equivalents (PCEs), 50 PCE-adjusted trips of which will occur during the morning peak hour and 52 PCE-adjusted trips of which will occur during the evening peak hour.

Future Traffic Volumes

Method of Projection

To assess future traffic conditions, existing traffic is combined with project traffic, ambient growth, and other development. The project completion year for analysis purposes in this report is 2017. For General Plan buildout conditions, the San Bernardino Transportation Analysis Model (SBTAM) was used.

Ambient Growth

To account for ambient growth on roadways, existing traffic volumes were increased by 3 percent per year over a two-year period.

Other Development

A list of other pending or approved development projects in the City was obtained from the City of San Bernardino Community Development Department—Major Projects List contained in Appendix E of the TIA. Table 3 of the TIA shows the forecast trip generation for other developments forecast to add future traffic to the study area; Figure 14 of the TIA shows the location of the other developments listed in Table 3 of the TIA.

General Plan Buildout Conditions

To derive General Plan buildout traffic volumes, the current SBTAM was used. In accordance with post-processing procedures contained in the Congestion Management Program for San Bernardino County, the long-range traffic volume forecasts have been determined using the growth increment approach on the Year 2008 and Year 2035 traffic volume forecasts. This difference defines the growth in traffic over the 27-year period. The incremental growth in traffic volume has been factored to reflect the forecast growth between existing traffic volumes (Year 2015) and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between existing Year 2015 and Year 2035 is 20 years of the 27-year time frame, a factor of 0.74 (i.e., 20 ÷ 27) was used.

To derive morning and evening peak-hour intersection turning movement volumes, the traffic growth forecasts were further refined using a spreadsheet program developed by the Federal Highway Administration and consistent with traffic forecasting procedures outlined in the National Cooperative Highway Research Program Report 255. The spreadsheet program uses a linear programming algorithm to calculate future individual turning movements based on the relationship of existing intersection turning movements and forecast model growth by approach. The forecast turning movements developed by the spreadsheet program were reviewed for reasonableness and adjusted as necessary to ensure minimum traffic growth. The end results of the post-processing procedures described are future traffic volumes suitable for analysis.

Existing Plus Project Traffic Volumes

The traffic volumes for Existing Plus Project conditions have been derived by adding the project-generated trips to existing traffic volumes. Existing Plus Project average daily traffic and peak-hour intersection turning movement volumes are shown on Figure 15 of the TIA.

Opening Year Base Traffic Volumes

The traffic volumes for Opening Year Base conditions have been derived by adding ambient growth to existing traffic volumes. Opening Year Base average daily traffic and peak-hour intersection turning movement volumes are shown on Figure 16 of the TIA.

Opening Year Base Plus Other Development Traffic Volumes

The traffic volumes for Opening Year Base Plus Other Development conditions have been derived by adding trips generated by other developments to Opening Year Base traffic volumes. Opening Year Base Plus Other Development average daily traffic and peak-hour intersection turning movement volumes are shown on Figure 17 of the TIA.

Opening Year Base Plus Other Development Plus Project Traffic Volumes

The traffic volumes for Opening Year Base Plus Other Development Plus Project conditions have been derived by adding trips generated by other developments and the proposed project to Opening Year Base traffic volumes. Opening Year Base Plus Other Development Plus Project average daily traffic and peak-hour intersection turning movement volumes are shown on Figure 18 of the TIA.

General Plan Buildout Without Project Traffic Volumes

To derive General Plan Buildout Without Project traffic volumes, the SBTAM was used. General Plan Buildout Without Project average daily traffic and peak-hour intersection turning movement volumes are shown on Figure 19 of the TIA.

General Plan Buildout With Project Traffic Volumes

To derive General Plan Buildout With Project traffic volumes, project trips were added to General Plan Buildout Without Project traffic volumes. General Plan Buildout With Project average daily traffic and peak-hour intersection turning movement volumes are shown on Figure 20 of the TIA.

Future Intersection Delay and Level of Service

Detailed delay and Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix H of the TIA.

Existing Plus Project Intersection Delay and Level of Service

Table 4 of the TIA shows intersection delay and Level of Service for Existing Plus Project traffic conditions based on existing lane geometry and project driveway improvements. As shown in Table 4 of the TIA, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Existing Plus Project traffic conditions. In addition, as shown in Table 5 of the TIA, the proposed project is forecast to result in no significant traffic impacts for Existing Plus Project traffic conditions.

Opening Year Base Intersection Delay and Level of Service

Table 6 of the TIA shows intersection delay and Level of Service for Opening Year Base traffic conditions based on existing lane geometry and project driveway improvements. As shown in Table 6 of the TIA, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year Base traffic conditions.

Opening Year Base Plus Other Development Intersection Delay and Level of Service

Table 7 of the TIA shows intersection delay and Level of Service for Opening Year Base Plus Other Development traffic conditions based on existing lane geometry and project driveway improvements. As shown in Table 7 of the TIA, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year Base Plus Other Development traffic conditions.

Opening Year Base Plus Other Development Plus Project Intersection Delay and Level of Service

Table 8 of the TIA shows intersection delay and Level of Service for Opening Year Base Plus Other Development Plus Project traffic conditions based on existing lane geometry and project driveway

improvements. As shown in Table 8 of the TIA, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year Base Plus Other Development Plus Project traffic conditions. In addition, as shown in Table 9 of the TIA, the proposed project is forecast to result in no significant traffic impacts for Opening Year traffic conditions.

General Plan Buildout Without Project Intersection Delay and Level of Service

Table 10 of the TIA shows intersection delay and Level of Service for General Plan Buildout Without Project traffic conditions based on existing lane geometry and project driveway improvements. As shown in Table 10 of the TIA, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for General Plan Buildout Without Project traffic conditions.

General Plan Buildout With Project Intersection Delay and Level of Service

Table 11 of the TIA shows intersection delay and Level of Service for General Plan Buildout With Project traffic conditions based on existing lane geometry and project driveway improvements. As shown in Table 11 of the TIA, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours for General Plan Buildout With Project traffic conditions. In addition, as shown in Table 12 of the TIA, the proposed project is forecast to result in no significant traffic impacts for General Plan Buildout traffic conditions.

On-site Improvements

MM TRANS-1 Construction of on-site improvements shall occur prior to issuance of a certificate of occupancy. The project applicant shall do the following, consistent with Figure 21, Circulation Recommendations, in the Traffic Impact Analysis by Kunzman Associates, Inc. (2016) for the project:

- Site-specific circulation and access recommendations are depicted on Figure 21 of the TIA.
- The proposed project driveways shall be constructed in conformance with City of San Bernardino standards, including provisions for sight distance requirements.
- Central Avenue along the project boundary shall be constructed at its ultimate half-section width, including landscaping and parkway improvements in conjunction with development, as necessary.
- On-site traffic signing and striping shall be submitted for City approval in conjunction with detailed construction plans for the project.
- Off-street parking shall be provided to meet City of San Bernardino parking code requirements.

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?

Less than significant impact. The purpose of the Congestion Management Program (CMP) is to develop a coordinated approach to managing and decreasing traffic congestion by linking the various transportation, land use, and air quality planning programs throughout the County, consistent with that of SANBAG. The CMP requires review of substantial individual projects that might on their own

impact the CMP transportation system. Specifically, the CMP Traffic Impact Analysis measures impacts of a project on the CMP Highway System. Compliance with the CMP requirements ensures a city's eligibility to compete for state gas tax funds for local transportation projects.

The CMP requires that a Traffic Impact Analysis must include analysis of any CMP arterial monitoring intersection where the proposed project will add 50 or more trips during either the AM or PM weekday peak hour; and any freeway monitoring location where the project will not add 150 or more trips, in either direction, during either the AM or PM peak hour. The TIA conducted a peak-hour trip contribution test for the project. Figure 13 of the TIA shows the forecast project trip contribution test used for identifying the study area. The Congestion Management Program for San Bernardino County requires the study area to include any intersection of streets on which at least one street is classified as Collector or above and the proposed project is forecast to contribute more than 50 peak-hour trips. Figure 13 of the TIA shows the project trip contribution test volumes on the roadways adjacent to the potential intersection analysis locations until the project volume has dropped below the 50 peak-hour trip threshold.

The proposed project would not add 50 or more trips during either the AM or PM weekday peak hour to a designated CMP intersection; and it would not add 150 or more trips to any freeway mainline location, in either direction, during either the AM or PM peak hour. Therefore, the proposed project would not exceed a level of service standard established by the CMP for designated roads or highways.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No impact. The proposed project would not include any aviation components or structures where height would be an aviation concern. No associated traffic impacts would occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No impact. The proposed project does not include the use of any incompatible vehicles or equipment on-site, such as farm equipment. The project would not provide any roadway improvements that could substantially increase hazards due to a design feature. The project is compatible with the surrounding commercial and warehouse uses, and no impacts would occur.

e) Result in inadequate emergency access?

Less than significant impact. The project would provide adequate access for fire protection and police protection vehicles in the case of emergency. The site would provide access via two entry/exit driveways on Central Avenue, and there are areas suitable for fire truck access and turnaround. As part of project approval, the City of San Bernardino Fire Department would review the site for adequate emergency access and provide additional requirements if warranted. Thus, impacts would be less than significant.

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?

No impact. The proposed project has been designed to be consistent with local policies, plans, and programs supporting alternative transportation. The main alternative transportation modes available to the project would be bus transit and bicycle access. The City of San Bernardino General Plan Trail System is shown on Figure 7 of the TIA and includes both multi-purpose trails and bicycle routes within the project area. Existing pedestrian facilities adjacent to the project site are shown on Figure 8 of the TIA. In addition, the project area is currently served by Omnitrans Route 5 along Waterman Avenue. Figure 9 of the TIA shows the existing transit routes in the project vicinity. Sidewalks would be provided along the project frontages. The project would not conflict with adopted policies, plans, or programs regarding alternative modes of transportation. No impact would result.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
17. Utilities and Service Systems *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 storm water 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?	☐	☐	☒	☐

Environmental Evaluation

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than significant impact. The City of San Bernardino Municipal Water Department (SBMWD) treats and disposes of all of the City's sewage at the San Bernardino Water Reclamation Plant and the Rapid Infiltration and Extraction. The SBMWD is permitted to treat 40 million gallons per day (mgd). The average daily flow is 22 mgd. Sanitary sewer lines that serve the project site are maintained by the City of San Bernardino and are already in place to serve the proposed project.

Since the City's wastewater treatment facilities are operating below the permitted capacity of 40 mgd, it is anticipated that wastewater generated by the proposed project would not result in an exceedance of any wastewater treatment requirements of the Santa Ana RWQCB. Impacts would be considered less than significant.

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?

No impact. Sewer and water lines are already in place to serve the project, and expansion of existing facilities or construction of new wastewater treatment facilities would not be needed for implementation of the proposed project. Therefore, there would be no impact.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than significant impact. Off-site street improvements for the proposed project would include curbs, gutters, and sidewalks on the west side of Central Avenue. Potential environmental impacts from the off-site improvements are analyzed as part of this Initial Study. According to the WQMP prepared for this project, the proposed project will install a subsurface infiltration system for on-site water quality treatment. The subsurface infiltration system will be constructed under the parking lot and drive aisles located along the east side of the building, adjacent to the loading dock area. The design infiltration rate is 1.5 inches per hour. The surface flows will enter the system via catch basins and will be conveyed to a hydrodynamic separator that will remove sediment and debris before the flows enter the infiltration system. The infiltration system consists of four 60-inch perforated HOPE pipes that will be placed on a 28-foot-wide gravel bed. Two areas totaling 0.18 acre at the northern and southern borders of the project site will be self-retaining, depressed landscaped areas, and the flows from these areas will not be directed to the subsurface infiltration system. The subsurface infiltration system would be the primary treatment method for the project site and are sized to contain the 100-year storm event, and would therefore not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities. Impacts would be less than significant.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less than significant impact. The SBMWD provides domestic water for the City and the unincorporated areas of San Bernardino. Buildout of the project site was anticipated in the City's General Plan and General Plan EIR and was planned for in the 2010 San Bernardino Valley Regional Urban Water Management Plan. The City's General Plan land use designations for the project site Light Industrial. The project proposes the entire project site be an industrial land use designation under the General Plan. Since the project would not change the land use designation in the General Plan to a more water intensive use, it would not increase the demand for water supplies on the project site beyond what has been planned for. Therefore, impacts are considered less than significant.

In addition, on April 1, 2015, Governor Brown issued Executive Order B-29-15. Key provisions include ordering the State Water Resources Control Board to impose restrictions to achieve a 25 percent reduction in potable urban water usage through February 28, 2016; directing the California Department of Water Resources to lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought-tolerant landscapes; and directing the California Energy Commission to implement a statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices. Approval of the project will not preclude the City from complying with this Executive Order.

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?

Less than significant impact. Refer to response Impact 17(b), above. The wastewater infrastructure needed to serve the project site is already in place, and the City's wastewater facilities have adequate capacity to serve the project's demand; impacts would be less than significant. Therefore, impacts associated with wastewater treatment capacity would be less than significant.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than significant impact. The City of San Bernardino Refuse and Recycling Division provides collection services to residential and commercial customers for refuse, recyclables, and green waste. The City utilizes Materials Recovery Facilities (MRF) to manage collected waste and recyclables. The Burrtec Waste Industries, Inc. East Valley Transfer and Recycling MRF has the expansion capability to accommodate up to 10,000 tons per day. It is not anticipated that the proposed project would affect existing facilities and cause the need to construct a new facility. The Mid-Valley Sanitary Landfill, which serves the Valley region of San Bernardino County, has remaining capacity and is anticipated to remain open until 2033. Therefore, impacts would be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less than significant impact. Refer to response Impact 17(f) above. The Mid-Valley Landfill is a facility that has been constructed to meet all required local, state, and federal rules and regulations. The proposed project would not compromise the City's compliance with federal, state, and local statutes and regulations related to solid waste. Furthermore, consistent with provisions stated in the 2013 CalGreen Building Code, any hazardous materials collected on the project site during either construction or operation of the project would be transported and disposed of by a permitted and licensed hazardous materials service provider at a facility permitted to accept such hazardous materials. Therefore, impacts associated with solid waste statutes and regulations would be less than significant.

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. Mandatory Findings of Significance				
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?	☐	☒	☐	☐

Environmental Evaluation

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?

Less than significant with mitigation incorporated. As described throughout the analysis above, the proposed project would not result in any significant impacts to the environment that cannot be mitigated to a less than significant level through the application of uniformly applied development policies and/or standards. The proposed project would be required to implement a range of standard and uniformly applied development policies and standards, as well as implement mitigation measures identified in the analysis herein, which would reduce impacts to a less than significant level.

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)?

Less than significant with mitigation incorporated. The proposed project would result in potentially significant impacts in the following areas: air quality, biological resources, cultural resources, geology/soils, noise and transportation/traffic. A Mitigation Program has been prepared for each of these environmental issue areas in order to reduce impacts to less than significant levels. Standard conditions would also be imposed upon the project. Other new development projects within the City would also be subject to these requirements. All other impacts of the project were determined either to have no impact or to be less than significant, without the need for mitigation. Cumulatively, the proposed project would not result in any significant impacts that would substantially combine with impacts of other current or probable future impacts. Therefore, the proposed project, in conjunction with other future projects, would not result in any cumulatively considerable impacts.

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

Less than significant with mitigation incorporated. As discussed in the respective sections, the proposed project would result in potentially significant impacts in the following areas: air quality, biological resources, cultural resources, geology/soils, noise and transportation/traffic. A Mitigation Program has been prepared for each of these environmental issue areas to reduce impacts to less than significant levels. Standard conditions would also be imposed upon the project. Therefore, the project would not cause substantial adverse effects on human beings directly or indirectly. Impacts would be less than significant.

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