

APPENDICES VOLUME 1

SCH# 2016091024 CITADEL OUTLETS EXPANSION & 10-ACRE DEVELOPMENT PROJECT COMMERCE, CALIFORNIA



LEAD AGENCY:

**CITY OF COMMERCE
PUBLIC WORKS AND DEVELOPMENT SERVICES DEPARTMENT
PLANNING DIVISION
2535 COMMERCE WAY
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REPORT PREPARED BY:

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MARCH 15, 2019

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NOTICE OF PREPARATION (NOP) & INITIAL STUDY

The purpose of this NOP is to notify all responsible agencies, trustee agencies, surrounding cities, and the public that the City of Commerce intends to initiate the preparation of an environmental impact report (EIR) for the proposed project described herein. The City of Commerce, in its capacity as Lead Agency, requests that this NOP and the attached Initial Study be reviewed. A 30-day public review period will be provided to allow these entities and other interested parties to comment on the proposed project and the NOP.

1. **Project Title:** Citadel Expansion & 10-Acre Development Project.
2. **Lead Agency Name and Address:** City of Commerce, 2535 Commerce Way, Commerce, California 90040.
3. **Contact Person and Phone Number:** Jose Jimenez, City Planner. (323) 722-4805, ext. 2389.
4. **Project Location:** The project area is located on the north side of Telegraph Road between Hoefner Avenue on the west and Washington Boulevard on the east. The project consists of three distinct elements: Area 1 is located within the eastern portion of the existing Citadel outlets shopping center, Area 2 includes an area located between the existing Citadel Outlets and the industrial buildings located along the west side Tubeway Avenue, and Area 3 is located on the northwest corner of the Telegraph Road/Washington Boulevard intersection. The industrial uses located along the west side of Tubeway Avenue and the Commerce Casino and Hotel are not part of the project and, as a result, are located outside of the project area.
5. **Project Sponsor's Name and Address:** Citadel Holdings Group, LLC, 4100 MacArthur Blvd, Suite 100, Newport Beach, California 92660, and Wash-Tel Commerce, LLC, 4100 MacArthur Blvd, Suite 100, Newport Beach, California 92660.
6. **General Plan Designation:** Commercial, and Commercial Manufacturing.
7. **Zoning:** C2 (*Unlimited Commercial*), C/M1 (*Commercial Manufacturing*), and M1/M2 (*Industrial*).
8. **Description of Project:** The project Applicant proposes to develop the Project in the three areas referred to herein as Area 1, Area 2, and Area 3, along the Telegraph Road corridor.
 - Area 1 will involve the expansion of the existing Citadel Outlets and this part of the project, referred to herein as Phase 5. The new Area 1 development will include the construction of up to approximately 165,000 square feet of retail, two new hotels (totaling approximately 270 rooms), and a new five-level parking structure (approximately 750 parking spaces).
 - The new development proposed for Area 2 (also referred to a Phase 6) will include two new retail buildings totaling 69,941 square feet, a new commercial recreation use totaling 129,000 square feet, a new three-level entertainment/movie complex with 150,000 square feet, a new four-level parking structure (approximately 1,220 parking spaces), a new hotel consisting of approximately 500 guest rooms, and three smaller fast-food restaurants.

- Area 3 will include up to five (5) new fast food restaurants each with a drive thru lane, a sit-down restaurant, and an approximately 55,000 square-foot warehouse/industrial building.

New landscaping will be installed throughout the new development. A new monorail system is proposed to serve Areas 1 and 2. A potential pedestrian connection to the Metro line will also be provided in the northern portion of Area 1. All of the aforementioned project elements will be collectively considered as the “proposed project.” Pursuant to California Government Code Section 65864, et seq., two statutory development agreements, which will include proposed Zone Changes (ZC), shall require City Council approval by ordinance.

9. Surrounding Land Uses and Setting: The project area is located on the north side of Telegraph Road between Hoefner Avenue on the west and Washington Boulevard on the east. Existing development located within the project area includes a wide range of land uses including industrial, warehousing, commercial uses, and vacant land. The area also includes a variety of commercial retail, office, hotel, and entertainment-related uses within the existing Citadel complex. Other commercial uses located in the area include a Costco club store, a McDonalds, and various industrial/warehouse buildings occupy the parcels located east of Washington Boulevard and Telegraph Road. The Santa Ana Freeway (I-5) is located to the south of the project area, on the south side of Telegraph Road.

10. City Contact: A 30-day public review period will be provided to allow these entities and other interested parties to comment on the proposed project and the NOP. The contact at the City of Commerce is the following person:

Jose Jimenez, City Planner
Public Works and Development Services Department, Planning Division
2535 Commerce Way, Commerce, California 90040
(323) 722-4805, ext. 2389.

11. Review Period: The 30-day review public review period will commence on October 22, 2018 and will conclude on November 21, 2018.

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1. INTRODUCTION

The City of Commerce Public Works and Development Services Department (referred to hereinafter as the *Lead Agency*) is reviewing a proposal to permit the expansion of both the Citadel Outlets as well as addition land area consisting of approximately 36 acres. The entire planning area is located along the north side of Telegraph Road between Hoefner Avenue (on the west) continuing east to Washington Boulevard. The land occupied by the existing industrial uses located to the west of Tubeway Avenue and the Commerce Casino and Hotel is not part of the proposed project. The project involves the development of a number of underutilized properties with new retail uses, new hotels, entertainment, offices, and other uses. The proposed improvements are detailed in Section 2, herein.

This Initial Study provides an evaluation of environmental impacts anticipated to result from the construction and operation of the proposed project. Pursuant to the CEQA Guidelines, additional purposes of this Initial Study include the following:

- To provide the City of Commerce with information needed to decide whether to prepare an Environmental Impact Report (EIR), Mitigated Negative Declaration, or Negative Declaration for the project;
- To facilitate the project's environmental assessment early in the design and development of a project;
- To eliminate unnecessary EIRs; and,
- To determine the nature and extent of any new impacts associated with the proposed project.¹

For the proposed project, this Initial Study determined that an Environmental Impact Report (EIR) would be required to analyze the proposed project's environmental impacts.

2. USE OF THIS INITIAL STUDY

Pursuant to Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines, this Initial Study was prepared to provide the City of Commerce, in its capacity as Lead Agency, with information to use as the basis for determining the nature and extent of any required environmental analysis and review. The findings of this Initial Study indicate that the project may have a significant effect on the environment and that an EIR would be required.

This Initial Study has been prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the City of Commerce;

¹ California, State of, *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act as Amended 2000.* (CEQA Guidelines) §15050.

and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law. The City of Commerce is designated as the Lead Agency in accordance with Section 15050 of the CEQA Guidelines.² The environmental analysis indicated a number of issue areas that would require further analysis in a Draft Environmental Impact Report (DEIR). Although this Initial Study was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation fully represent the independent judgment and position of the City of Commerce acting in its capacity as Lead Agency.

Copies of this *Initial Study* and the *Notice of Preparation (NOP)* will be forwarded to responsible agencies and will be made available to the public for review and comment. A 30-day public review period will be provided to allow these entities and other interested parties to comment on the proposed project and the NOP. The contact at the City of Commerce is the following person:

Jose Jimenez, City Planner
Public Works and Development Services Department, Planning Division
2535 Commerce Way, Commerce, California 90040
(323) 722-4805, ext. 2389.

This Initial Study has been included with the Notice of Preparation that indicates an EIR will be prepared for the proposed project's environmental review. This Initial Study will be circulated for a period of 30 days for public and agency review. Comments received as part of the NOP's circulation will be taken into consideration as part of the preparation of the Draft EIR.

3. PROJECT LOCATION

The project area is located in the north-central portion of the City of Commerce. The City of Commerce is located approximately six miles southeast of downtown Los Angeles and is bounded by Montebello on the east, unincorporated East Los Angeles on the north, the cities of Vernon, Bell, and Maywood on the west, and the City of Bell Gardens on the south.³ The location of the City of Commerce in a regional context is shown in Exhibit 1. The project area's location in the City is shown in Exhibit 2.

The entire project area is located along the north side of Telegraph Road between Hoefner Avenue (on the west) continuing east to Washington Boulevard. The land occupied by the existing Commerce Casino and Hotel and the industrial properties located to the west of Tubeway Avenue are not part of the proposed project. The project involves the development of a number of underutilized properties with new retail uses, new hotels, entertainment, offices, and other uses.⁴ An aerial photograph of the project area and the surrounding area is provided in Exhibit 3.

² California, State of, *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act as Amended 2000.* (CEQA Guidelines) §15050.

³ United States Geological Survey. *Los Angeles 7½ Minute Quadrangle.*

⁴ Google Earth. Website accessed October 1, 2018.

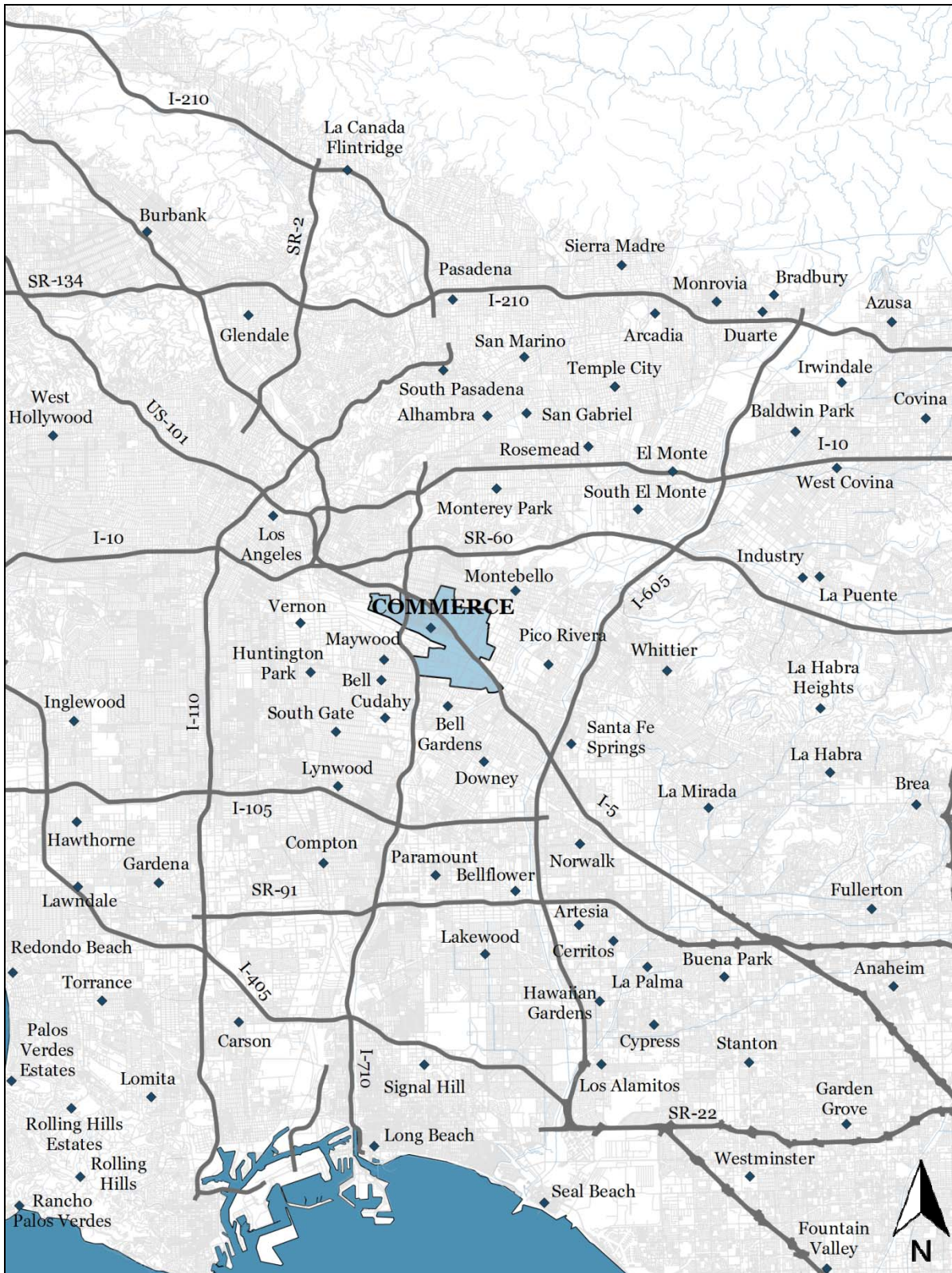


EXHIBIT 1
REGIONAL LOCATION
Source: Quantum GIS

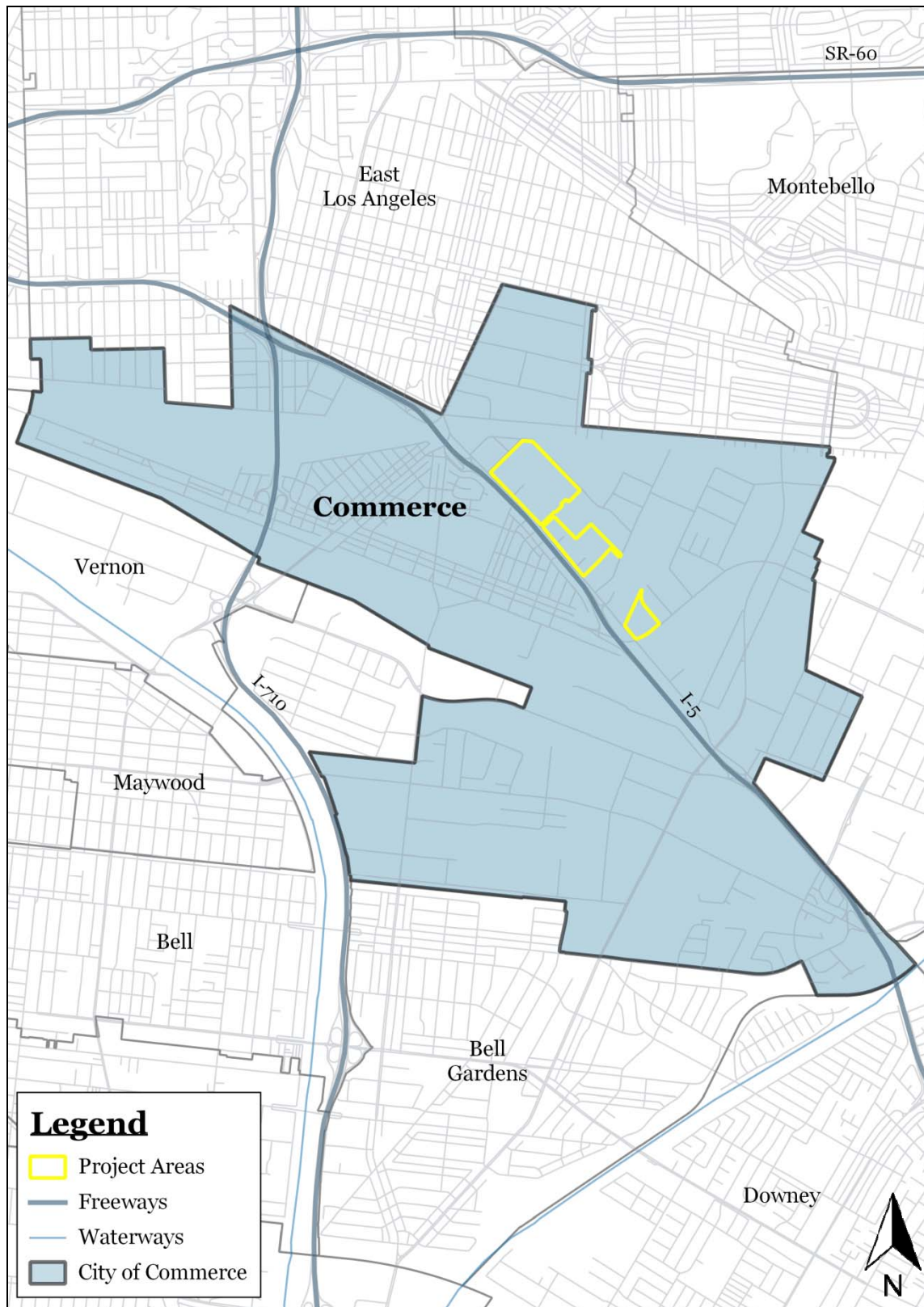


EXHIBIT 2
CITYWIDE MAP
Source: Quantum GIS

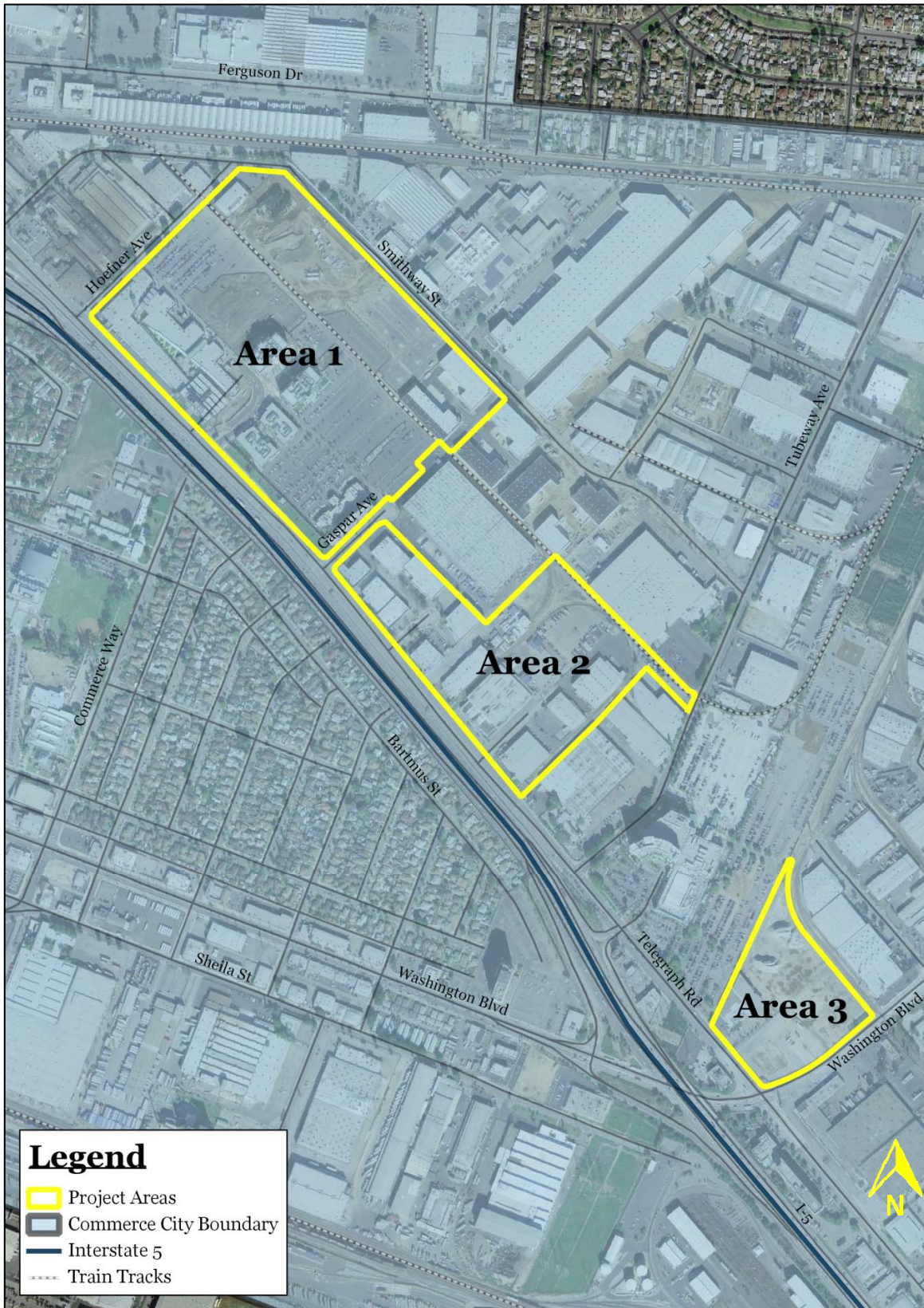


EXHIBIT 3
AERIAL MAP
Source: Quantum GIS

4. PROJECT DESCRIPTION

The project will be divided into three elements (Phase 5, Phase 6, and the Telegraph Road/Washington Boulevard development). For the purposes of this CEQA analysis, the three distinct geographic areas are referred to as Area 1 (Phase 5), Area 2 (Phase 6), and Area 3 (the portion located on the northwest corner of Washington Boulevard and Telegraph Road).

Area 1 - Citadel Expansion (Phase 5)

Area 1 includes an area located within the existing Citadel shopping center complex. These new improvements are collectively referred to as Phase 5. The new elements proposed as part of the Phase 5 development are outlined below.

- *Building 20* will be a new 15,000 square-foot, three-level commercial building that will be constructed. The first level will consist of approximately 7,030 square feet while the mezzanine will have approximately 1,810 square feet and the second level will contain 6,160 square feet of floor area. An escalator will provide pedestrian travel between the two main levels.
- *Building 21* will be a new 106,434 square-foot commercial building that will be constructed immediately south of Building 20. The building will be subdivided into multiple retail tenant spaces. Larger tenant spaces will consist of two levels while the remaining smaller tenant spaces will have a single level. The floors within the two-level tenant spaces will be connected by escalators to facilitate pedestrian travel between the two floors.
- The *Parking Structure* will consist of five levels and provide total of approximately 750 parking spaces. The new five-level parking structure will be constructed below the two hotel buildings. Access to the parking structure will be possible using a direct driveway connection with Gaspar Avenue (on the east) and a new drive aisle access with Smithway Street on the north.⁵
- *Traveler's Hotel* will be constructed in the northeast portion of the Phase 5 area. This five-level hotel will contain approximately 174 guest rooms. As indicated previously, this hotel structure will be constructed over the parking structure levels. The maximum height of the hotel/parking structure will be approximately 150 feet above grade.⁶
- *Loft Hotel* will be constructed south of the Traveler's Hotel though this hotel building will also be constructed over the parking structure. This hotel building will consist of five levels on top of the four-level parking structure. This hotel will contain 96 guest rooms. The hotel will also include a monorail platform that will provide pedestrian access to the monorail that will pass through the

⁵ Google Earth. Website accessed October 1, 2018.

⁶ Ibid.

parking structure's fourth level. The maximum height of the hotel/parking structure will be approximately 150 feet above grade.⁷

- The *Hotel Access* will be provided via the parking structure located below the parking structure as well as a Porte Corche that will be accessible from Gaspar Avenue. The Porte Corche will be shared by both hotels.⁸

Other improvements that will be located in Area 1 include approximately 41,571 square feet of additional retail/food, new six-level parking structure with 550 spaces, expansion of existing five-level structure, new water features and artwork, pedestrian paths, safety and decorative lighting, and landscaping. A new monorail will be constructed that will extend through the existing Citadel Outlets continuing to Area 2. The development plan for Area 1 is shown in Exhibit 5.

Area 2 - Citadel Expansion (Phase 6)

Area 2 consists of approximately 26 acres and is located east of the existing Citadel complex and continuing westerly for an approximate distance of 1,500 feet. Gaspar Avenue is the demarcation between Area 1 and Area 2. The new improvements are collectively referred to as Phase 6. The majority of the new buildings will be located in the northern and eastern portion of Area 2 while surface parking fields will be located between the aforementioned buildings and the Telegraph Road right-of-way. The new elements proposed as part of the Phase 6 development are outlined below.

- *Building 22* will be a new 46,834 square-foot commercial retail building that will include both single-level and two-level tenant spaces. An escalator will provide the pedestrian travel between the two levels within the two level tenant spaces. This building is located in the westernmost portion of Area 2. The public entrances to the individual tenant spaces will be located along the building's south facing elevation.⁹
- *Building 23* will be a new 23,107 square-foot retail building that will be constructed immediately east of Building 22. Similar to Building 22, this building will include both single and two-level retail tenant spaces. The floors of the two-level retail space will include an escalator for pedestrian access. The public entrances to the individual tenant spaces will be located along the building's south facing elevation.¹⁰

⁷ Studio Progett. *A Project of Craig Realty Group. [The] Citadel*. September 25, 2018.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

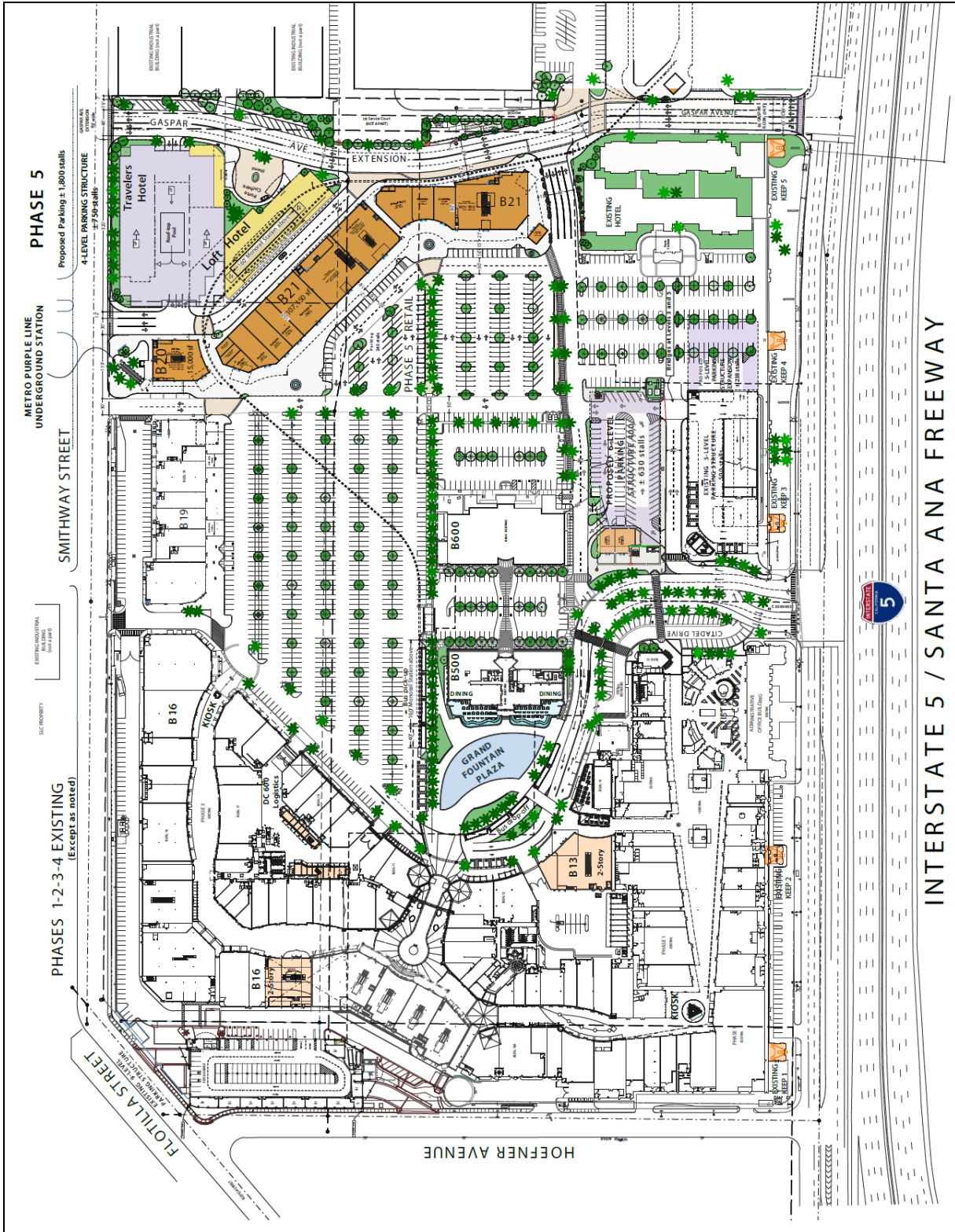


EXHIBIT 4
DEVELOPMENT CONCEPT FOR AREA 1 (PHASE 5)
 Source: Studio Progetti, Inc.

- A *Recreational Commercial* (referred to as an “Adventure Experiential Retail”), consisting of two levels and 120,000 square feet of floor area, will be centrally located within Area 2. The public entrances to this building will be located on the north and south building elevation. A surface parking area that will accommodate both conventional and oversized parking will be located to the rear (north side) of the building.¹¹
- A new *Hotel and Parking Structure* will be located in the northeastern portion of Area 2. The new parking structure will consist of four parking levels that will accommodate approximately 1,220 parking spaces and will be approximately 170 feet tall. A new hotel, consisting of five levels, will be constructed over the parking structure. The hotel will contain approximately 500 guest rooms. The hotel’s main lobby area and public entry will be located along the structure’s south facing elevation. The hotel lobby will also include a pedestrian access/platform to the monorail system.¹²
- A *Movie/Entertainment Complex* will be located in the southeast corner of Area 2 along the Telegraph Road frontage. This building will consist of three levels and will include approximately 150,000 square feet of floor area. Small fast-food restaurants that will largely cater to those attending the theater along with an outside court area will be located along the theater’s west facing elevation. A valet parking entrance will be located along the building’s south-facing element. The valet drive aisles will connect directly to Telegraph Road. A 150-foot tall design element (referred to an Icon Tower) will be situated near the theater building’s southeast corner.¹³
- A *Restaurant*, consisting of approximately 3,140 square feet, will be located in the westernmost portion of Area 2.

Other improvements that will be located in Area 2 include restriped parking fields that will provide approximately 507 surface parking spaces, new water features and artwork, pedestrian paths, safety and decorative lighting, and landscaping. The development plan for Area 2 is shown in Exhibit 5.

Area 3 – Northwest Corner of Washington Boulevard and Citadel Expansion

Area 3 consists of approximately 10 acres of land located on the northwest corner of Washington Boulevard and Telegraph Road.

Washington Boulevard extends along the east side of Area 3 while Telegraph Road extends along the south side. The new elements proposed as part of Area 3 development are outlined below.

- *Fast Food Restaurant Pad 1* will be a new 2,000 square-foot restaurant located in the northeastern portion of Area 3. This restaurant will also include a drive-thru lane. Approximately 38 parking spaces will be provided.

¹¹ Studio Progett. *A Project of Craig Realty Group. [The] Citadel*. September 25, 2018

¹² Ibid.

¹³ Ibid.

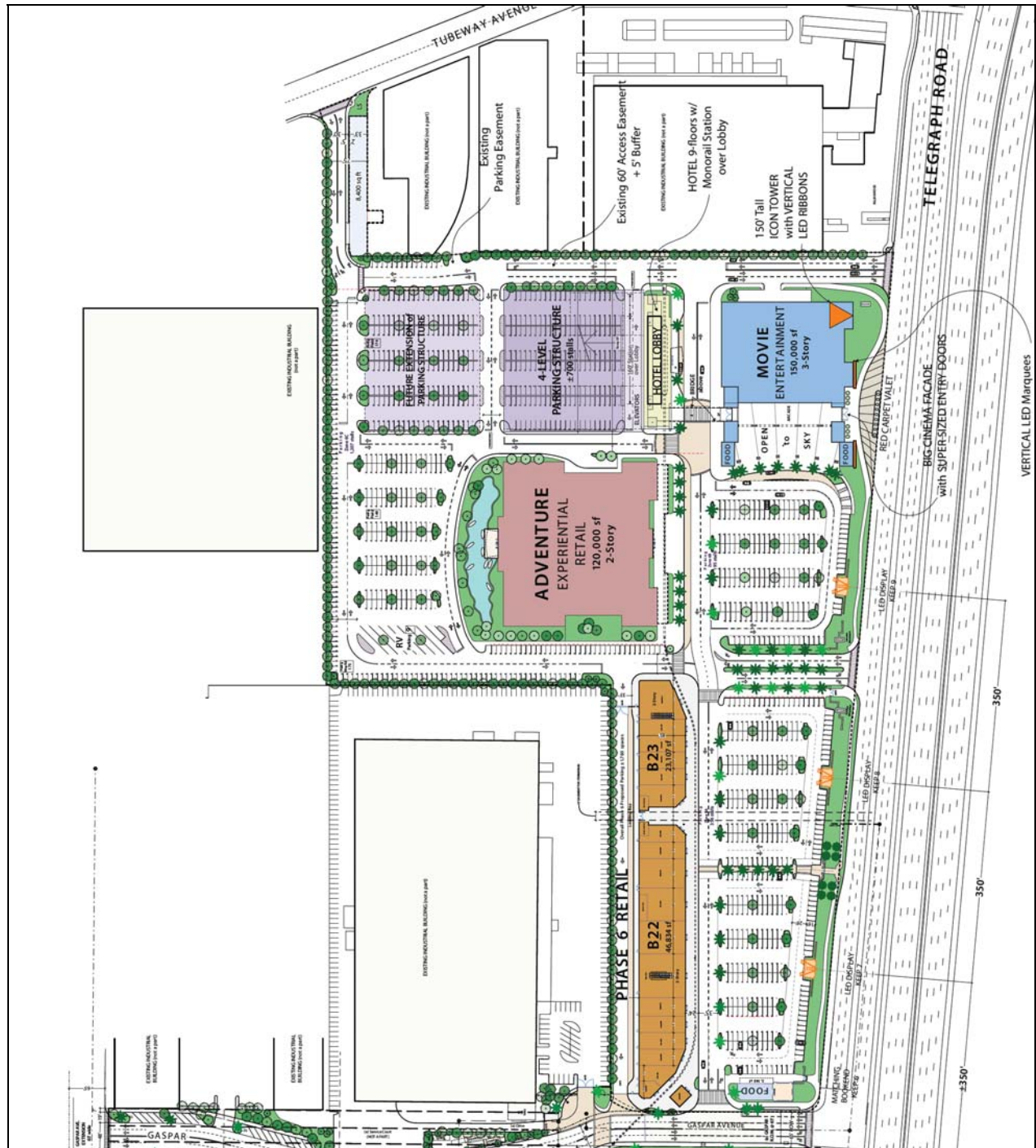


EXHIBIT 5
DEVELOPMENT CONCEPT FOR AREA 2 (PHASE 5)
 Source: Studio Progetti, Inc.

- *Fast Food Restaurant Pad 2* will be a new 4,400 square-foot restaurant located in the eastern portion of Area 3 along the Washington Boulevard frontage. This restaurant will also include a drive-thru lane. A total of 61 parking spaces will be provided.¹⁴
- *Sit Down Restaurant Pad 3* will be a new 5,000 square-foot restaurant located on the southeast corner of Area 3. This restaurant will also include an outdoor dining area. A total of 81 parking spaces will be provided.¹⁵
- *Fast Food Restaurant Pad 4* will be a new 2,000 square-foot restaurant located in the southwest portion of Area 3 along the Telegraph Road frontage. This restaurant will also include a drive-thru lane. A total of 33 parking spaces will be provided.¹⁶
- A *Fast Food Restaurant* consisting of an approximate floor area of 4,500 square feet will be constructed in the western portion of Area 3. The parking lot will contain approximately 73 spaces.¹⁷
- A new *Warehouse/Industrial Building* will be located in the northwest portion of Area 3. This building will have a total floor area of approximately 55,000 square feet. A total of seven loading docks will be located along the building's west-facing elevation. Access to the truck receiving and loading area will be secured by gates. A total of 45 surface parking spaces will be provided in a surface parking lot located to the east of the building and approximately 20 surface parking spaces in the rear of the building.¹⁸

Other improvements that will be located in Area 3 include landscaping, internal roadways, and parking areas. The development plan for Area 3 is shown in Exhibit 6.

5. OVERVIEW OF DISCRETIONARY ACTIONS

As currently envisioned, the project will require the approval of the following discretionary actions:

- The entire planning area (Area 1 [existing Citadel], Area 2 [approximately 26 acres], and Area 3 [approximately 10 acres]) will be included in and subject to statutory development agreements (DAs);
- Pursuant to California Government Code Section 65864, et. Seq., two Development Agreements shall require City Council approval by ordinance;

¹⁴ Studio Progett. *A Project of Craig Realty Group. [The] Citadel. Overall Site Plan.* September 25, 2018.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.



EXHIBIT 6
DEVELOPMENT CONCEPT FOR AREA 3
 Source: Studio Progetti, Inc.

- Pursuant to California Government Code Section 65863 through 65857, proposed Zone Changes (ZC) from M-2 (*Heavy Industrial*) to C-2 (*Commercial*) in a portion of Area 1, proposed ZC from C/M1 (*Commercial Manufacturing*) to C-2 (*Commercial*) in Area 2 (approximately 26 acres), and proposed ZC from C/M1 to M-1/M-2 (*Industrial*) and C-2 (*Commercial*) in Area 3 (approximately ten acres), which ZCs would be included in the DA as approved by ordinance, require Planning Commission review, and City Council approval; and,
- Certification of the Final EIR.

Other permits will be required as part of the proposed project’s approval including a Solid Waste Facility Permit, Construction Stormwater Permit (State of California Water Resources Control Board), General Industrial Stormwater Permit (State of California Water Resources Control Board), Grading Permit (City of Commerce), Building Permit (City of Commerce), and Occupancy Permit (City of Commerce).

6. ENVIRONMENTAL FACTORS AFFECTED & DETERMINATION

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 provided in Table 1 in Section 7.

| | | | | | |
|-------------------------------------|--------------------------|-------------------------------------|-------------------------|-------------------------------------|---------------------------|
| <input checked="" type="checkbox"/> | Aesthetics | <input type="checkbox"/> | Agriculture & Forests | <input checked="" type="checkbox"/> | Air Quality |
| <input type="checkbox"/> | Biological Resources | <input checked="" type="checkbox"/> | Cultural Resources | <input type="checkbox"/> | Geology & Soils |
| <input checked="" type="checkbox"/> | Greenhouse Gas Emissions | <input checked="" type="checkbox"/> | Hazards & Haz-materials | <input checked="" type="checkbox"/> | Hydrology & Water Quality |
| <input checked="" type="checkbox"/> | Land Use & Planning | <input type="checkbox"/> | Mineral Resources | <input checked="" type="checkbox"/> | Noise |
| <input checked="" type="checkbox"/> | Population & Housing | <input checked="" type="checkbox"/> | Public Services | <input type="checkbox"/> | Recreation |
| <input checked="" type="checkbox"/> | Transportation & Traffic | <input checked="" type="checkbox"/> | Utilities & Energy | <input checked="" type="checkbox"/> | Mandatory Findings |

On the basis of the environmental analysis and review completed as part of this Initial Study’s preparation:

| | |
|-------------------------------------|--|
| <input type="checkbox"/> | I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. |
| <input type="checkbox"/> | 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. |
| <input checked="" type="checkbox"/> | I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. |
| <input type="checkbox"/> | I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. |

| | |
|--------------------------|--|
| <input type="checkbox"/> | 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. |
|--------------------------|--|

Planner _____

Date _____

7. INITIAL STUDY CHECKLIST

The environmental analysis in Section 8 of this Initial Study indicates that the proposed project may result in potentially significant impacts. For this reason, the City of Commerce has determined that an Environmental Impact Report will be required pursuant to CEQA. The Initial Study Checklist, provided below and on the following pages, summarizes the findings of the environmental analysis.

Table 1
Initial Study Checklist

| S | Description of Issue | Requires Evaluation | | Less than | No Impact |
|---|---|--------------------------------|---------------------------------------|-----------|-----------|
| | | Potentially Significant Impact | Less than Significant with Mitigation | | |
| Section 8.1 Aesthetics | | | | | |
| 8.4.1.A | Would the project have a substantial adverse effect on a scenic vista? | X | | | |
| 8.1.B | Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? | X | | | |
| 8.1.C | Would the project substantially degrade the existing visual character or quality of the site and its surroundings? | X | | | |
| 8.1.D | Would the project create a new source of substantial light or glare which would adversely affect day or night-time views in the area? | X | | | |
| Section 8.2 Agricultural & Forestry Resources | | | | | |
| 82.A | Would the project 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? | | | | X |
| 8.2.B | Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract? | | | | X |
| 8.2.C | Would the project conflict with existing zoning for or cause rezoning of, forest land (as defined in Public Resources Code §4526), or zoned timberland production (as defined by Government Code §51104 [g])? | | | | X |
| 8.2.D | Would the project result in the loss of forest land or the conversion of forest land to a non-forest use? | | | | X |
| 8.2.E | Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or the conversion of forest land to a non-forest use? | | | | X |

Table 1
Initial Study Checklist

| S | Description of Issue | Requires Evaluation | | Less than Significant | No Impact |
|----------------------------------|--|--------------------------------|---------------------------------------|-----------------------|-----------|
| | | Potentially Significant Impact | Less than Significant with Mitigation | | |
| Section 8.3 Air Quality | | | | | |
| 8.3.A | Would the project conflict with or obstruct implementation of the applicable air quality plan? | X | | | |
| 8.3.B | Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? | X | | | |
| 8.3.C | Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | X | | | |
| 8.3.D | Would the project expose sensitive receptors to substantial pollutant concentrations? | X | | | |
| 8.3.E | Would the project create objectionable odors affecting a substantial number of people? | X | | | |
| Section 8.4 Biological Resources | | | | | |
| 8.4.A | Would the project, either directly or through habitat modifications, have a substantial adverse effect 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? | | | | X |
| 8.4.B | Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | | | X |
| 8.4.C | Would the project have a substantial adverse effect on Federally protected wetlands as defined by §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? | | | | X |
| 8.4.D | Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites? | | | | X |
| 8.4.E | Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X |
| 8.4.F | Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan? | | | | X |
| Section 8.5 Cultural Resources | | | | | |
| 8.5.A | Would the project cause a substantial adverse change in the significance of a historical resource as defined in §5064.5 of the CEQA Guidelines? | | | | X |

Table 1
Initial Study Checklist

| S | Description of Issue | Requires Evaluation | | Less Than a | No Impact |
|--|---|---------------------------------------|--|--------------------|------------------|
| | | Potentially Significant Impact | Less than Significant with Mitigation | | |
| 8.5.B | Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §5064.5 of the CEQA Guidelines? | X | | | |
| 8.5.C | Would the project, directly or indirectly, destroy a unique paleontological resource or site or unique geologic feature? | | | | X |
| 8.5.D | Would the project disturb any human remains, including those interred outside of formal cemeteries? | | | | X |
| Section 4.6 Geology & Soils | | | | | |
| 8.6.A | Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault (as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault), ground shaking, liquefaction, or landslides? | | | X | |
| 8.6.B | Would the project result in substantial soil erosion or the loss of topsoil. | | | X | |
| 8.6.C | Would the project be located on a soil or geologic unit that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | | | X | |
| 8.6.D | Would the project result in or expose people to potential impacts, including location on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2012) creating a substantial risks to life or property? | | | X | |
| 8.6.E | Would the project be located on soils that are incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | X |
| Section 8.7 Greenhouse Gas Emissions | | | | | |
| 8.7.A | Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | X | | | |
| 8.7.B | Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gasses? | X | | | |
| Section 8.8 Hazards & Hazardous Materials | | | | | |
| 8.8.A | Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | X | | | |
| 8.8.B | Would the project create a significant hazard to the public or the environment or result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | X | |

Table 1
Initial Study Checklist

| S | Description of Issue | Requires Evaluation | | Less Than a n | No I n p a |
|--|--|---|--|----------------------------------|-----------------------------------|
| | | Potentially Significant Impact | Less than Significant with Mitigation | | |
| 8.8.C | Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | X | | | |
| 8.8.D | Would the project be located on a site, which is included on a list of hazardous material sites compiled pursuant to Government Code §65962.5, and as a result, would it create a significant hazard to the public or the environment? | | | X | |
| 8.8.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 a public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| 8.8.F | For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| 8.8.G | Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? | | | | X |
| 8.8.H | Would the project expose people or structures to a significant risk of loss, injury, or death involving wild land fire, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands? | | | | X |
| Section 8.9 Hydrology & Water Quality | | | | | |
| 8.9.A | Would the project violate any water quality standards or waste discharge requirements? | X | | | |
| 8.9.B | Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge in such a way that would cause 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)? | X | | | |
| 8.9.C | Would the project substantially alter the existing drainage pattern of the site or area, including 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? | X | | | |
| 8.9.D | Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner, which would result in flooding on- or off-site? | X | | | |
| 8.9.E | Would the project 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? | X | | | |

Table 1
Initial Study Checklist

| S | Description of Issue | Requires Evaluation | | Less T h a n | No I n p a |
|---|--|---|--|-------------------------------------|-----------------------------------|
| | | Potentially Significant Impact | Less than Significant with Mitigation | | |
| 8.9.F | Would the project substantially degrade water quality? | X | | | |
| 8.9.G | Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | X |
| 8.9.H | Would the project place within a 100-year flood hazard area, structures which would impede or redirect flood flows? | | | | X |
| 8.9.I | Would the project expose people or structures to a significant risk of flooding as a result of dam or levee failure? | | | X | |
| 8.9.J | Would the project result in inundation by seiche, tsunami, or mudflow? | | | | X |
| Section 8.10 Land Use & Planning | | | | | |
| 8.10.A | Would the project physically divide an established community, or otherwise result in an incompatible land use? | | | | X |
| 8.10.B | Would the project conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | X | | | |
| 8.10.C | Would the project conflict with any applicable habitat conservation or natural community conservation plan? | | | | X |
| Section 8.11 Mineral Resources | | | | | |
| 8.11.A | Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State? | | | | X |
| 8.11.B | Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | | | | X |
| Section 8.12 Noise | | | | | |
| 8.12.A | Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | X | | | |
| 8.12.B | Would the project result in exposure of people to or generation of excessive ground-borne noise levels? | X | | | |
| 8.12.C | Would the project result in substantial permanent increase in ambient noise levels in the project vicinity above noise levels existing without the project? | X | | | |

Table 1
Initial Study Checklist

| S | Description of Issue | Requires Evaluation | | Less Than | No Impact |
|--|--|---------------------------------------|--|------------------|------------------|
| | | Potentially Significant Impact | Less than Significant with Mitigation | | |
| 8.12.D | Would the project result in substantial temporary or periodic increases in ambient noise levels in the project vicinity above levels existing without the project? | X | | | |
| 8.12.E | For a project located with 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? | | | | X |
| 8.12.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? | | | | X |
| Section 8.13 Population & Housing | | | | | |
| 8.13.A | Would the project induce substantial population growth in an area, either directly or indirectly? | X | | | |
| 8.13.B | Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| 8.13.C | Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X |
| Section 8.14 Public Services | | | | | |
| 8.14.A | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives in <i>fire protection</i> services? | X | | | |
| 8.14.B | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives in <i>police protection</i> services? | X | | | |
| 8.14.C | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives in <i>school</i> services? | X | | | |

Table 1
Initial Study Checklist

| S | Description of Issue | Requires Evaluation | | Less Than | No Impa |
|--|---|---|--|----------------------|--------------------|
| | | Potentially Significant Impact | Less than Significant with Mitigation | | |
| 8.14.D | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives in <i>other public facilities</i> ? | X | | | |
| Section 8.15 Recreation | | | | | |
| 8.15.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? | | | X | |
| 8.15.B | Would the project affect existing recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | | | X | |
| Section 8.16 Transportation & Circulation | | | | | |
| 8.16.A | Would the project 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. | X | | | |
| 8.16.B | Would the project conflict with an applicable congestions management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by a county congestion management agency for designated roads or highways? | X | | | |
| 8.16.C | Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in the location that results in substantial safety risks. | | | | X |
| 8.16.D | Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | X | | | |
| 8.16.E | Would the project result in inadequate emergency access? | | | X | |
| 8.16.F | Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. | | | X | |

Table 1
Initial Study Checklist

| S | Description of Issue | Requires Evaluation | | Less Than a n | No Impacts |
|------------------------|---|--------------------------------|---------------------------------------|---------------|------------|
| | | Potentially Significant Impact | Less than Significant with Mitigation | | |
| Section 8.17 Utilities | | | | | |
| 8.17.A | Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | X | | | |
| 8.17.B | Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts? | X | | | |
| 8.17.C | Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | X | | | |
| 8.17.D | Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | X | | | |
| 8.17.E | Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | X | | | |
| 8.17.F | Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs? | X | | | |
| 8.17.G | Would the project comply with Federal, State, and local statutes and regulations related to solid waste? | X | | | |

8. ENVIRONMENTAL ANALYSIS

This section of the Initial Study analyzes the potential environmental impacts that may result from the proposed project's implementation. The issue areas evaluated in this Initial Study include:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Aesthetics; • Agricultural & Forestry Resources; • Air Quality; • Biological Resources; • Cultural Resources; • Geology & Soils; • Greenhouse Gas Emissions;; • Hazards & Hazardous Materials; • Hydrology & Water Quality; | <ul style="list-style-type: none"> • Land Use & Planning; • Mineral Resources; • Noise; • Population & Housing; • Public Services; • Recreation; • Transportation & Circulation; • Utilities; and, • Mandatory Findings of Significance. |
|---|---|

The environmental analysis contained in this section reflects the Initial Study Checklist format used by the City of Commerce Public Works and Development Services Department in its environmental review process pursuant to the CEQA Guidelines. Under each issue area, an assessment of impacts is provided in the form of questions and answers. The analysis contained herein serves as a response to the individual questions. For the evaluation of potential impacts, questions are stated and an answer is provided according to the analysis undertaken as part of this Initial Study's preparation. To each question, there are four possible responses:

- *No Impact.* The approval and subsequent implementation of the proposed project will not have any measurable environmental impact on the environment.
- *Less Than Significant Impact.* The approval and subsequent implementation of the proposed project may have the potential for affecting the environment, although these impacts will be below levels or thresholds that the City of Commerce or other responsible agencies consider to be significant.
- *Less Than Significant Impact with Mitigation.* The approval and subsequent implementation of the proposed project may have the potential to generate impacts that will have a significant impact on the environment. However, the level of impact may be reduced to levels that are less than significant with the implementation of mitigation measures.
- *Potentially Significant Impact.* The approval and subsequent implementation of the proposed project may result in environmental impacts that are significant.

8.1 AESTHETICS

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse aesthetic impact if it results in any of the following:

- An adverse effect on a scenic vista;
- Substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- A substantial degradation of the existing visual character or quality of the site and its surroundings; or,
- A new source of substantial light and glare that would adversely affect day or night-time views in the area.

ENVIRONMENTAL ANALYSIS

8.1.A. Would the project affect a scenic vista? • Impact will be Analyzed in EIR.

The proposed project will not result in the obstruction of any view or create any shade or shadow impacts that could cause shadows to reside over sensitive uses. The proposed project represents a substantial improvement over the current on-site conditions for Areas 2 and 3. However, the new hotel buildings and parking structures will result in an increased in the overall building height and mass that will require analysis in the EIR. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.1.B. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? • Impact will be Analyzed in EIR.

According to the California Department of Transportation (Caltrans), there are no State or County designated scenic highways located in the vicinity of the project area.¹⁹ The proposed project will not impact rock-outcroppings or scenic vegetation along a designated scenic highway since there are no rock-outcroppings or scenic vegetation present on-site. In addition, none of the existing buildings within the affected area are considered to be historic resources. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.1.C. Would the project substantially degrade the existing visual character or quality of the site and its surroundings? • Impact will be Analyzed in EIR.

The project involves the development of a number of underutilized properties with new retail uses, new hotels, entertainment, offices, and other uses. The visual character of the project area will change as part of the proposed project's implementation. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.1.D. Would the project create a new source of substantial light or glare that would adversely affect day or night-time views in the area? • Impact will be Analyzed in EIR.

The project would generate new sources of light in this area that will include vehicle headlights, parking area lighting, security lighting, signage, and building lighting. This land use would not significantly illuminate the project's surroundings beyond the existing ambient lighting associated with the existing development located to the north, west, and east of the project sites. The proposal includes three new LED signs similar to those existing at the Citadel Outlets. These signs may create a significant increase of light in the area in the absence of mitigation. The Cinema will include a LED marquee and a 150-foot tall icon tower with vertical LED ribbons. Mitigation may be required to ensure that light trespass does not affect the aforementioned project elements. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

¹⁹ California Department of Transportation. *Official Designated Scenic Highways*. www.dot.ca.gov.

8.2 AGRICULTURAL AND FORESTRY RESOURCES

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant impact on agricultural and/or forestry resources if it results in any of the following:

- The conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance;
- A conflict with existing zoning for agricultural use or the termination of a Williamson Act Contract;
- A conflict with the existing zoning or cause the rezoning of, forest land (as defined in Public Resources Code Section 4526), or zoned timberland production (as defined by Government Code § 51104 [g]);
- The loss of forest land or the conversion of forest land to a non-forest use; or,
- Changes to the existing environment, which due to their location or nature, may result in the conversion of farmland to non-agricultural uses or the conversion of forest land to a non-forest uses.

ENVIRONMENTAL ANALYSIS

8.2.A. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, 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 project area is located along the Telegraph Road corridor. According to the California Department of Conservation, the City of Commerce does not contain any areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Since the implementation of the proposed project will not involve the conversion of prime farmland, unique farmland, or farmland of statewide importance to urban uses, no impacts will occur. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.2.B. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract? • No Impact.

No active agricultural activities are located within the project area nor are any such uses found in the adjacent parcels. In addition, according to the California Department of Conservation Division of Land Resource Protection, the project sites are not subject to a Williamson Act Contract.²⁰ Therefore, no impacts will occur since the proposed development will not be erected on a site that is subject to a Williamson Act Contract. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

²⁰ California Department of Conservation. *State of California Williamson Act Contract Land*.
ftp://ftp.consrv.ca.gov/pub/dlrp/WA/2012%20Statewide%20Map/WA_2012_8x11.pdf.

8.2.C. *Would the project conflict with existing zoning for or cause rezoning of, forest land (as defined in Public Resources Code Section 4526), or zoned timberland production (as defined by Government Code §51104[g])? • No Impact.*

The City of Commerce and the planning areas are located in the midst of a larger urban area and no forest lands are located in the City or within this portion of Los Angeles County. The City's General Plan and Zoning Ordinance do not specifically provide for any forest land preservation. As a result, no impacts on forest lands or timber resources will result. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.2.D. *Would the project result in the loss of forest land or the conversion of forest land to a non-forest use? • No Impact.*

No forest lands are located within the vicinity of either project site. As a result, no loss or conversion of forest lands will result from the proposed project's implementation and no impacts will occur. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.2.E. *Would the project involve other changes in the existing environment that, due to their location or nature, may result in conversion of farmland to non-agricultural use or the conversion of forest land to a non-forest use? • No Impact.*

The project would not involve the disruption or damage of the existing environment that would result in a loss of farmland to nonagricultural use or conversion of forest land to non-forest use because the project sites are not located in close proximity to forest land or farmland. As a result, no impacts will result from the implementation of the proposed project. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.3 AIR QUALITY

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project will normally be deemed to have a significant adverse environmental impact on air quality, if it results in any of the following:

- A conflict with or obstruction of the implementation of the applicable air quality plan;
- A violation of an air quality standard or contribute substantially to an existing or projected air quality violation;
- 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);
- The exposure of sensitive receptors to substantial pollutant concentrations; or,

- The creation of objectionable odors.

ENVIRONMENTAL ANALYSIS

- 8.3.A. *Would the project conflict with or obstruct implementation of the applicable air quality plan? • Impact will be Analyzed in EIR.*

Measures to improve regional air quality are outlined in the SCAQMD's Air Quality Management Plan (AQMP).²¹ The most recent AQMP was adopted in 2012 and was jointly prepared with the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG).²² The AQMP will help the SCAQMD maintain focus on the air quality impacts of major projects associated with goods movement, land use, energy efficiency, and other key areas of growth. Specific criteria for determining a project's conformity with the AQMP is defined in Section 12.3 of the SCAQMD's CEQA Air Quality Handbook.²³ Due to the project's size and scope, the implementation of the proposed project could result in substantial employment and population growth. In addition, the emissions generated during the project's construction and operational phase may exceed the thresholds of significance set by the SCAQMD for the six criteria pollutants. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

- 8.3.B. *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? • Impact will be Analyzed in EIR.*

The project's implementation will involve the generation of short-term construction emissions associated with site grading, the use of construction equipment, worker vehicle exhaust, and fugitive dust during excavation, grading, and other site preparation activities. Long-term impacts would occur from emissions generated from vehicle trips by retail customers, employees, residents, and guests as well as stationary emissions associated with natural gas and electrical energy consumption. The project will result in an increase in vehicular traffic along the Telegraph Road corridor beyond levels currently generated. In addition, the project would result in an increase in emissions from stationary sources associated with natural gas and electrical consumption. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

- 8.3.C. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? • Impact will be Analyzed in EIR..*

The project sites are located within the SCAB, which is currently non-attainment for two criteria pollutants (ozone and particulate matter). Operational activities associated with implementation of the project would result in increases in air pollutant emissions, which individually or cumulatively, could exceed established

²¹ South Coast Air Quality Management District, *Final 2012 Air Quality Plan*, Adopted February 2013.

²² Ibid.

²³ South Coast Air Quality Management District. *CEQA Air Quality Handbook*. April 1993.

thresholds for these criteria pollutants and may result in a significant impact without mitigation. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.3.D. *Would the project expose sensitive receptors to substantial pollutant concentrations? • Impact will be Analyzed in EIR.*

Sensitive receptors refer to land uses and/or activities that are especially sensitive to poor air quality and typically include homes, schools, playgrounds, hospitals, convalescent homes, and other facilities where children or the elderly may congregate.²⁴ These population groups are generally more sensitive to poor air quality. The nearest sensitive receptor is the single-family residential neighborhood located 329 feet to the southwest of the Citadel Outlets expansion project site. This neighborhood is separated from the Telegraph Road corridor by the I-5 freeway. The project's potential trip generation may result in a further exposure of the aforementioned sensitive receptors to high concentrations of particulate matter and other criteria pollutants. Therefore, the project's potential impact with respect to the local significance thresholds (LSTs) will require analysis. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.3.E. *Would the project create objectionable odors affecting a substantial number of people? • Impact will be Analyzed in EIR.*

The odor impact generated during construction activities would be short-term in nature and would cease upon completion of the respective development phase. Mitigation will be identified in the subsequent EIR to minimize the odor impacts from diesel equipment. Typically, the types of land use development that are associated with odor problems include refineries, chemical plants, wastewater treatment plants, landfills, composting facilities, and transfer stations. No such uses will occupy the project sites. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.4 BIOLOGICAL RESOURCES

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse impact on biological resources if it results in any of the following:

- A substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service;
- A substantial adverse effect on any riparian habitat or other sensitive natural plant community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

²⁴ South Coast Air Quality Management District. *CEQA Air Quality Handbook, Appendix 9*. 2004 (as amended).

- A substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means;
- A substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites;
- A conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,
- A 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 ANALYSIS

8.4.A. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? • No Impact.*

A review of the California Department of Fish and Wildlife California Natural Biodiversity Database (CNDDB) Bios Viewer indicated that there are five threatened or endangered species located within the East Los Angeles Quadrangle, which includes the City of Commerce. There are no native, threatened, or endangered species located on-site. The vegetation located within the Citadel Outlets consists of species typically used as ornamental landscaping. In addition, any wildlife found on-site will be limited to species most commonly found in an urban environment. As a result, no impacts will occur. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.4.B. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? • No Impact.*

A review of the U.S. Fish and Wildlife Service National Wetlands Inventory, Wetlands Mapper indicated that there are no wetlands or riparian habitat present on-site or in the adjacent properties. In addition, there are no designated “blue line streams” located within the project sites. This conclusion is supported by the field survey of the project sites and the surrounding area.²⁵ *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.4.C. *Would the project have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? • No Impact.*

As indicated in the previous subsection, the project sites and adjacent developed properties do not contain any natural wetland and/or riparian habitat. The project sites are located along a major City thoroughfare.

²⁵ Blodgett Baylosis Environmental Planning. Site survey. Survey was conducted May 5, 2016.

As a result, the proposed project will not impact any protected wetland area or designated blue-line stream and no impacts will occur. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.4.D. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites? • No Impact.*

The project sites are located in the midst of an urban area. In addition, the sites have been disturbed to accommodate the existing and former development. Thus, no native vegetation or natural open space areas remain. Furthermore, the site contains no natural hydrological features. Constant disturbance (noise and vibration) from vehicular traffic travelling along Telegraph Road, Washington Boulevard, and the I-5 also limits the site's utility as a migration corridor. Since the site is located along major thoroughfares and lacks suitable habitat, the site's utility as a migration corridor is restricted. Therefore, no impacts will result from the implementation of the proposed project. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.4.E. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? • No Impact.*

The City of Commerce does not have locally-designated species and on-site vegetation is limited to landscaping. Additionally, the project will not result in the removal of any significant varieties of plants or trees. Thus, no impacts on locally-designated species are expected as part of the proposed project's implementation. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.4.F. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan? • No Impact.*

As indicated previously, the project area is located within an urbanized setting and no natural habitats are found within the proposed project sites or in adjacent areas. The project sites are not located within an area governed by a habitat conservation or community conservation plan. As a result, no impacts on local, regional, or State habitat conservation plans will result from the proposed project's implementation. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.5 CULTURAL RESOURCES

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project will normally have a significant adverse impact on cultural resources if it results in any of the following:

- A substantial adverse change in the significance of a historical resource as defined in §15064.5 of the CEQA Guidelines;

- A substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines;
- The destruction of a unique paleontological resource, site, or unique geologic feature; or,
- The disturbance of any human remains, including those interred outside of formal cemeteries.

ENVIRONMENTAL ANALYSIS

8.5.A. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the CEQA Guidelines? • No Impact.*

Ordinarily, properties that have achieved significance within the past 50 years are not considered eligible for the National Register. However, such properties *will qualify* if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A religious property deriving primary significance from architectural or artistic distinction or historical importance;
- Districts, sites, buildings, structures, and objects that are associated with events that have made a significant contribution to the broad patterns of our history;
- A building or structure removed from its original location that is significant for architectural value, or which is the surviving structure is associated with a historic person or event;
- A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life;
- A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events;
- A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived;
- A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or,
- A property achieving significance within the past 50 years if it is of exceptional importance.

A review of the State of California State Historic Preservation Office (SHPO) indicated there are no National Register listed or eligible properties or State landmarks located within the project sites. The Samson's Tire Plant façade, now a part of the Citadel Outlets, is a locally significant resource. The project will not physically affect the Tire Plant façade since the buildings that will be demolished on either site do not exhibit the aforementioned façade treatments. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.5.B. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines? • Impact will be Analyzed in EIR.*

No archaeological resources are expected to be found within the project sites due to the past development. Formal consultation to the required Native American tribes pursuant to AB-52 will be required as part of the CEQA process. AB-52 was implemented to give local Native Americans a 30-day period to review projects under consideration by the Lead Agency. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.5.C. *Would the project directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature? • No Impact.*

The project sites and the surrounding area, because of its alluvial geology and the previous development, are not considered to be likely candidates for the discovery of paleontological resources. Alluvial deposits are typically quaternary in age (from two million years ago to the present day) and span the two most recent geologic epochs, the Pleistocene and the Holocene.²⁶ The likelihood of the discovery of such materials is also considered to be low due to the previous disturbance that has occurred in the area. Thus, the proposed project is not anticipated to disturb any paleontological resources. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.5.D. *Would the project disturb any human remains, including those interred outside of formal cemeteries? • No Impact.*

There are no cemeteries located in the immediate area that would be affected by the proposed project. In addition, the project sites do not contain any religious or sacred structure. Thus, no impacts on existing religious facilities in the City will occur with the proposed project. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.6 GEOLOGY & SOILS

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse environmental impact on the environment if it results in the following:

- The exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault;
- Substantial soil erosion or the loss of topsoil;
- The locating of a project on a soil or geologic unit that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;

²⁶ United States Geological Survey. *What is the Quaternary?* http://geomaps.wr.usgs.gov/sfgeo/quaternary/stories/what_is.html.

- The exposure of people to potential impacts, including location on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating a substantial risks to life or property; or,
- The locating of a project on soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

ENVIRONMENTAL ANALYSIS

8.6.A. *Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault (as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area), ground-shaking, liquefaction, or landslides? • Less than Significant Impact.*

Numerous faults are found within the Los Angeles basin. Most are of such length and orientation that they are considered to be of secondary importance to major faults such as the Whittier-Elsinore, Newport-Inglewood, and San Andreas, in terms of generating major earthquakes. The project area is not located within an Alquist-Priolo Special Studies Zone, though the potential impacts in regards to ground-shaking and fault rupture are less than significant since the risk is no greater in and around the project sites than for the rest of the area. The project sites are not located in an area that is subject to liquefaction. Lastly, the project sites are not subject to the risk of landslides because there are no hills or mountains located in the vicinity of the project sites. As a result, the potential impacts in regards to liquefaction and landslides are less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.6.B. *Would the project result in substantial soil erosion or the loss of topsoil? • Less than Significant Impact.*

The project sites are currently underlain by soils of the Ramona-Placentia association.²⁷ According to the United States Department of Agriculture Soil Conservation Service, soils of the Ramona-Placentia association have a slight erosion risk.²⁸ The Ramona soils that underlie the project sites (a two to five percent slope) pose a slight moderate erosion hazard. However, the project sites are currently developed and are located outside of a slope failure zone.²⁹ In addition, the project sites could also be underlain by the Placentia soils.³⁰ The Placentia soils have a moderate to high erosion hazard and are fine textured subsoil.³¹ It should be noted that the Placentia soils are suitable for urban development, but pose a problem once deep surface excavation occurs. The Placentia soils make up only around 15% of the

²⁷ General Soil Map for Los Angeles County California. December 1969.

²⁸ United States Department of Agriculture Soil Conservation Service. Report and General Soil Map Los Angeles County, California. Revised 1969.

³⁰ United States Department of Agriculture Soil Conservation Service.
<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Website accessed January 2015.

³¹ Ibid.

Ramona-Placentia soils association that underlies the City.³² As stated previously, the project sites have been previously developed, suggesting that the sites are conducive for construction and poses little problems for future development. Therefore, the impacts are expected to be less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.6.C. *Would the project be located on a soil or geologic unit that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? • Less than Significant Impact.*

The project area is not in an area that is at risk for landslides. Lateral spreading is a phenomenon that is characterized by the horizontal, or lateral, movement of the ground. Lateral spreading could be liquefaction-induced or can be the result of excess moisture within the underlying soils. The project sites are at not risk for lateral spreading. Lateral spreading occurring from below the project will not affect the proposed project since the buildings will be constructed with the strict adherence to the most pertinent State and City building codes. Furthermore, since the sites are not located in an area that is subject to liquefaction, the chances of lateral spreading occurring on or adjacent to the site is minimal. Soils of the Ramona-Placentia association may be prone to subsidence due to the shrink-swell characteristics exhibited by the underlying soils.³³ Subsidence occurs via soil shrinkage and is triggered by a significant reduction in an underlying groundwater table, thus causing the earth on top to sink.³⁴ Grading and other construction activities are not expected to reach the depths required to encounter an underlying groundwater aquifer. In addition, the project will be required to be connected to the City's water lines; therefore, the project's operation will not utilize groundwater supplies below the sites. Lastly, the project sites are not located in an area that is subject to liquefaction. As a result, the potential impacts are anticipated to be less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.6.D. *Would the project result in or expose people to potential impacts, including location on expansive soil, as defined in the Uniform Building Code (2016) creating a substantial risk to life or property? • Less than Significant Impact.*

The soils that underlie the project sites belong to the Ramona-Placentia association, which exhibit certain shrink-swell characteristics. The shrinking and swelling of soils is influenced by the amount of clay present in the underlying soils.³⁵ Clay is present in the composition of above-mentioned soils.³⁶ These soils become sticky when wet and expand according to the moisture content present at the time. If soils consist of expansive clay, damage to foundations and structures may occur. In order to prevent foundation damage, the project structural engineer must determine the nature and extent of foundation and construction elements required to address potential expansive soil impacts. The project contractors will be

³² United States Department of Agriculture Soil Conservation Service.
<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Website accessed January 2015.

³³ Subsidence Support. *What Causes House Subsidence?* <http://www.subsidencesupport.co.uk/what-causes-subsidence.html>.

³⁴ Ibid.

³⁵ Natural Resources Conservation Service Arizona. *Soil Properties Shrink/Swell Potential*.
http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/az/soils/?cid=nrcs144p2_065083.

³⁶ United States Department of Agriculture Soil Conservation Service. *Report and General Soil Map Los Angeles County, California*. Revised 1969.

required to comply with the structural engineer's recommendations. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.6.E. *Would the project be located on soils that are incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? • No Impact.*

The proposed development will be connected to a sanitary sewer system. The proposed use will not utilize a septic tank system. As a result, no impacts on septic tanks will result. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.7 GREENHOUSE GAS EMISSIONS

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse impact on greenhouse gas emissions if it results in any of the following:

- The generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and,
- The potential for conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases.

ENVIRONMENTAL ANALYSIS

8.7.A. *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? • Impact will be Analyzed in EIR.*

The State of California requires CEQA documents include an evaluation of greenhouse gas (GHG) emissions or gases that trap heat in the atmosphere. GHG are emitted by both natural processes and human activities. Examples of GHG that are produced both by natural and industrial processes include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). The EIR analysis will indicate the daily and annual emissions of GHG. Although the development is consistent with State efforts to encourage infill development, the project's GHG emissions may exceed SCAQMD thresholds. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.7.B. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gasses? • Impact will be Analyzed in EIR.*

The project would incorporate a number of design features that are consistent with the California Attorney General's recommended policies and measures to reduce GHG emissions. A list of the Attorney General's recommended measures and the project's conformance with each will be identified in the EIR. The new on-site improvements will also be required to incorporate any pertinent sustainable practices that include

water, energy, and solid waste efficiency measures. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.8 HAZARDS & HAZARDOUS MATERIALS

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse impact on risk of upset and human health if it results in any of the following:

- The creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- The creation of 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;
- The generation of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- The locating of a project on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 resulting in a significant hazard to the public or the environment;
- For a project located within an area governed by an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area;
- For a project located in the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- The impairment of the implementation of, or physical interference with, an adopted emergency response plan or emergency evacuation plan; or,
- The exposure of people or structures to a significant risk of loss, injury, or death involving wild land fire, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands.

ENVIRONMENTAL ANALYSIS

8.8.A. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? • Impact will be Analyzed in EIR.*

A records search was conducted through the California EPA Cortese list databases. There are two Leaking Underground Storage Tank (LUST) sites located within the Citadel Outlets expansion project sites. The

primary containment of concern for both sites was diesel. Clean up efforts within the two sites identified in the Citadel Outlets expansion area has been complete since the 1990's. The record search through the State EPA website also identified a LUST site within the project area located at the Telegraph Road and Washington Boulevard. Clean up efforts have also been completed to address the gasoline contamination present within the aforementioned site. The vacant building and adjacent undeveloped located along the east side of Travers Avenue within the Citadel Outlets expansion sites have been identified in the United States EPA Envirofacts database. In addition, there are two sites (both are located within the eastern portion of the Phase 6 site) that are identified in the EPA's Envirofacts database. The potential presence of contamination, lead-based paint, and asbestos-containing materials will need to be further examined in the EIR. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.8.B. *Would the project create a significant hazard to the public or the environment, or result in reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? • Less than Significant Impact.*

Due to the nature of the proposed project (retail, restaurants, a hotel, and office uses, no hazardous materials will be used on-site beyond those which are used for routine cleaning and maintenance. In the event that any of the project's future tenants will involve the use, transport, or disposal of hazardous materials, the affected tenant(s) will need to comply with all Federal and State regulations regarding the handling and transportation of hazardous materials should the use of those materials be required for daily operations. Compliance with all pertinent existing regulations will address any potential impacts. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.8.C. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? • Impact will be Analyzed in EIR.*

The nearest school is Rosewood School, located approximately 600 feet west of the project sites. The school is separated from the project sites by the Santa Ana Freeway. The proposed retail, apartment, restaurant, and hotel uses will not involve the use, manufacture, or storage of hazardous materials other than those that are commonly used for maintenance and landscaping purposes. However, the potential exists for hazardous materials to be present on the project sites during construction since the project sites have been under the jurisdiction of the United States EPA. Therefore, a Phase I Environmental Site Assessment will be prepared to determine the presence of existing contaminants. The location and extent of potential contamination, if any, will be described in the EIR. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.8.D. *Would the project be located on a site, which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment? • Less than Significant Impact.*

There are sites in the project area that are located within both of the project sites that have been identified on the CalEPA's LUST database. According to the California State Water Resources Control Board, all cleanup efforts have been completed over 20 years ago and have addressed previous issues regarding

potential groundwater and soil contamination. Therefore, the impacts will be less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.8.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 a public use airport, would the project result in a safety hazard for people residing or working in the project area? • No Impact.*

The project area is not located within two miles of an operational *public* airport. The nearest airport is Compton-Woodley Airport, located approximately 12 miles to the southwest. The proposed project is not located within the Runway Protection Zones (RPZ) of the aforementioned airport. In addition, the proposed project will not penetrate the designated slopes for the Compton-Woodley airport. Essentially, the proposed project will not introduce a building that will interfere with the approach and take-off of airplanes utilizing the aforementioned airport. As a result, no impacts are anticipated. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.8.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.*

The project area is not located within two miles of a private airstrip.³⁷ As a result, the proposed project will not present a safety hazard related to aircraft and/or airport operations at a private use airstrip and no impacts will occur. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.8.G. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? • No Impact.*

At no time will Telegraph Road or Washington Boulevard be completely closed to traffic during the project's construction. The construction plan must identify specific provisions for the regulation of construction vehicle ingress and egress to the site during construction as a means to provide continued through-access. All construction staging must occur on-site. As a result, no impacts are associated with the proposed project's implementation. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.8.H. *Would the project expose people or structures to a significant risk of loss, injury, or death involving wild land fire, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands? • No Impact.*

The project sites and surrounding properties are urbanized and the majority of the parcels are developed. There are no areas of native vegetation found within the project sites or in the surrounding properties that could provide a fuel source for a wildfire. Therefore, development of the project will not expose people or structures to a significant risk of loss, injury, or death involving wild land fires. *No impact is anticipated and this issue will not require analysis in the EIR.*

³⁷ Tollfreeairline. *Los Angeles County Public and Private Airports, California*.
<http://www.tollfreeairline.com/california/losangeles.htm>

8.9 HYDROLOGY & WATER QUALITY

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse environmental impact on water resources or water quality if it results in any of the following:

- A violation of any water quality standards or waste discharge requirements;
- A substantial depletion of groundwater supplies or interference with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- A substantial alteration of the existing drainage pattern of the site or area through the alteration of the course of a stream or river in a manner that would result in substantial erosion or siltation on- or off-site;
- A substantial alteration of the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in flooding on-site or off-site;
- The creation or contribution of water runoff that would exceed the capacity of existing or planned stormwater drainage systems or the generation of substantial additional sources of polluted runoff;
- The substantial degradation of water quality;
- The placement of housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map;
- The placement of structures within 100-year flood hazard areas that would impede or redirect flood flows;
- The exposure of people or structures to a significant risk of flooding as a result of dam or levee failure; or,
- The exposure of a project to inundation by seiche, tsunami, or mudflow.

ENVIRONMENTAL ANALYSIS

8.9.A. *Would the project violate any water quality standards or waste discharge requirements? • Impact will be Analyzed in EIR.*

The eastern portion of the Citadel Outlets expansion area is covered over in pervious surfaces, as is a majority of the Telegraph Road/Washington Boulevard project site. The project will replace existing unpaved surfaces with new buildings, parking lots, roads, and landscaping features that have the potential to affect the existing drainage pattern of the site. In addition, the project may affect the overall drainage

pattern within the vicinity of the project sites in the absence of mitigation. The project would increase impervious surfaces on the project sites and has the potential to create pollutants typical of urban development, including oils and other substances, which could contaminate ground water supplies in the absence of mitigation. Therefore, construction and operation of the project may affect water quality standards in the absence of mitigation. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.9.B. *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge in such a way that would cause a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of a pre-existing nearby well would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? • Impact will be Analyzed in EIR.*

Grading-related activities are not anticipated to encounter and deplete groundwater supplies from any underlying aquifer, though the depth of underlying groundwater is not known. In addition, the proposed project will be connected to the City's water lines and is not anticipated to deplete groundwater supplies through the consumption of the water. The project will be required to install Xeriscape landscaping and water-efficient appliances to reduce the burden placed on the City's water resources (refer to Section 4.17). Future water consumption will be limited to that used for landscaping, restroom use, and routine maintenance and cleaning. While no adverse impacts on water quality are anticipated as part of the proposed project's construction and subsequent operation, mitigation measures will be identified to reduce the potential for groundwater and runoff contamination during construction. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.9.C. *Would the project substantially alter the existing drainage pattern of the site or area, including 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? • Impact will be Analyzed in EIR.*

The eastern portion of the Citadel Outlets expansion area is covered over impervious surfaces as is a majority of the Telegraph Road/Washington Boulevard project site. The project will replace existing unpaved surfaces with new buildings, parking lots, roads, and landscaping features that have the potential to affect the existing drainage pattern of the site. In addition, the project may affect the overall drainage pattern within the vicinity of the project sites in the absence of mitigation. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.9.D. *Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner, which would result in flooding on or off-site? • Impact will be Analyzed in EIR.*

As indicated previously, the implementation of the proposed project may increase surface runoff in the absence of mitigation and other stormwater runoff controls. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.9.E. *Would the project 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? • Impact will be Analyzed in EIR.*

It is not anticipated that the project will create runoff water that would exceed the capacity of the existing stormwater drainage system or provide substantial additional sources of polluted runoff. However, mitigation and other stormwater runoff controls will need to be identified. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.9.F. *Would the project otherwise substantially degrade water quality? • Impact will be Analyzed in EIR.*

As noted previously, the project will increase the amount of impervious surfaces on both sites, which may increase urban runoff and could affect water quality in the area. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.9.G. *Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? • No Impact.*

According to the Federal Emergency Management Agency (FEMA) flood insurance map obtained from the Los Angeles County Department of Public Works, the project area is located in Zone X. This flood zone has an annual probability of flooding of less than 0.2% and represents areas outside the 500-year flood plain. Thus, properties located in Zone X are not located within a 100-year flood plain.³⁸ Therefore, no impact is identified for this issue area. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.9.H. *Would the project place within a 100-year flood hazard area, structures which would impede or redirect flood flows? • No Impact.*

As indicated previously, the project area is not located within a designated flood hazard area as identified by FEMA. As a result, the project will not impede or redirect the flows of potential floodwater since the project areas are not located within a flood hazard area. Therefore, no impacts are associated with the proposed project's implementation. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.9.I *Would the project expose people or structures to a significant risk of flooding as a result of dam or levee failure? • Less Than Significant Impact.*

The project area is located within the potential inundation area of the Sepulveda Reservoir and the Garvey Reservoir. Potential overflow from the Rio Hondo River may affect areas to the southeast and southwest of the City though these flows are not expected to reach the project area. As a result, the impacts are considered to be less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

³⁸ FEMA. *Flood Zones, Definition/Description*. <http://www.fema.gov/floodplain-management/flood-zones>.

8.9.J. *Would the project result in inundation by seiche, tsunami or mudflow? • No Impact.*

The project area will not be exposed to a tsunami since the site is located inland from the Pacific Ocean. There are no hillsides located in the area that would result in mudslides. In addition, no surface water bodies are located in the immediate area that would result in a seiche. As a result, no impacts are expected. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.10 LAND USE & PLANNING

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant impact on land use and development if it results in any of the following:

- The disruption or division of the physical arrangement of an established community;
- A conflict with an applicable land use plan, policy, or regulation of the agency with jurisdiction over the project; and,
- A conflict with any applicable conservation plan or natural community conservation plan.

ENVIRONMENTAL ANALYSIS

8.10.A. *Would the project physically divide or disrupt an established community or otherwise result in an incompatible land use? • No Impact.*

The implementation of the proposed project will not affect an established community because there are no residential neighborhoods located in the vicinity of either site. As indicated previously, the project sites are located along the Telegraph Road corridor and are surrounded by commercial and industrial development. Furthermore, the implementation of the proposed project will not result in an incompatible land use since the project has been anticipated in the City's General Plan. Therefore, no impacts will result. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.10.B. *Would the project conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? • Impact will be Analyzed in EIR.*

The implementation of the proposed project is assumed to require implementation through two statutory development agreements and the identified zone changes which waive certain development standards for development of the project, including, but not limited to, building height, Floor Area Ratio (FAR) ancillary structure height (e.g. light poles), and signage (area, count, and height). However, the project is consistent with the goals envisioned for the Telegraph Road Corridor in the City's General Plan. Any elements of the proposed project that may require a zone change or conflict with elements of the City's zoning code will be

analyzed. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.10.C. *Will the project conflict with any applicable habitat conservation plan or natural community conservation plan? • No Impact.*

The project sites are located in the midst of an existing urbanized area. No natural or native habitats are found within the site or within the adjacent parcels. In addition, there are no areas within the immediate vicinity that are subject to habitat conservation plans. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.11 MINERAL RESOURCES

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse impact on energy and mineral resources if it results in any of the following:

- The loss of availability of a known mineral resource that would be of value to the region and the residents of the State; or,
- 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.

8.11.A. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State? • No Impact.*

According to the California Department of Conservation Division of Oil, Gas, and Geothermal Resources Well Finder, there are no existing or former oil wells and/or oil extraction activities located within the project sites. In addition, according to the Significant Mineral Aggregate Resource Area (SMARA) study area maps prepared by the California Geological Survey, the City of Commerce is located within the larger San Gabriel Valley SMARA (identified as the Portland cement concrete-grade aggregate). However, as indicated in the San Gabriel Valley P-C region MRZ-2 map, the project sites are not located in an area where there are significant aggregate resources present. In addition, the project sites are not located in an area with active mineral extraction activities. As a result, no impacts will occur. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.11.B. *Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? • No Impact.*

There are no mineral, oil, or energy extraction and/or generation activities within the project area or in the immediate area. Review of maps provided by the State Department of Conservation indicates that there are no abandoned and capped wells within the sites that will be improved as part of the project. The resources and materials used in the limited amount of construction will not include any materials that are

considered to be rare or unique. Thus, the project will not result in any effects on mineral resources in the region. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.12 NOISE

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant impact on the environment if it results in any of the following:

- The exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies;
- The exposure of people to, or generation of, excessive ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the vicinity of the project above levels that exist without the project;
- A substantial temporary or periodic increase in ambient noise levels (due to construction) in the project vicinity above levels existing without the project;
- The locating of a project within an area governed by an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or private use airport, where the project would expose people residing or working in the project area to excessive noise levels; or,
- The locating of a project within the vicinity of a private airstrip that would result in the exposure of people residing or working in the project area to excessive noise levels.

ENVIRONMENTAL ANALYSIS

8.12.A. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? • Impact will be Analyzed in EIR.

Potential operational impacts associated with traffic in the area; mechanical equipment associated with heating, ventilation, and air conditioning; and building operations could also be significant sources of noise. In addition, elements of the project are considered to be sensitive receptors (the hotels). *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.12.B. Would the project result in exposure of people to, or generation of, excessive ground-borne noise levels? • Impact will be Analyzed in EIR.

Construction of the project will include conventional construction activities such as excavation, grading, site preparation, and building construction. A temporary increase in noise levels will result from construction activities. Operation of the project will not involve any activities that have the potential to

cause excessive ground-borne vibration or noise. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.12.C. *Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? • Impact will be Analyzed in EIR.*

The majority of long-term operational noise generated by the project will be attributable to vehicular traffic, which may affect hotel guests. Additional sources of noise include noise generated by drive-thru speaker boxes, and retail alarms. Further analysis of this issue will be required. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.12.D. *Would the project result in a substantial temporary or periodic increase in ambient noise levels (due to construction) in the project vicinity above levels existing without the project? • Impact will be Analyzed in EIR.*

The construction activities will include conventional construction activities such as excavation, grading, site preparation, and building construction. A temporary increase in noise levels will result from construction activities. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.12.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? • No Impact.*

The project sites are not located within two miles of an operational public airport. The nearest airport is Compton-Woodley Airport, located approximately 12 miles to the southwest. The proposed project is not located within the Runway Protection Zones (RPZ) of the aforementioned airport. In addition, the proposed project will not penetrate the designated slopes for the Compton-Woodley airport. Essentially, the proposed project will not introduce a building that will interfere with the approach and take-off of airplanes utilizing the aforementioned airport. As a result, no impacts are anticipated. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

8.12.F. *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 project sites are not located within two miles of a private airstrip.³⁹ As a result, the proposed project will not present a safety hazard related to aircraft and/or airport operations at a private use airstrip and no impacts will occur. *No significant impact is anticipated and this issue will not require analysis in the EIR.*

³⁹ Tollfreeairline. *Los Angeles County Public and Private Airports, California*.
<http://www.tollfreeairline.com/california/losangeles.htm>

8.13 POPULATION & HOUSING

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant impact on housing and population if it results in any of the following:

- A substantial growth in the population within an area, either directly or indirectly related to a project;
- The displacement of a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere; or,
- The displacement of substantial numbers of people, necessitating the construction of replacement housing.

ENVIRONMENTAL ANALYSIS

8.13.A. *Would the project induce substantial population growth in an area, either directly or indirectly?*

- *Impact will be Analyzed in EIR.*

The proposed project may induce population growth while increasing local employment growth. Therefore, this issue will require analysis in the EIR. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.13.B. *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?* • *No Impact.*

There are no dwelling units located on, or persons residing within, the project sites. Since no housing units will be demolished as part of the proposed project's implementation, no replacement housing will be needed and no impacts will occur. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.13.C. *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?* • *No Impact.*

There are no dwelling units located on, or persons residing within, the project sites. Since no housing units will be demolished as part of the proposed project's implementation, no replacement housing will be needed and no impacts will occur. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.14 PUBLIC SERVICES

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse impact on public services if it results in any of the following:

- A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to *fire protection services*;
- A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to *law enforcement services*;
- A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to *educational services*; or,
- A substantial adverse physical impact associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives relative to *other public facilities*.

ENVIRONMENTAL ANALYSIS

8.14.A. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services? • Impact will be Analyzed in EIR.*

The project will increase the level of activity at the site and vehicular and pedestrian traffic in the project area, and therefore, would generate additional demand for fire protection services. Further analysis of this issue will be required. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.14.B. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services? • Impact will be Analyzed in EIR.*

The project will increase the level of activity at the site and vehicular and pedestrian traffic in the project area, and therefore would generate additional demand for police protection services. Further analysis of this issue will be required. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.14.C. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for school services? • Impact will be Analyzed in EIR..*

The project will result in a growth inducing population and employment growth. This indirect increase in population may result in an increase in enrollments beyond that projected through natural population growth for the area. Therefore, the project's potential impacts will need to be examined further in the EIR. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.14.D. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which would cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for other public services? • Potentially Significant Impact.*

As indicated previously, the implementation of the proposed project may create an additional demand for other government facilities such as parks and the City's libraries. Therefore, the project's potential impacts will need to be examined further in the EIR. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.15 RECREATION

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse impact on the environment if it results in any of the following:

- 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; or,
- The construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

ENVIRONMENTAL ANALYSIS

8.15.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? • Less than Significant Impact.*

The City of Commerce Parks and Recreation Department operates a camp in Lake Arrowhead, California, four neighborhood parks, seven community centers, and 17 divisions. The proposed project may increase the City's population, which could lead to an increased demand in park facilities and other recreational services provided by the City. As a result, the project Applicant will be required to pay Quimby Act fees (park development fees) to the City to offset any potential impacts to the City's parks and recreation facilities. Therefore, the project's impacts are anticipated to be less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.15.B. *Would the project affect existing recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? • Less than Significant Impact.*

The proposed project will be restricted to the designated sites and will not affect or physically alter any parks or recreational facilities. The nearest such facility is Rosewood Park, located approximately 1,058 feet southwest of the project sites. In addition, the project Applicant will be required to pay all pertinent Quimby Act fees and/or park development fees to the City to offset any potential impacts to the City's parks and recreation facilities. Therefore, the anticipated impacts are considered to be less than significant impact. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.16 TRANSPORTATION & CIRCULATION

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project will normally have a significant adverse impact on traffic and circulation if it results in any of the following:

- 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;
- A conflict with an applicable congestions 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;
- Results in a change in air traffic patterns, including either an increase in traffic levels or a change in the location that results in substantial safety risks;

- Substantially increases hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Results in inadequate emergency access;
- A 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 ANALYSIS

8.16.A Would the project 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? • Impact will be Analyzed in EIR.

The project includes the construction of new retail, restaurants, and a hotel, which will result in a significant increase in vehicular traffic in the vicinity of the project sites. A traffic study is being prepared that will assess the project's traffic generation and the attendant level of service impacts. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.16.B. Would the project conflict with an applicable congestions 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? • Impact will be Analyzed in EIR.

The project includes the construction of new retail, restaurants, and a hotel, which could potentially impact a CMP intersection. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.16.C. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in the location that results in substantial safety risks? • No Impact.

As indicated previously, the project is not located within the RPZ of the Compton-Woodley airport. Therefore, the project will not introduce any development that could potentially affect air traffic patterns. *No impact is anticipated and this issue will not require analysis in the EIR.*

8.16.D. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? • Impact will be Analyzed in EIR.

The additional traffic generated by the proposed project may increase safety hazards for pedestrians walking in the project's vicinity. In addition, the proposed internal roadway widths and turning radii will be designed in accordance with City standards. Ultimate development on the project sites will require Design Review approval by the City, which would ensure that adequate emergency access is provided. A

traffic study is being prepared that will assess the project's impacts on local roads as well the internal circulation and parking characteristics. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.16.E. Would the project result in inadequate emergency access? • Less than Significant Impact.

The proposed project will not affect emergency access to any adjacent parcels. At no time will any local streets or parcels be closed to traffic. Furthermore, all construction staging areas will be located on-site. As a result, the proposed project's implementation will not result in any impacts. The potential impacts on this issue will be less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.16.F. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. • Less than Significant Impact.

There are no pedestrian or bicycle facilities located along Telegraph Road. In addition, the proposed project will not impact any bus stops located along the Telegraph Road corridor, including the bus stop located at the northeast corner of the Telegraph Road/Washington Boulevard intersection and the bus stop located adjacent to the driveway providing access to the Commerce Casino. Therefore, the potential impacts are deemed to be less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.17 UTILITIES

THRESHOLDS OF SIGNIFICANCE

In accordance with the provisions of CEQA, a project may be deemed to have a significant adverse impact on utilities if it results in any of the following:

- An exceedance of wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- The construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts;
- The construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- An overcapacity of the storm drain system, causing area flooding;
- A determination by the wastewater treatment provider that serves or may serve the project, that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

- Utilization of a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or,
- Non-compliance with Federal, State, and local statutes and regulations relative to solid waste.

ENVIRONMENTAL ANALYSIS

8.17.A. *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? • Impact will be Analyzed in EIR.*

The project area is connected to sanitary sewers via sewer lines in both Telegraph Road and Smithway Street. The County Sanitation Districts maintain and operate the sewer system in the City of Commerce. The project area is served by the Los Angeles County Sanitation District No. 2. Under the project, wastewater generation would increase and further analysis of this issue is required. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.17.B. *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts? • Impact will be Analyzed in EIR.*

The project will increase the need for water and wastewater service due to the increased water consumption and effluent generation associated with the proposed project's operation. Additional water and wastewater connections may be required to serve the project and further analysis of this issue is required. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.17.C. *Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? • Impact will be Analyzed in EIR.*

Construction activities and an increase of impervious surfaces on the project sites could impact soil erosion and stormwater runoff levels in the absence of mitigation. Therefore, further analysis of this issue will be required. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.17.D. *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? • Impact will be Analyzed in EIR.*

The project would result in an overall increase in the amount of water consumed, which is substantial since California is in the midst of a severe drought. Further analysis will be required to assess potential water consumption and the availability of existing water supplies. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.17.E. *Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? • Impact will be Analyzed in EIR.*

The project would result in an overall increase in the amount of wastewater generated in the immediate service area. Further analysis of potential effluent generation will be required. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.17.F. *Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs? • Impact will be Analyzed in EIR.*

Trash collection is provided by the Metropolitan Waste Disposal Company and other private haulers for disposal into the Commerce Incinerator. Under the project, solid waste generation will increase and the amount of potential waste will need to be determined. *This issue will be analyzed in the EIR to identify the potential impacts along with any requisite mitigation.*

8.17.G. *Will the project comply with Federal, State, and local statutes and regulations related to solid waste? • Impact will be Analyzed in EIR.*

The proposed use, like all other developments in the City, will be required to adhere to all pertinent ordinances related to waste reduction and recycling. The State of California implemented a mandatory 50% diversion mandate set for local jurisdictions. Thus, the project's impacts are considered less than significant. *Since the impact is less than significant, this issue will not require analysis in the EIR.*

8.18 MANDATORY FINDINGS OF SIGNIFICANCE

The following findings can be made regarding the Mandatory Findings of Significance set forth in Section 15065 of the CEQA Guidelines based on the results of this environmental assessment:

- The approval and subsequent implementation of the proposed project *may have* the potential to degrade the quality of the environment.
- The approval and subsequent implementation of the proposed project *may have* the potential to achieve short-term goals to the disadvantage of long-term environmental goals.
- The approval and subsequent implementation of the proposed project *may have* impacts that are individually limited, but cumulatively considerable, when considering planned or proposed development in the immediate vicinity.
- The approval and subsequent implementation of the proposed project *may have* environmental effects that will adversely affect humans, either directly or indirectly.

9. REFERENCES

BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING
2211 South Hacienda Boulevard, Suite 107
Hacienda Heights, CA 91745
(626) 336-0033

Marc Blodgett, Project Manager
Bryan Hamilton, Project Planner
Liesl Sullano, Project Planner
Alejandra Rocha, Project Planner

Commerce, City of, *General Plan*, as amended.

California Department of Conservation, Division of Oil, Gas, Geothermal Resources, *1995 Preliminary Report*, 1996.

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APPENDICES

APPENDIX A – AIR QUALITY WORKSHEETS

APPENDIX B – NOISE WORKSHEETS

APPENDIX C – UTILITIES WORKSHEETS

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APPENDIX A

AIR QUALITY WORKSHEETS

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Citadel Expansion - South Coast AQMD Air District, Summer

Citadel Expansion
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|--------------------------------------|----------|----------|-------------|--------------------|------------|
| General Office Building | 70.00 | 1000sqft | 1.61 | 70,000.00 | 0 |
| Unrefrigerated Warehouse-No Rail | 55.00 | 1000sqft | 1.26 | 55,000.00 | 0 |
| Enclosed Parking with Elevator | 700.00 | Space | 6.30 | 280,000.00 | 0 |
| Unenclosed Parking with Elevator | 1,618.00 | Space | 14.56 | 647,200.00 | 0 |
| Arena | 120.00 | 1000sqft | 38.57 | 120,000.00 | 0 |
| Fast Food Restaurant w/o Drive Thru | 3.14 | 1000sqft | 0.07 | 3,140.00 | 0 |
| Fast Food Restaurant with Drive Thru | 6.40 | 1000sqft | 0.15 | 6,400.00 | 0 |
| Fast Food Restaurant with Drive Thru | 2.00 | 1000sqft | 0.05 | 2,000.00 | 0 |
| High Turnover (Sit Down Restaurant) | 5.00 | 1000sqft | 0.11 | 5,000.00 | 0 |
| Hotel | 270.00 | Room | 9.00 | 392,040.00 | 0 |
| Hotel | 500.00 | Room | 16.67 | 726,000.00 | 0 |
| Movie Theater (No Matinee) | 150.00 | 1000sqft | 3.44 | 150,000.00 | 0 |
| Regional Shopping Center | 167.72 | 1000sqft | 3.85 | 167,721.00 | 0 |
| Regional Shopping Center | 69.94 | 1000sqft | 1.61 | 69,941.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|-----------------|----------------------------|------------------|-----|---------------------------|------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 31 |
| Climate Zone | 9 | | | Operational Year | 2026 |
| Utility Company | Southern California Edison | | | | |

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CO2 Intensity (lb/MW/hr) 702.44 CH4 Intensity (lb/MW/hr) 0.029 N2O Intensity (lb/MW/hr) 0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - This represents the proposed land uses.

Construction Phase - Construction times are estimated.

Demolition -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

| Table Name | Column Name | Default Value | New Value |
|----------------------|------------------------------|---------------|-----------|
| tblAreaCoating | Area_EF_Parking | 100 | 0 |
| tblAreaCoating | Area_Nonresidential_Exterior | 883621 | 0 |
| tblAreaCoating | Area_Nonresidential_Interior | 2650863 | 0 |
| tblAreaCoating | Area_Parking | 55632 | 0 |
| tblConstructionPhase | NumDays | 110.00 | 88.00 |
| tblConstructionPhase | NumDays | 110.00 | 86.00 |
| tblConstructionPhase | NumDays | 110.00 | 87.00 |
| tblConstructionPhase | NumDays | 1,550.00 | 284.00 |
| tblConstructionPhase | NumDays | 1,550.00 | 380.00 |
| tblConstructionPhase | NumDays | 1,550.00 | 383.00 |
| tblConstructionPhase | NumDays | 100.00 | 43.00 |
| tblConstructionPhase | NumDays | 100.00 | 44.00 |
| tblConstructionPhase | NumDays | 100.00 | 44.00 |
| tblConstructionPhase | NumDays | 155.00 | 44.00 |

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| | | | |
|----------------------|-------------------|------------|------------|
| tblConstructionPhase | NumDays | 155.00 | 45.00 |
| tblConstructionPhase | NumDays | 155.00 | 43.00 |
| tblConstructionPhase | NumDays | 110.00 | 41.00 |
| tblConstructionPhase | NumDays | 110.00 | 44.00 |
| tblConstructionPhase | NumDays | 110.00 | 42.00 |
| tblConstructionPhase | NumDays | 60.00 | 43.00 |
| tblConstructionPhase | NumDays | 60.00 | 43.00 |
| tblConstructionPhase | NumDays | 60.00 | 43.00 |
| tblConsumerProducts | ROG_EF | 1.98E-05 | 2.14E-05 |
| tblGrading | AcresOfGrading | 110.00 | 387.50 |
| tblGrading | AcresOfGrading | 112.50 | 387.50 |
| tblGrading | AcresOfGrading | 107.50 | 387.50 |
| tblLandUse | LandUseSquareFeet | 167,720.00 | 167,721.00 |
| tblLandUse | LandUseSquareFeet | 69,940.00 | 69,941.00 |
| tblTripsAndVMT | HaulingTripNumber | 102.00 | 0.00 |
| tblTripsAndVMT | HaulingTripNumber | 361.00 | 0.00 |
| tblTripsAndVMT | HaulingTripNumber | 402.00 | 0.00 |

2.0 Emissions Summary

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Citadel Expansion - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|----------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------------|-----------------|--------|--------|-----------------|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2019 | 9.4572 | 75.4064 | 78.8619 | 0.2721 | 18.2675 | 2.3919 | 20.6594 | 9.9840 | 2.2006 | 12.1846 | 0.0000 | 27,803.18 03 | 27,803.18 03 | 1.9500 | 0.0000 | 27,849.32 56 |
| 2020 | 8.5528 | 68.9159 | 72.9037 | 0.2671 | 15.1355 | 1.4402 | 16.5756 | 4.0782 | 1.3561 | 5.4343 | 0.0000 | 27,283.72 10 | 27,283.72 10 | 1.7467 | 0.0000 | 27,327.38 93 |
| 2021 | 190.2406 | 46.4546 | 31.6319 | 0.0642 | 18.2675 | 2.0459 | 20.3134 | 9.9840 | 1.8823 | 11.8663 | 0.0000 | 6,228.524 1 | 6,228.524 1 | 1.9488 | 0.0000 | 6,277.243 0 |
| 2022 | 7.2191 | 58.3540 | 64.1714 | 0.2566 | 15.1354 | 0.9706 | 16.1060 | 4.0782 | 0.9125 | 4.9907 | 0.0000 | 26,246.58 73 | 26,246.58 73 | 1.6095 | 0.0000 | 26,286.82 52 |
| 2023 | 194.5012 | 47.1006 | 60.1808 | 0.2487 | 15.1354 | 0.8195 | 15.9549 | 4.0782 | 0.7699 | 4.8480 | 0.0000 | 25,447.27 42 | 25,447.27 42 | 1.4866 | 0.0000 | 25,484.43 85 |
| 2024 | 6.1932 | 45.8659 | 57.5253 | 0.2445 | 18.2675 | 1.3369 | 19.4982 | 9.9840 | 1.2300 | 11.1163 | 0.0000 | 25,034.52 73 | 25,034.52 73 | 1.9481 | 0.0000 | 25,070.81 01 |
| 2025 | 5.8728 | 44.4368 | 54.8916 | 0.2395 | 15.1354 | 0.6437 | 15.7791 | 4.0782 | 0.6043 | 4.6825 | 0.0000 | 24,538.83 21 | 24,538.83 21 | 1.4167 | 0.0000 | 24,574.24 88 |
| 2026 | 192.1399 | 8.6074 | 14.9699 | 0.0242 | 2.4591 | 0.4196 | 2.5266 | 0.6522 | 0.3861 | 0.7184 | 0.0000 | 2,344.932 9 | 2,344.932 9 | 0.7165 | 0.0000 | 2,362.845 3 |
| Maximum | 194.5012 | 75.4064 | 78.8619 | 0.2721 | 18.2675 | 2.3919 | 20.6594 | 9.9840 | 2.2006 | 12.1846 | 0.0000 | 27,803.18 03 | 27,803.18 03 | 1.9500 | 0.0000 | 27,849.32 56 |

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Citadel Expansion - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

| Year | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|----------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------------|-----------------|--------|--------|-----------------|
| | | | | | | | | | | | | | | | | |
| 2019 | 9.4572 | 75.4064 | 78.8619 | 0.2721 | 15.1355 | 2.3919 | 16.8561 | 4.0782 | 2.2006 | 6.1269 | 0.0000 | 27,803.18 03 | 27,803.18 03 | 1.9500 | 0.0000 | 27,849.32 56 |
| 2020 | 8.5528 | 68.9159 | 72.9037 | 0.2671 | 15.1355 | 1.4402 | 16.5756 | 4.0782 | 1.3561 | 5.4343 | 0.0000 | 27,283.72 10 | 27,283.72 10 | 1.7467 | 0.0000 | 27,327.38 93 |
| 2021 | 190.2406 | 46.4546 | 31.6319 | 0.0642 | 7.2470 | 2.0459 | 9.2930 | 3.9263 | 1.8823 | 5.8086 | 0.0000 | 6,228.524 1 | 6,228.524 1 | 1.9488 | 0.0000 | 6,277.243 0 |
| 2022 | 7.2191 | 58.3540 | 64.1714 | 0.2566 | 15.1354 | 0.9706 | 16.1060 | 4.0782 | 0.9125 | 4.9907 | 0.0000 | 26,246.58 73 | 26,246.58 73 | 1.6095 | 0.0000 | 26,286.82 52 |
| 2023 | 194.5012 | 47.1006 | 60.1808 | 0.2487 | 15.1354 | 0.8195 | 15.9549 | 4.0782 | 0.7699 | 4.8480 | 0.0000 | 25,447.27 42 | 25,447.27 42 | 1.4866 | 0.0000 | 25,484.43 85 |
| 2024 | 6.1932 | 45.8659 | 57.5253 | 0.2445 | 15.1354 | 1.3369 | 15.8670 | 4.0782 | 1.2300 | 5.0586 | 0.0000 | 25,034.52 73 | 25,034.52 73 | 1.9481 | 0.0000 | 25,070.81 01 |
| 2025 | 5.8728 | 44.4368 | 54.8916 | 0.2395 | 15.1354 | 0.6437 | 15.7791 | 4.0782 | 0.6043 | 4.6825 | 0.0000 | 24,538.83 21 | 24,538.83 21 | 1.4167 | 0.0000 | 24,574.24 88 |
| 2026 | 192.1399 | 8.6074 | 14.9699 | 0.0242 | 2.4591 | 0.4196 | 2.5266 | 0.6522 | 0.3861 | 0.7184 | 0.0000 | 2,344.932 9 | 2,344.932 9 | 0.7165 | 0.0000 | 2,362.845 3 |
| Maximum | 194.5012 | 75.4064 | 78.8619 | 0.2721 | 15.1355 | 2.3919 | 16.8561 | 4.0782 | 2.2006 | 6.1269 | 0.0000 | 27,803.18 03 | 27,803.18 03 | 1.9500 | 0.0000 | 27,849.32 56 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 14.67 | 0.00 | 14.48 | 38.09 | 0.00 | 32.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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Citadel Expansion - South Coast AQMD Air District, Summer

2.2 Overall Operational
Unmitigated Operational

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|-------------|----------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|-----------|
| lb/day | | | | | | | | | | | | | | | | |
| Area | 38.1824 | 3.4500e-003 | 0.3806 | 3.0000e-005 | | 1.3500e-003 | 1.3500e-003 | | 1.3500e-003 | 1.3500e-003 | | 0.8179 | 0.8179 | 2.1300e-003 | | 0.8711 |
| Energy | 1.0838 | 9.8525 | 8.2761 | 0.0591 | | 0.7488 | 0.7488 | | 0.7488 | 0.7488 | | 11,822.94 | 11,822.94 | 0.2266 | 0.2168 | 11,893.20 |
| Mobile | 50.0982 | 231.4622 | 519.7037 | 2.1482 | 190.2232 | 1.4989 | 191.7221 | 50.8837 | 1.3911 | 52.2748 | | 219,695.4 | 219,695.4 | 9.6228 | | 219,936.0 |
| Total | 89.3644 | 241.3181 | 528.3603 | 2.2073 | 190.2232 | 2.2490 | 192.4722 | 50.8837 | 2.1412 | 53.0250 | | 231,519.2 | 231,519.2 | 9.8515 | 0.2168 | 231,830.1 |
| | | | | | | | | | | | | | | 416 | 416 | 214 |

Mitigated Operational

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|-------------|----------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|-----------|
| lb/day | | | | | | | | | | | | | | | | |
| Area | 38.1824 | 3.4500e-003 | 0.3806 | 3.0000e-005 | | 1.3500e-003 | 1.3500e-003 | | 1.3500e-003 | 1.3500e-003 | | 0.8179 | 0.8179 | 2.1300e-003 | | 0.8711 |
| Energy | 1.0838 | 9.8525 | 8.2761 | 0.0591 | | 0.7488 | 0.7488 | | 0.7488 | 0.7488 | | 11,822.94 | 11,822.94 | 0.2266 | 0.2168 | 11,893.20 |
| Mobile | 45.6757 | 209.2393 | 401.0245 | 1.5885 | 135.1028 | 1.1313 | 136.2341 | 36.1393 | 1.0486 | 37.1889 | | 162,658.7 | 162,658.7 | 7.5553 | | 162,847.6 |
| Total | 84.9419 | 219.0952 | 409.6812 | 1.6476 | 135.1028 | 1.8814 | 136.9842 | 36.1393 | 1.7998 | 37.9391 | | 174,482.5 | 174,482.5 | 7.7841 | 0.2168 | 174,741.7 |
| | | | | | | | | | | | | | | 107 | 107 | 052 |

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Citadel Expansion - South Coast AQMD Air District, Summer

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|-------|-------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|-------|------|-------|
| Percent Reduction | 4.96 | 9.21 | 22.46 | 25.35 | 28.98 | 16.34 | 28.83 | 28.98 | 15.95 | 28.45 | 0.00 | 24.64 | 24.64 | 20.99 | 0.00 | 24.63 |

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|---------------------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1 | Demolition (Area 3) | Demolition | 6/1/2019 | 7/31/2019 | 5 | 43 | |
| 2 | Demolition (Area 1) | Demolition | 7/1/2021 | 8/31/2021 | 5 | 44 | |
| 3 | Demolition (Area 2) | Demolition | 1/1/2024 | 2/29/2024 | 5 | 44 | |
| 4 | Site Preparation (Area 3) | Site Preparation | 8/1/2019 | 9/30/2019 | 5 | 43 | |
| 5 | Site Preparation (Area 1) | Site Preparation | 9/1/2021 | 10/31/2021 | 5 | 43 | |
| 6 | Site Preparation (Area 2) | Site Preparation | 3/1/2024 | 4/30/2024 | 5 | 43 | |
| 7 | Grading (Area 3) | Grading | 10/1/2019 | 11/30/2019 | 5 | 44 | |
| 8 | Grading (Area 1) | Grading | 11/1/2021 | 12/31/2021 | 5 | 45 | |
| 9 | Grading (Area 2) | Grading | 5/1/2024 | 6/30/2024 | 5 | 43 | |
| 10 | Building Construction (Area 3) | Building Construction | 12/1/2019 | 12/31/2020 | 5 | 284 | |
| 11 | Building Construction (Area 1) | Building Construction | 1/1/2022 | 6/30/2023 | 5 | 390 | |
| 12 | Building Construction (Area 2) | Building Construction | 7/1/2024 | 12/31/2025 | 5 | 393 | |
| 13 | Paving (Area 3) | Paving | 1/1/2021 | 2/28/2021 | 5 | 41 | |
| 14 | Paving (Area 1) | Paving | 7/1/2023 | 8/31/2023 | 5 | 44 | |
| 15 | Paving (Area 2) | Paving | 1/1/2026 | 2/28/2026 | 5 | 42 | |
| 16 | Architectural Coating (Area 3) | Architectural Coating | 3/1/2021 | 6/30/2021 | 5 | 88 | |
| 17 | Architectural Coatings (Area 1) | Architectural Coating | 9/1/2023 | 12/31/2023 | 5 | 86 | |
| 18 | Architectural Coating (Area 2) | Architectural Coating | 3/1/2026 | 6/30/2026 | 5 | 87 | |

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Citadel Expansion - South Coast AQMD Air District, Summer

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.86

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,650,863; Non-Residential Outdoor: 883,621; Striped Parking Area: 55,632 (Architectural Coating – sqft)

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---------------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition (Area 3) | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition (Area 3) | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition (Area 3) | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Demolition (Area 1) | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition (Area 1) | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition (Area 1) | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Demolition (Area 2) | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition (Area 2) | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition (Area 2) | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation (Area 3) | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation (Area 3) | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Site Preparation (Area 1) | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation (Area 1) | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Site Plan (Area 2) | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Plan (Area 2) | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading (Area 3) | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading (Area 3) | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading (Area 3) | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading (Area 3) | Scrapers | 2 | 8.00 | 367 | 0.48 |

APPENDICES • VOLUME 1 • SCH#2016091024
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Citadel Expansion - South Coast AQMD Air District, Summer

| | | | | | |
|--------------------------------|---------------------------|---|------|-----|------|
| Grading (Area 3) | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Grading (Area 1) | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading (Area 1) | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading (Area 1) | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading (Area 1) | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading (Area 1) | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Grading (Area 2) | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading (Area 2) | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading (Area 2) | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading (Area 2) | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading (Area 2) | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction (Area 3) | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction (Area 3) | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction (Area 3) | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction (Area 3) | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction (Area 3) | Welders | 1 | 8.00 | 46 | 0.45 |
| Building Construction (Area 1) | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction (Area 1) | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction (Area 1) | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction (Area 1) | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction (Area 1) | Welders | 1 | 8.00 | 46 | 0.45 |
| Building Construction (Area 2) | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction (Area 2) | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction (Area 2) | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction (Area 2) | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction (Area 2) | Welders | 1 | 8.00 | 46 | 0.45 |
| Building Construction (Area 2) | Pavers | 2 | 8.00 | 130 | 0.42 |

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Citadel Expansion - South Coast AQMD Air District, Summer

| | | | | | |
|---------------------------------|------------------|---|------|-----|------|
| Paving (Area 3) | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving (Area 3) | Rollers | 2 | 8.00 | 80 | 0.38 |
| Paving (Area 1) | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving (Area 1) | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving (Area 1) | Rollers | 2 | 8.00 | 80 | 0.38 |
| Paving (Area 2) | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving (Area 2) | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving (Area 2) | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating (Area 3) | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Architectural Coatings (Area 1) | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Architectural Coating (Area 2) | Air Compressors | 1 | 6.00 | 78 | 0.48 |

Trips and VMT

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Citadel Expansion - South Coast AQMD Air District, Summer

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---------------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition (Area 3) | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Demolition (Area 1) | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Demolition (Area 2) | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation (Area 3) | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation (Area 1) | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Plan (Area 2) | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading (Area 3) | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading (Area 1) | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading (Area 2) | 8 | 20.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction (Area 3) | 9 | 1,101.00 | 442.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction (Area 1) | 9 | 1,101.00 | 442.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction (Area 2) | 9 | 1,101.00 | 442.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving (Area 3) | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving (Area 1) | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving (Area 2) | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating (Area 3) | 1 | 220.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coatings (Area 1) | 1 | 220.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating (Area 2) | 1 | 220.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

Water Exposed Area

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3.2 Demolition (Area 3) - 2019
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------|------------------|---------------|-----|------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 0.5151 | 0.0000 | 0.5151 | 0.0780 | 0.0000 | 0.0780 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.5134 | 35.7830 | 22.0600 | 0.0388 | | 1.7949 | 1.7949 | | 1.6697 | 1.6697 | | 3.816.899 | 3.816.899 | 1.0618 | | 3.843.445 |
| | | | | | | | | | | | | 4 | 4 | | | 1 |
| Total | 3.5134 | 35.7830 | 22.0600 | 0.0388 | 0.5151 | 1.7949 | 2.3100 | 0.0780 | 1.6697 | 1.7477 | | 3.816.899 | 3.816.899 | 1.0618 | | 3.843.445 |
| | | | | | | | | | | | | 4 | 4 | | | 1 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0735 | 0.0511 | 0.6740 | 1.7800e-003 | 0.1677 | 1.3000e-003 | 0.1690 | 0.0445 | 1.2000e-003 | 0.0457 | | 177.1484 | 177.1484 | 5.5400e-003 | | 177.2859 |
| Total | 0.0735 | 0.0511 | 0.6740 | 1.7800e-003 | 0.1677 | 1.3000e-003 | 0.1690 | 0.0445 | 1.2000e-003 | 0.0457 | | 177.1484 | 177.1484 | 5.5400e-003 | | 177.2859 |

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3.2 Demolition (Area 3) - 2019

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------|------------------|---------------|-----|------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 0.2009 | 0.0000 | 0.2009 | 0.0304 | 0.0000 | 0.0304 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.5134 | 35.7830 | 22.0600 | 0.0388 | | 1.7949 | 1.7949 | | 1.6697 | 1.6697 | 0.0000 | 3.816.899 | 3.816.899 | 1.0618 | | 3,843.445 |
| | | | | | | | | | | | | 4 | 4 | | | 1 |
| Total | 3.5134 | 35.7830 | 22.0600 | 0.0388 | 0.2009 | 1.7949 | 1.9958 | 0.0304 | 1.6697 | 1.7001 | 0.0000 | 3.816.899 | 3.816.899 | 1.0618 | | 3,843.445 |
| | | | | | | | | | | | | 4 | 4 | | | 1 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0735 | 0.0511 | 0.6740 | 1.7800e-003 | 0.1677 | 1.3000e-003 | 0.1690 | 0.0445 | 1.2000e-003 | 0.0457 | | 177.1484 | 177.1484 | 5.5400e-003 | | 177.2869 |
| Total | 0.0735 | 0.0511 | 0.6740 | 1.7800e-003 | 0.1677 | 1.3000e-003 | 0.1690 | 0.0445 | 1.2000e-003 | 0.0457 | | 177.1484 | 177.1484 | 5.5400e-003 | | 177.2869 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.3 Demolition (Area 1) - 2021
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------------|------------------------------|---------------|-----|------------------------------|
| ib/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 1.7758 | 0.0000 | 1.7758 | 0.2689 | 0.0000 | 0.2689 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | | 3,747,944 ₉ | 3,747,944 ₉ | 1.0549 | | 3,774,317 ₄ |
| Total | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 1.7758 | 1.5513 | 3.3271 | 0.2689 | 1.4411 | 1.7100 | | 3,747,944₉ | 3,747,944₉ | 1.0549 | | 3,774,317₄ |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| ib/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0411 | 0.5651 | 1.6700e-003 | 0.1677 | 1.2300e-003 | 0.1689 | 0.0445 | 1.1400e-003 | 0.0456 | | 166.1105 | 166.1105 | 4.4700e-003 | | 166.2222 |
| Total | 0.0633 | 0.0411 | 0.5651 | 1.6700e-003 | 0.1677 | 1.2300e-003 | 0.1689 | 0.0445 | 1.1400e-003 | 0.0456 | | 166.1105 | 166.1105 | 4.4700e-003 | | 166.2222 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.3 Demolition (Area 1) - 2021
Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 0.6925 | 0.0000 | 0.6925 | 0.1049 | 0.0000 | 0.1049 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.1651 | 31.4407 | 21.5650 | 0.0388 | | 1.5513 | 1.5513 | | 1.4411 | 1.4411 | 0.0000 | 3,747.944 ₉ | 3,747.944 ₉ | 1.0549 | | 3,774.317 ₄ |
| Total | 3.1651 | 31.4407 | 21.5650 | 0.0388 | 0.6925 | 1.5513 | 2.2439 | 0.1049 | 1.4411 | 1.5460 | 0.0000 | 3,747.944₉ | 3,747.944₉ | 1.0549 | | 3,774.317₄ |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0411 | 0.5551 | 1.6700e-003 | 0.1677 | 1.2300e-003 | 0.1689 | 0.0445 | 1.1400e-003 | 0.0456 | | 166.1105 | 166.1105 | 4.4700e-003 | | 166.2222 |
| Total | 0.0633 | 0.0411 | 0.5551 | 1.6700e-003 | 0.1677 | 1.2300e-003 | 0.1689 | 0.0445 | 1.1400e-003 | 0.0456 | | 166.1105 | 166.1105 | 4.4700e-003 | | 166.2222 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.4 Demolition (Area 2) - 2024
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 1.9769 | 0.0000 | 1.9769 | 0.2993 | 0.0000 | 0.2993 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.2437 | 20.8781 | 19.7073 | 0.0388 | | 0.9602 | 0.9602 | | 0.8922 | 0.8922 | | 3,747,422 ₈ | 3,747,422 ₈ | 1.0485 | | 3,773,634 ₅ |
| Total | 2.2437 | 20.8781 | 19.7073 | 0.0388 | 1.9769 | 0.9602 | 2.9371 | 0.2993 | 0.8922 | 1.1915 | | 3,747,422₈ | 3,747,422₈ | 1.0485 | | 3,773,634₅ |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0529 | 0.0306 | 0.4508 | 1.5000e-003 | 0.1677 | 1.1500e-003 | 0.1688 | 0.0445 | 1.0600e-003 | 0.0455 | | 149,1313 | 149,1313 | 3.3400e-003 | | 149,2148 |
| Total | 0.0529 | 0.0306 | 0.4508 | 1.5000e-003 | 0.1677 | 1.1500e-003 | 0.1688 | 0.0445 | 1.0600e-003 | 0.0455 | | 149,1313 | 149,1313 | 3.3400e-003 | | 149,2148 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.4 Demolition (Area 2) - 2024
Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------------------|------------------------|--------|-----|------------------------|
| | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 0.7710 | 0.0000 | 0.7710 | 0.1167 | 0.0000 | 0.1167 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.2437 | 20.8781 | 19.7073 | 0.0388 | | 0.9602 | 0.9602 | | 0.8922 | 0.8922 | 0.0000 | 3,747.422 ₈ | 3,747.422 ₈ | 1.0485 | | 3,773.634 ₅ |
| Total | 2.2437 | 20.8781 | 19.7073 | 0.0388 | 0.7710 | 0.9602 | 1.7312 | 0.1167 | 0.8922 | 1.0089 | 0.0000 | 3,747.422 ₈ | 3,747.422 ₈ | 1.0485 | | 3,773.634 ₅ |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0529 | 0.0306 | 0.4508 | 1.5000e-003 | 0.1677 | 1.1500e-003 | 0.1688 | 0.0445 | 1.0600e-003 | 0.0455 | | 149.1313 | 149.1313 | 3.3400e-003 | | 149.2148 |
| Total | 0.0529 | 0.0306 | 0.4508 | 1.5000e-003 | 0.1677 | 1.1500e-003 | 0.1688 | 0.0445 | 1.0600e-003 | 0.0455 | | 149.1313 | 149.1313 | 3.3400e-003 | | 149.2148 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.5 Site Preparation (Area 3) - 2019

Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------------------|------------------------|--------|-----|------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.3350 | 45.5727 | 22.0630 | 0.0380 | | 2.3904 | 2.3904 | | 2.1991 | 2.1991 | | 3,766,452 ₉ | 3,766,452 ₉ | 1.1917 | | 3,796,244 ₅ |
| Total | 4.3350 | 45.5727 | 22.0630 | 0.0380 | 18.0663 | 2.3904 | 20.4566 | 9.9307 | 2.1991 | 12.1298 | | 3,766,452 ₉ | 3,766,452 ₉ | 1.1917 | | 3,796,244 ₅ |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0882 | 0.0613 | 0.8088 | 2.1400e-003 | 0.2012 | 1.5700e-003 | 0.2028 | 0.0534 | 1.4400e-003 | 0.0548 | | 212.5780 | 212.5780 | 6.6500e-003 | | 212.7442 |
| Total | 0.0882 | 0.0613 | 0.8088 | 2.1400e-003 | 0.2012 | 1.5700e-003 | 0.2028 | 0.0534 | 1.4400e-003 | 0.0548 | | 212.5780 | 212.5780 | 6.6500e-003 | | 212.7442 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.5 Site Preparation (Area 3) - 2019

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|-----|----------------|
| | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 7.0458 | 0.0000 | 7.0458 | 3.8730 | 0.0000 | 3.8730 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.3350 | 45.5727 | 22.0630 | 0.0380 | | 2.3904 | 2.3904 | | 2.1991 | 2.1991 | 0.0000 | 3,766.452 9 | 3,766.452 9 | 1.1917 | | 3,796.244 5 |
| Total | 4.3350 | 45.5727 | 22.0630 | 0.0380 | 7.0458 | 2.3904 | 9.4362 | 3.8730 | 2.1991 | 6.0721 | 0.0000 | 3,766.452 9 | 3,766.452 9 | 1.1917 | | 3,796.244 5 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0882 | 0.0613 | 0.8088 | 2.1400e-003 | 0.2012 | 1.5700e-003 | 0.2028 | 0.0534 | 1.4400e-003 | 0.0548 | | 212.5780 | 212.5780 | 6.6500e-003 | | 212.7442 |
| Total | 0.0882 | 0.0613 | 0.8088 | 2.1400e-003 | 0.2012 | 1.5700e-003 | 0.2028 | 0.0534 | 1.4400e-003 | 0.0548 | | 212.5780 | 212.5780 | 6.6500e-003 | | 212.7442 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.6 Site Preparation (Area 1) - 2021

Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4871 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | | 3.685.6569 | 3.685.6569 | 1.1920 | | 3,715.4573 |
| Total | 3.8882 | 40.4871 | 21.1543 | 0.0380 | 18.0663 | 2.0445 | 20.1107 | 9.9307 | 1.8809 | 11.8116 | | 3.685.6569 | 3.685.6569 | 1.1920 | | 3,715.4573 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0760 | 0.0493 | 0.6781 | 2.0000e-003 | 0.2012 | 1.4800e-003 | 0.2027 | 0.0534 | 1.3600e-003 | 0.0547 | | 199.3326 | 199.3326 | 5.3600e-003 | | 199.4666 |
| Total | 0.0760 | 0.0493 | 0.6781 | 2.0000e-003 | 0.2012 | 1.4800e-003 | 0.2027 | 0.0534 | 1.3600e-003 | 0.0547 | | 199.3326 | 199.3326 | 5.3600e-003 | | 199.4666 |

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3.6 Site Preparation (Area 1) - 2021
Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 7.0458 | 0.0000 | 7.0458 | 3.8730 | 0.0000 | 3.8730 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.8882 | 40.4871 | 21.1543 | 0.0380 | | 2.0445 | 2.0445 | | 1.8809 | 1.8809 | 0.0000 | 3,685.656 ₉ | 3,685.656 ₉ | 1.1920 | | 3,715.457 ₃ |
| Total | 3.8882 | 40.4871 | 21.1543 | 0.0380 | 7.0458 | 2.0445 | 9.0903 | 3.8730 | 1.8809 | 5.7539 | 0.0000 | 3,685.656₉ | 3,685.656₉ | 1.1920 | | 3,715.457₃ |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0760 | 0.0493 | 0.6781 | 2.0000e-003 | 0.2012 | 1.4800e-003 | 0.2027 | 0.0534 | 1.3600e-003 | 0.0547 | | 199.3326 | 199.3326 | 5.3600e-003 | | 199.4666 |
| Total | 0.0760 | 0.0493 | 0.6781 | 2.0000e-003 | 0.2012 | 1.4800e-003 | 0.2027 | 0.0534 | 1.3600e-003 | 0.0547 | | 199.3326 | 199.3326 | 5.3600e-003 | | 199.4666 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.7 Site Plan (Area 2) - 2024

Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|----------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 18.0663 | 0.0000 | 18.0663 | 9.9307 | 0.0000 | 9.9307 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6609 | 27.1760 | 18.3356 | 0.0381 | | 1.2294 | 1.2294 | | 1.1310 | 1.1310 | | 3,688.010 0 | 3,688.010 0 | 1.1928 | | 3,717.829 4 |
| Total | 2.6609 | 27.1760 | 18.3356 | 0.0381 | 18.0663 | 1.2294 | 19.2956 | 9.9307 | 1.1310 | 11.0617 | | 3,688.010 0 | 3,688.010 0 | 1.1928 | | 3,717.829 4 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0634 | 0.0367 | 0.5409 | 1.7900e-003 | 0.2012 | 1.3800e-003 | 0.2026 | 0.0534 | 1.2700e-003 | 0.0546 | | 178.9576 | 178.9576 | 4.0100e-003 | | 179.0577 |
| Total | 0.0634 | 0.0367 | 0.5409 | 1.7900e-003 | 0.2012 | 1.3800e-003 | 0.2026 | 0.0534 | 1.2700e-003 | 0.0546 | | 178.9576 | 178.9576 | 4.0100e-003 | | 179.0577 |

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3.7 Site Plan (Area 2) - 2024

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|-----------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 7.0458 | 0.0000 | 7.0458 | 3.8730 | 0.0000 | 3.8730 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6609 | 27.1760 | 18.3356 | 0.0381 | | 1.2294 | 1.2294 | | 1.1310 | 1.1310 | 0.0000 | 3,688.010 | 3,688.010 | 1.1928 | | 3,717.829 |
| Total | 2.6609 | 27.1760 | 18.3356 | 0.0381 | 7.0458 | 1.2294 | 8.2752 | 3.8730 | 1.1310 | 5.0040 | 0.0000 | 3,688.010 | 3,688.010 | 1.1928 | | 3,717.829 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0634 | 0.0367 | 0.5409 | 1.7900e-003 | 0.2012 | 1.3800e-003 | 0.2026 | 0.0534 | 1.2700e-003 | 0.0546 | | 178.9576 | 178.9576 | 4.0100e-003 | | 179.0577 |
| Total | 0.0634 | 0.0367 | 0.5409 | 1.7900e-003 | 0.2012 | 1.3800e-003 | 0.2026 | 0.0534 | 1.2700e-003 | 0.0546 | | 178.9576 | 178.9576 | 4.0100e-003 | | 179.0577 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.8 Grading (Area 3) - 2019

Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------------------|------------------------|--------|-----|------------------------|
| | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 15.3617 | 0.0000 | 15.3617 | 4.3187 | 0.0000 | 4.3187 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.7389 | 54.5202 | 33.3768 | 0.0620 | | 2.3827 | 2.3827 | | 2.1920 | 2.1920 | | 6,140.019 ₅ | 6,140.019 ₅ | 1.9426 | | 6,188.585 ₄ |
| Total | 4.7389 | 54.5202 | 33.3768 | 0.0620 | 15.3617 | 2.3827 | 17.7444 | 4.3187 | 2.1920 | 6.5107 | | 6,140.019 ₅ | 6,140.019 ₅ | 1.9426 | | 6,188.585 ₄ |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0980 | 0.0682 | 0.8887 | 2.3700e-003 | 0.2236 | 1.7400e-003 | 0.2253 | 0.0593 | 1.6000e-003 | 0.0609 | | 236.1978 | 236.1978 | 7.3900e-003 | | 236.3825 |
| Total | 0.0980 | 0.0682 | 0.8887 | 2.3700e-003 | 0.2236 | 1.7400e-003 | 0.2253 | 0.0593 | 1.6000e-003 | 0.0609 | | 236.1978 | 236.1978 | 7.3900e-003 | | 236.3825 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.8 Grading (Area 3) - 2019

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 5.9911 | 0.0000 | 5.9911 | 1.6843 | 0.0000 | 1.6843 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.7389 | 54.5202 | 33.3768 | 0.0620 | | 2.3827 | 2.3827 | | 2.1920 | 2.1920 | 0.0000 | 6,140.0195 | 6,140.0195 | 1.9426 | | 6,188.5854 |
| Total | 4.7389 | 54.5202 | 33.3768 | 0.0620 | 5.9911 | 2.3827 | 8.3737 | 1.6843 | 2.1920 | 3.8763 | 0.0000 | 6,140.0195 | 6,140.0195 | 1.9426 | | 6,188.5854 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0980 | 0.0682 | 0.8887 | 2.3700e-003 | 0.2236 | 1.7400e-003 | 0.2253 | 0.0593 | 1.6000e-003 | 0.0609 | | 236.1978 | 236.1978 | 7.3900e-003 | | 236.3825 |
| Total | 0.0980 | 0.0682 | 0.8887 | 2.3700e-003 | 0.2236 | 1.7400e-003 | 0.2253 | 0.0593 | 1.6000e-003 | 0.0609 | | 236.1978 | 236.1978 | 7.3900e-003 | | 236.3825 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.8 Grading (Area 3) - 2019

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 5.9911 | 0.0000 | 5.9911 | 1.6843 | 0.0000 | 1.6843 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.7389 | 54.5202 | 33.3768 | 0.0620 | | 2.3827 | 2.3827 | | 2.1920 | 2.1920 | 0.0000 | 6,140.0195 | 6,140.0195 | 1.9426 | | 6,188.5854 |
| Total | 4.7389 | 54.5202 | 33.3768 | 0.0620 | 5.9911 | 2.3827 | 8.3737 | 1.6843 | 2.1920 | 3.8763 | 0.0000 | 6,140.0195 | 6,140.0195 | 1.9426 | | 6,188.5854 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0980 | 0.0682 | 0.8887 | 2.3700e-003 | 0.2236 | 1.7400e-003 | 0.2253 | 0.0593 | 1.6000e-003 | 0.0609 | | 236.1978 | 236.1978 | 7.3900e-003 | | 236.3825 |
| Total | 0.0980 | 0.0682 | 0.8887 | 2.3700e-003 | 0.2236 | 1.7400e-003 | 0.2253 | 0.0593 | 1.6000e-003 | 0.0609 | | 236.1978 | 236.1978 | 7.3900e-003 | | 236.3825 |

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3.9 Grading (Area 1) - 2021
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|----------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 15.1542 | 0.0000 | 15.1542 | 4.2963 | 0.0000 | 4.2963 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | | 6,007.043 ₄ | 6,007.043 ₄ | 1.9428 | | 6,055.613 ₄ |
| Total | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 15.1542 | 1.9853 | 17.1395 | 4.2963 | 1.8265 | 6.1228 | | 6,007.043₄ | 6,007.043₄ | 1.9428 | | 6,055.613₄ |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0844 | 0.0548 | 0.7535 | 2.2200e-003 | 0.2236 | 1.6500e-003 | 0.2252 | 0.0593 | 1.5200e-003 | 0.0508 | | 221.4807 | 221.4807 | 5.9600e-003 | | 221.6296 |
| Total | 0.0844 | 0.0548 | 0.7535 | 2.2200e-003 | 0.2236 | 1.6500e-003 | 0.2252 | 0.0593 | 1.5200e-003 | 0.0508 | | 221.4807 | 221.4807 | 5.9600e-003 | | 221.6296 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.9 Grading (Area 1) - 2021

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 5.9101 | 0.0000 | 5.9101 | 1.6756 | 0.0000 | 1.6756 | | | 0.0000 | | | 0.0000 |
| Off-Road | 4.1912 | 46.3998 | 30.8785 | 0.0620 | | 1.9853 | 1.9853 | | 1.8265 | 1.8265 | 0.0000 | 6,007.043 ₄ | 6,007.043 ₄ | 1.9428 | | 6,055.613 ₄ |
| Total | 4.1912 | 46.3998 | 30.8785 | 0.0620 | 5.9101 | 1.9853 | 7.8955 | 1.6756 | 1.8265 | 3.5021 | 0.0000 | 6,007.043₄ | 6,007.043₄ | 1.9428 | | 6,055.613₄ |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0644 | 0.0548 | 0.7535 | 2.2200e-003 | 0.2236 | 1.6500e-003 | 0.2252 | 0.0593 | 1.5200e-003 | 0.0608 | | 221.4807 | 221.4807 | 5.9600e-003 | | 221.6296 |
| Total | 0.0644 | 0.0548 | 0.7535 | 2.2200e-003 | 0.2236 | 1.6500e-003 | 0.2252 | 0.0593 | 1.5200e-003 | 0.0608 | | 221.4807 | 221.4807 | 5.9600e-003 | | 221.6296 |

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3.10 Grading (Area 2) - 2024
Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|-----------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 15.5789 | 0.0000 | 15.5789 | 4.3421 | 0.0000 | 4.3421 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2181 | 32.3770 | 27.7228 | 0.0621 | | 1.3354 | 1.3354 | | 1.2286 | 1.2286 | | 6,009,748 | 6,009,748 | 1.9437 | | 6,058,340 |
| Total | 3.2181 | 32.3770 | 27.7228 | 0.0621 | 15.5789 | 1.3354 | 16.9143 | 4.3421 | 1.2286 | 5.5707 | | 6,009,748 | 6,009,748 | 1.9437 | | 6,058,340 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|----------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0705 | 0.0408 | 0.6010 | 1.9900e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4100e-003 | 0.0607 | | 198.8418 | 198.8418 | 4.4500e-003 | | 198.9531 |
| Total | 0.0705 | 0.0408 | 0.6010 | 1.9900e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4100e-003 | 0.0607 | | 198.8418 | 198.8418 | 4.4500e-003 | | 198.9531 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.10 Grading (Area 2) - 2024

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------|------------------|---------------|-----|------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Fugitive Dust | | | | | 6.0758 | 0.0000 | 6.0758 | 1.6934 | 0.0000 | 1.6934 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.2181 | 32.3770 | 27.7228 | 0.0621 | | 1.3354 | 1.3354 | | 1.2286 | 1.2286 | 0.0000 | 6,009.748 | 6,009.748 | 1.9437 | | 6,058.340 |
| | | | | | | | | | | | | 7 | 7 | | | 5 |
| Total | 3.2181 | 32.3770 | 27.7228 | 0.0621 | 6.0758 | 1.3354 | 7.4112 | 1.6934 | 1.2286 | 2.9220 | 0.0000 | 6,009.748 | 6,009.748 | 1.9437 | | 6,058.340 |
| | | | | | | | | | | | | 7 | 7 | | | 5 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0705 | 0.0408 | 0.6010 | 1.9900e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4100e-003 | 0.0607 | | 198.8418 | 198.8418 | 4.4500e-003 | | 198.9531 |
| Total | 0.0705 | 0.0408 | 0.6010 | 1.9900e-003 | 0.2236 | 1.5400e-003 | 0.2251 | 0.0593 | 1.4100e-003 | 0.0607 | | 198.8418 | 198.8418 | 4.4500e-003 | | 198.9531 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.11 Building Construction (Area 3) - 2019
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 2.3612 | 21.0788 | 17.1638 | 0.0269 | | 1.2899 | 1.2899 | | 1.2127 | 1.2127 | | 2,591.5802 | 2,591.5802 | 0.6313 | | 2,607.3635 |
| Total | 2.3612 | 21.0788 | 17.1638 | 0.0269 | | 1.2899 | 1.2899 | | 1.2127 | 1.2127 | | 2,591.5802 | 2,591.5802 | 0.6313 | | 2,607.3635 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 1.7040 | 50.5753 | 12.2262 | 0.1146 | 2.8289 | 0.3350 | 3.1639 | 0.8144 | 0.3205 | 1.1349 | | 12,208.9109 | 12,208.9109 | 0.8078 | | 12,229.1064 |
| Worker | 5.3921 | 3.7522 | 48.4719 | 0.1306 | 12.3066 | 0.0958 | 12.4024 | 3.2638 | 0.0882 | 3.3520 | | 13,002.6893 | 13,002.6893 | 0.4067 | | 13,012.8557 |
| Total | 7.0961 | 54.3276 | 61.6981 | 0.2452 | 15.1355 | 0.4308 | 15.5663 | 4.0782 | 0.4087 | 4.4869 | | 25,211.6001 | 25,211.6001 | 1.2145 | | 25,241.9621 |

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3.11 Building Construction (Area 3) - 2019
Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 2.3612 | 21.0788 | 17.1638 | 0.0269 | | 1.2899 | 1.2899 | | 1.2127 | 1.2127 | 0.0000 | 2,591.5802 | 2,591.5802 | 0.6313 | | 2,607.3635 |
| Total | 2.3612 | 21.0788 | 17.1638 | 0.0269 | | 1.2899 | 1.2899 | | 1.2127 | 1.2127 | 0.0000 | 2,591.5802 | 2,591.5802 | 0.6313 | | 2,607.3635 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 1.7040 | 50.5753 | 12.2262 | 0.1146 | 2.8289 | 0.3350 | 3.1639 | 0.8144 | 0.3205 | 1.1349 | | 12,208.9109 | 12,208.9109 | 0.8078 | | 12,229.1064 |
| Worker | 5.3921 | 3.7522 | 49.4719 | 0.1306 | 12.3066 | 0.0958 | 12.4024 | 3.2638 | 0.0882 | 3.3520 | | 13,002.6893 | 13,002.6893 | 0.4067 | | 13,012.8557 |
| Total | 7.0961 | 54.3276 | 61.6981 | 0.2452 | 15.1355 | 0.4308 | 15.5663 | 4.0782 | 0.4087 | 4.4869 | | 25,211.6001 | 25,211.6001 | 1.2145 | | 25,241.9621 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.11 Building Construction (Area 3) - 2020
Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|-----------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Off-Road | 2.1198 | 19.1860 | 16.8485 | 0.0269 | | 1.1171 | 1.1171 | | 1.0503 | 1.0503 | | 2,553.063 | 2,553.063 | 0.6229 | | 2,568.634 |
| | | | | | | | | | | | | 1 | 1 | | | 5 |
| Total | 2.1198 | 19.1860 | 16.8485 | 0.0269 | | 1.1171 | 1.1171 | | 1.0503 | 1.0503 | | 2,553.063 | 2,553.063 | 0.6229 | | 2,568.634 |
| | | | | | | | | | | | | 1 | 1 | | | 5 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|-----------|
| Category | lb/day | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 1.4516 | 46.3813 | 11.0444 | 0.1137 | 2.8289 | 0.2298 | 3.0587 | 0.8144 | 0.2198 | 1.0342 | | 12,130.62 | 12,130.62 | 0.7616 | | 12,149.66 |
| | | | | | | | | | | | | 17 | 17 | | | 22 |
| Worker | 4.9814 | 3.3485 | 45.0109 | 0.1265 | 12.3066 | 0.0834 | 12.3989 | 3.2638 | 0.0860 | 3.3498 | | 12,600.03 | 12,600.03 | 0.3623 | | 12,609.09 |
| | | | | | | | | | | | | 62 | 62 | | | 27 |
| Total | 6.4330 | 49.7298 | 56.0552 | 0.2402 | 15.1355 | 0.3231 | 15.4586 | 4.0782 | 0.3058 | 4.3840 | | 24,730.65 | 24,730.65 | 1.1239 | | 24,758.75 |
| | | | | | | | | | | | | 79 | 79 | | | 49 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.11 Building Construction (Area 3) - 2020
Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|-----------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 2.1198 | 19.1860 | 16.8485 | 0.0269 | | 1.1171 | 1.1171 | | 1.0503 | 1.0503 | 0.0000 | 2,553.063 | 2,553.063 | 0.6229 | | 2,568.634 |
| | | | | | | | | | | | | 1 | 1 | | | 5 |
| Total | 2.1198 | 19.1860 | 16.8485 | 0.0269 | | 1.1171 | 1.1171 | | 1.0503 | 1.0503 | 0.0000 | 2,553.063 | 2,553.063 | 0.6229 | | 2,568.634 |
| | | | | | | | | | | | | 1 | 1 | | | 5 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|-----------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 1.4516 | 46.3813 | 11.0444 | 0.1137 | 2.8289 | 0.2298 | 3.0587 | 0.8144 | 0.2198 | 1.0342 | | 12,130.62 | 12,130.62 | 0.7616 | | 12,149.66 |
| | | | | | | | | | | | | 17 | 17 | | | 22 |
| Worker | 4.9814 | 3.3485 | 45.0109 | 0.1265 | 12.3066 | 0.0934 | 12.3999 | 3.2638 | 0.0860 | 3.3498 | | 12,600.03 | 12,600.03 | 0.3623 | | 12,609.09 |
| | | | | | | | | | | | | 62 | 62 | | | 27 |
| Total | 6.4330 | 49.7298 | 56.0552 | 0.2402 | 15.1355 | 0.3231 | 15.4586 | 4.0782 | 0.3058 | 4.3840 | | 24,730.65 | 24,730.65 | 1.1239 | | 24,758.75 |
| | | | | | | | | | | | | 79 | 79 | | | 49 |

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3.12 Building Construction (Area 1) - 2022
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |
| Total | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,569.6322 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 1.1534 | 40.0156 | 9.4543 | 0.1117 | 2.8288 | 0.0736 | 2.9024 | 0.8144 | 0.0703 | 0.8847 | | 11,936.6133 | 11,936.6133 | 0.7012 | | 11,954.1443 |
| Worker | 4.3594 | 2.7228 | 38.3637 | 0.1180 | 12.3066 | 0.0880 | 12.3946 | 3.2638 | 0.0810 | 3.3448 | | 11,755.6405 | 11,755.6405 | 0.2963 | | 11,763.0486 |
| Total | 5.5128 | 42.7384 | 47.8080 | 0.2297 | 15.1354 | 0.1616 | 15.2970 | 4.0782 | 0.1514 | 4.2295 | | 23,692.2538 | 23,692.2538 | 0.9976 | | 23,717.1930 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.12 Building Construction (Area 1) - 2022

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|-----|------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,559.6322 |
| Total | 1.7062 | 15.6156 | 16.3634 | 0.0269 | | 0.8090 | 0.8090 | | 0.7612 | 0.7612 | 0.0000 | 2,554.3336 | 2,554.3336 | 0.6120 | | 2,559.6322 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 1.1534 | 40.0156 | 9.4543 | 0.1117 | 2.8288 | 0.0736 | 2.9024 | 0.8144 | 0.0703 | 0.8847 | | 11,936.6133 | 11,936.6133 | 0.7012 | | 11,954.1443 |
| Worker | 4.3594 | 2.7228 | 38.3637 | 0.1180 | 12.3066 | 0.0880 | 12.3946 | 3.2638 | 0.0810 | 3.3448 | | 11,755.6405 | 11,755.6405 | 0.2963 | | 11,763.0486 |
| Total | 5.5128 | 42.7384 | 47.8080 | 0.2297 | 15.1354 | 0.1616 | 15.2970 | 4.0782 | 0.1514 | 4.2295 | | 23,692.2538 | 23,692.2538 | 0.9976 | | 23,717.1930 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.12 Building Construction (Area 1) - 2023
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555,209.9 | 2,555,209.9 | 0.6079 | | 2,570,406.1 |
| Total | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | | 2,555,209.9 | 2,555,209.9 | 0.6079 | | 2,570,406.1 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.8605 | 30.2520 | 8.5181 | 0.1082 | 2.8288 | 0.0340 | 2.8628 | 0.8144 | 0.0325 | 0.8469 | | 11,574.5531 | 11,574.5531 | 0.6115 | | 11,589.8400 |
| Worker | 4.0989 | 2.4637 | 35.4187 | 0.1135 | 12.3066 | 0.0857 | 12.3923 | 3.2638 | 0.0789 | 3.3427 | | 11,317.5112 | 11,317.5112 | 0.2673 | | 11,324.1924 |
| Total | 4.9594 | 32.7157 | 43.9368 | 0.2217 | 15.1354 | 0.1197 | 15.2551 | 4.0782 | 0.1114 | 4.1896 | | 22,892.0643 | 22,892.0643 | 0.8787 | | 22,914.0324 |

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3.12 Building Construction (Area 1) - 2023

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.209 ₉ | 2,555.209 ₉ | 0.6079 | | 2,570.406 ₁ |
| Total | 1.5728 | 14.3849 | 16.2440 | 0.0269 | | 0.6997 | 0.6997 | | 0.6584 | 0.6584 | 0.0000 | 2,555.209₉ | 2,555.209₉ | 0.6079 | | 2,570.406₁ |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|----------|-------------------------------|-------------------------------|---------------|-----|-------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.8605 | 30.2520 | 8.5181 | 0.1082 | 2.8288 | 0.0340 | 2.8628 | 0.8144 | 0.0325 | 0.8469 | | 11,574.55 ₃₁ | 11,574.55 ₃₁ | 0.6115 | | 11,589.84 ₀₀ |
| Worker | 4.0989 | 2.4637 | 35.4187 | 0.1135 | 12.3066 | 0.0857 | 12.3923 | 3.2638 | 0.0789 | 3.3427 | | 11,317.51 ₁₂ | 11,317.51 ₁₂ | 0.2673 | | 11,324.19 ₂₄ |
| Total | 4.9594 | 32.7157 | 43.9368 | 0.2217 | 15.1354 | 0.1197 | 15.2551 | 4.0782 | 0.1114 | 4.1896 | | 22,892.06₄₃ | 22,892.06₄₃ | 0.8787 | | 22,914.03₂₄ |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.13 Building Construction (Area 2) - 2024
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| Total | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.8424 | 30.1770 | 8.2730 | 0.1077 | 2.8288 | 0.0337 | 2.8625 | 0.8144 | 0.0322 | 0.8466 | | 11,532.5879 | 11,532.5879 | 0.6020 | | 11,547.6371 |
| Worker | 3.8792 | 2.2451 | 33.0855 | 0.1098 | 12.3066 | 0.0846 | 12.3912 | 3.2638 | 0.0779 | 3.3416 | | 10,946.2404 | 10,946.2404 | 0.2450 | | 10,952.3653 |
| Total | 4.7216 | 32.4221 | 41.3585 | 0.2175 | 15.1354 | 0.1182 | 15.2537 | 4.0782 | 0.1100 | 4.1882 | | 22,478.8284 | 22,478.8284 | 0.8470 | | 22,500.0024 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.13 Building Construction (Area 2) - 2024

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Off-Road | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| Total | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.8424 | 30.1770 | 8.2730 | 0.1077 | 2.8288 | 0.0337 | 2.8625 | 0.8144 | 0.0322 | 0.8466 | | 11,532.5879 | 11,532.5879 | 0.6020 | | 11,547.6371 |
| Worker | 3.8792 | 2.2451 | 33.0855 | 0.1098 | 12.3066 | 0.0846 | 12.3912 | 3.2638 | 0.0779 | 3.3416 | | 10,946.2404 | 10,946.2404 | 0.2450 | | 10,952.3653 |
| Total | 4.7216 | 32.4221 | 41.3685 | 0.2175 | 15.1354 | 0.1182 | 15.2537 | 4.0782 | 0.1100 | 4.1882 | | 22,478.8284 | 22,478.8284 | 0.8470 | | 22,500.0024 |

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3.13 Building Construction (Area 2) - 2025

Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1,3674 | 12,4697 | 16,0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.474 4 | 2,556.474 4 | 0.6010 | | 2,571,498 1 |
| Total | 1,3674 | 12,4697 | 16,0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.474 4 | 2,556.474 4 | 0.6010 | | 2,571,498 1 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|----------|-------------------------|-------------------------|---------------|-----|-------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.8210 | 29.9139 | 8.0544 | 0.1071 | 2.8288 | 0.0332 | 2.8620 | 0.8144 | 0.0317 | 0.8461 | | 11,467.03 30 | 11,467.03 30 | 0.5924 | | 11,481.84 30 |
| Worker | 3.6844 | 2.0532 | 30.7525 | 0.1055 | 12.3066 | 0.0630 | 12.3695 | 3.2638 | 0.0764 | 3.3401 | | 10,515.32 48 | 10,515.32 48 | 0.2233 | | 10,520.90 77 |
| Total | 4.5054 | 31.9671 | 38.8069 | 0.2125 | 15.1354 | 0.1161 | 15.2515 | 4.0782 | 0.1081 | 4.1862 | | 21,982.35 78 | 21,982.35 78 | 0.8157 | | 22,002.75 07 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.13 Building Construction (Area 2) - 2025
Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.474 4 | 2,556.474 4 | 0.6010 | | 2,571.498 1 |
| Total | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.474 4 | 2,556.474 4 | 0.6010 | | 2,571.498 1 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|----------|-------------------------|-------------------------|---------------|-----|-------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.8210 | 29.9139 | 8.0644 | 0.1071 | 2.8288 | 0.0332 | 2.8620 | 0.8144 | 0.0317 | 0.8461 | | 11,467.03 30 | 11,467.03 30 | 0.5924 | | 11,481.84 30 |
| Worker | 3.6844 | 2.0532 | 30.7525 | 0.1055 | 12.3066 | 0.0830 | 12.3895 | 3.2638 | 0.0764 | 3.3401 | | 10,515.32 48 | 10,515.32 48 | 0.2233 | | 10,520.90 77 |
| Total | 4.5054 | 31.9671 | 38.8069 | 0.2125 | 15.1354 | 0.1161 | 15.2515 | 4.0782 | 0.1081 | 4.1862 | | 21,982.35 78 | 21,982.35 78 | 0.8157 | | 22,002.75 07 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.14 Paving (Area 3) - 2021

Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.2556 | 12.9191 | 14.6532 | 0.0228 | | 0.6777 | 0.6777 | | 0.6235 | 0.6235 | | 2,207.210 ₉ | 2,207.210 ₉ | 0.7139 | | 2,225.057 ₃ |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.2556 | 12.9191 | 14.6532 | 0.0228 | | 0.6777 | 0.6777 | | 0.6235 | 0.6235 | | 2,207.210₉ | 2,207.210₉ | 0.7139 | | 2,225.057₃ |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0411 | 0.5651 | 1.6700e-003 | 0.1677 | 1.2300e-003 | 0.1689 | 0.0445 | 1.1400e-003 | 0.0456 | | 166.1105 | 166.1105 | 4.4700e-003 | | 166.2222 |
| Total | 0.0633 | 0.0411 | 0.5651 | 1.6700e-003 | 0.1677 | 1.2300e-003 | 0.1689 | 0.0445 | 1.1400e-003 | 0.0456 | | 166.1105 | 166.1105 | 4.4700e-003 | | 166.2222 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.14 Paving (Area 3) - 2021

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.2556 | 12.9191 | 14.6532 | 0.0228 | | 0.6777 | 0.6777 | | 0.6235 | 0.6235 | 0.0000 | 2,207.210 ₉ | 2,207.210 ₉ | 0.7139 | | 2,225.057 ₃ |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.2556 | 12.9191 | 14.6532 | 0.0228 | | 0.6777 | 0.6777 | | 0.6235 | 0.6235 | 0.0000 | 2,207.210₉ | 2,207.210₉ | 0.7139 | | 2,225.057₃ |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0633 | 0.0411 | 0.5651 | 1.6700e-003 | 0.1677 | 1.2300e-003 | 0.1689 | 0.0445 | 1.1400e-003 | 0.0456 | | 166.1105 | 166.1105 | 4.4700e-003 | | 166.2222 |
| Total | 0.0633 | 0.0411 | 0.5651 | 1.6700e-003 | 0.1677 | 1.2300e-003 | 0.1689 | 0.0445 | 1.1400e-003 | 0.0456 | | 166.1105 | 166.1105 | 4.4700e-003 | | 166.2222 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.15 Paving (Area 1) - 2023

Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------|------------------|---------------|-----|------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.584 | 2,207.584 | 0.7140 | | 2,225.433 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | | 2,207.584 | 2,207.584 | 0.7140 | | 2,225.433 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0558 | 0.0336 | 0.4825 | 1.5500e-003 | 0.1677 | 1.1700e-003 | 0.1688 | 0.0445 | 1.0800e-003 | 0.0455 | | 154.1895 | 154.1895 | 3.6400e-003 | | 154.2806 |
| Total | 0.0558 | 0.0336 | 0.4825 | 1.5500e-003 | 0.1677 | 1.1700e-003 | 0.1688 | 0.0445 | 1.0800e-003 | 0.0455 | | 154.1895 | 154.1895 | 3.6400e-003 | | 154.2806 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.15 Paving (Area 1) - 2023

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------|------------------|---------------|-----|------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.584 | 2,207.584 | 0.7140 | | 2,225.433 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 1.0327 | 10.1917 | 14.5842 | 0.0228 | | 0.5102 | 0.5102 | | 0.4694 | 0.4694 | 0.0000 | 2,207.584 | 2,207.584 | 0.7140 | | 2,225.433 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0558 | 0.0336 | 0.4825 | 1.5500e-003 | 0.1677 | 1.1700e-003 | 0.1688 | 0.0445 | 1.0800e-003 | 0.0455 | | 154.1895 | 154.1895 | 3.6400e-003 | | 154.2806 |
| Total | 0.0558 | 0.0336 | 0.4825 | 1.5500e-003 | 0.1677 | 1.1700e-003 | 0.1688 | 0.0445 | 1.0800e-003 | 0.0455 | | 154.1895 | 154.1895 | 3.6400e-003 | | 154.2806 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.16 Paving (Area 2) - 2026
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.745 2 | 2,206.745 2 | 0.7137 | | 2,224.587 8 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.745 2 | 2,206.745 2 | 0.7137 | | 2,224.587 8 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0479 | 0.0258 | 0.3919 | 1.3900e-003 | 0.1677 | 1.0900e-003 | 0.1688 | 0.0445 | 1.0100e-003 | 0.0455 | | 138.1878 | 138.1878 | 2.7900e-003 | | 138.2575 |
| Total | 0.0479 | 0.0258 | 0.3919 | 1.3900e-003 | 0.1677 | 1.0900e-003 | 0.1688 | 0.0445 | 1.0100e-003 | 0.0455 | | 138.1878 | 138.1878 | 2.7900e-003 | | 138.2575 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.16 Paving (Area 2) - 2026

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Off-Road | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | 0.0000 | 2,206,745 ₂ | 2,206,745 ₂ | 0.7137 | | 2,224,587 ₈ |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Total | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | 0.0000 | 2,206,745₂ | 2,206,745₂ | 0.7137 | | 2,224,587₈ |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0479 | 0.0258 | 0.3919 | 1.3900e-003 | 0.1677 | 1.0900e-003 | 0.1688 | 0.0445 | 1.0100e-003 | 0.0455 | | 138.1878 | 138.1878 | 2.7900e-003 | | 138.2575 |
| Total | 0.0479 | 0.0258 | 0.3919 | 1.3900e-003 | 0.1677 | 1.0900e-003 | 0.1688 | 0.0445 | 1.0100e-003 | 0.0455 | | 138.1878 | 138.1878 | 2.7900e-003 | | 138.2575 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.17 Architectural Coating (Area 3) - 2021
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|-----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Archit. Coating | 189.0830 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2189 | 1.5268 | 1.8176 | 2.9700e-003 | | 0.0941 | 0.0941 | | 0.0941 | 0.0941 | | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |
| Total | 189.3119 | 1.5268 | 1.8176 | 2.9700e-003 | | 0.0941 | 0.0941 | | 0.0941 | 0.0941 | | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.9287 | 0.6023 | 8.2879 | 0.0245 | 2.4591 | 0.0181 | 2.4772 | 0.6522 | 0.0167 | 0.6688 | | 2,436.2873 | 2,436.2873 | 0.0655 | | 2,437.9252 |
| Total | 0.9287 | 0.6023 | 8.2879 | 0.0245 | 2.4591 | 0.0181 | 2.4772 | 0.6522 | 0.0167 | 0.6688 | | 2,436.2873 | 2,436.2873 | 0.0655 | | 2,437.9252 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.17 Architectural Coating (Area 3) - 2021

Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|-----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Archit. Coating | 189.0530 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.2189 | 1.5268 | 1.8176 | 2.9700e-003 | | 0.0941 | 0.0941 | | 0.0941 | 0.0941 | 0.0000 | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |
| Total | 189.3119 | 1.5268 | 1.8176 | 2.9700e-003 | | 0.0941 | 0.0941 | | 0.0941 | 0.0941 | 0.0000 | 281.4481 | 281.4481 | 0.0193 | | 281.9309 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.9287 | 0.6023 | 8.2879 | 0.0245 | 2.4591 | 0.0181 | 2.4772 | 0.6522 | 0.0167 | 0.6688 | | 2,436,287 ₃ | 2,436,287 ₃ | 0.0655 | | 2,437,925 ₂ |
| Total | 0.9287 | 0.6023 | 8.2879 | 0.0245 | 2.4591 | 0.0181 | 2.4772 | 0.6522 | 0.0167 | 0.6688 | | 2,436,287₃ | 2,436,287₃ | 0.0655 | | 2,437,925₂ |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.18 Architectural Coatings (Area 1) - 2023

Unmitigated Construction On-Site

| Category | lb/day | | | | | | | | | | lb/day | | | | | | |
|-----------------|----------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-----|----------|--|
| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e | |
| Archit. Coating | 193.4906 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 | |
| Off-Road | 0.1917 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | | 281.4481 | 281.4481 | 0.0168 | | 281.8690 | |
| Total | 193.6822 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | | 281.4481 | 281.4481 | 0.0168 | | 281.8690 | |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------------------|------------------------|--------|-----|------------------------|
| | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.8190 | 0.4923 | 7.0773 | 0.0227 | 2.4591 | 0.0171 | 2.4762 | 0.6522 | 0.0158 | 0.6679 | | 2,261,446 ₄ | 2,261,446 ₄ | 0.0534 | | 2,262,781 ₄ |
| Total | 0.8190 | 0.4923 | 7.0773 | 0.0227 | 2.4591 | 0.0171 | 2.4762 | 0.6522 | 0.0158 | 0.6679 | | 2,261,446 ₄ | 2,261,446 ₄ | 0.0534 | | 2,262,781 ₄ |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.18 Architectural Coatings (Area 1) - 2023
Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|-----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| lb/day | | | | | | | | | | | | | | | | |
| Archit. Coating | 193.4906 | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1917 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | 0.0000 | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |
| Total | 193.6822 | 1.3030 | 1.8111 | 2.9700e-003 | | 0.0708 | 0.0708 | | 0.0708 | 0.0708 | 0.0000 | 281.4481 | 281.4481 | 0.0168 | | 281.8690 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------------|------------------------------|---------------|-----|------------------------------|
| lb/day | | | | | | | | | | | | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.8190 | 0.4923 | 7.0773 | 0.0227 | 2.4591 | 0.0171 | 2.4762 | 0.6522 | 0.0158 | 0.6679 | | 2,261.446 ₄ | 2,261.446 ₄ | 0.0534 | | 2,262.781 ₄ |
| Total | 0.8190 | 0.4923 | 7.0773 | 0.0227 | 2.4591 | 0.0171 | 2.4762 | 0.6522 | 0.0158 | 0.6679 | | 2,261.446₄ | 2,261.446₄ | 0.0534 | | 2,262.781₄ |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.19 Architectural Coating (Area 2) - 2026
Unmitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|-----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Archit. Coating | 191.2665 | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| Total | 191.4374 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |

Unmitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.7025 | 0.3777 | 5.7479 | 0.0203 | 2.4591 | 0.0160 | 2.4751 | 0.5522 | 0.0148 | 0.5669 | | 2,026.7538 | 2,026.7538 | 0.0409 | | 2,027.7760 |
| Total | 0.7025 | 0.3777 | 5.7479 | 0.0203 | 2.4591 | 0.0160 | 2.4751 | 0.5522 | 0.0148 | 0.5669 | | 2,026.7538 | 2,026.7538 | 0.0409 | | 2,027.7760 |

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Citadel Expansion - South Coast AQMD Air District, Summer

3.19 Architectural Coating (Area 2) - 2026
Mitigated Construction On-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|-----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Archit. Coating | 191.2665 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| Total | 191.4374 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |

Mitigated Construction Off-Site

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------------|------------------------------|---------------|-----|------------------------------|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.7025 | 0.3777 | 5.7479 | 0.0203 | 2.4591 | 0.0160 | 2.4751 | 0.6522 | 0.0148 | 0.6669 | | 2,026,753 ₈ | 2,026,753 ₈ | 0.0409 | | 2,027,776 ₀ |
| Total | 0.7025 | 0.3777 | 5.7479 | 0.0203 | 2.4591 | 0.0160 | 2.4751 | 0.6522 | 0.0148 | 0.6669 | | 2,026,753₈ | 2,026,753₈ | 0.0409 | | 2,027,776₀ |

4.0 Operational Detail - Mobile

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Citadel Expansion - South Coast AQMD Air District, Summer

4.1 Mitigation Measures Mobile

- Increase Diversity
- Improve Destination Accessibility
- Improve Pedestrian Network

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|----------|----------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|--------------|--------------|--------|-----|--------------|
| Category | lb/day | | | | | | | | | | | lb/day | | | | |
| Mitigated | 45.6757 | 209.2393 | 401.0245 | 1.5885 | 135.1028 | 1.1313 | 136.2341 | 36.1393 | 1.0496 | 37.1889 | | 162,658.7483 | 162,658.7483 | 7.5553 | | 162,847.6318 |
| Unmitigated | 50.0982 | 231.4622 | 519.7037 | 2.1482 | 190.2232 | 1.4989 | 191.7221 | 50.8837 | 1.3911 | 52.2748 | | 219,695.4793 | 219,695.4793 | 9.6228 | | 219,936.0479 |

4.2 Trip Summary Information

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Citadel Expansion - South Coast AQMD Air District, Summer

| Land Use | Average Daily Trip Rate | | | Unmitigated Annual VMT | Mitigated Annual VMT |
|--------------------------------------|-------------------------|------------------|------------------|---------------------------|-------------------------|
| | Weekday | Saturday | Sunday | | |
| Arena | 1,285.20 | 1,285.20 | 1,285.20 | 2,774,107 | 1,970,262 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | | |
| Fast Food Restaurant w/o Drive Thru | 2,248.24 | 2,185.44 | 1,570.00 | 3,879,939 | 2,755,660 |
| Fast Food Restaurant with Drive Thru | 3,175.17 | 4,620.99 | 3,473.41 | 3,603,712 | 2,559,474 |
| Fast Food Restaurant with Drive Thru | 992.24 | 1,444.06 | 1,085.44 | 1,126,160 | 799,836 |
| General Office Building | 772.10 | 172.20 | 73.50 | 1,889,709 | 1,342,133 |
| High Turnover (Sit Down Restaurant) | 635.75 | 791.85 | 659.20 | 901,376 | 640,187 |
| Hotel | 2,205.90 | 2,211.30 | 1,606.50 | 5,061,171 | 3,594,610 |
| Hotel | 4,085.00 | 4,085.00 | 2,975.00 | 9,372,539 | 6,656,685 |
| Movie Theater (No Matinee) | 11,709.00 | 14,892.00 | 12,285.00 | 25,949,488 | 18,430,179 |
| Regional Shopping Center | 7,161.64 | 8,380.97 | 4,233.25 | 14,961,455 | 10,626,117 |
| Regional Shopping Center | 2,986.44 | 3,494.90 | 1,765.29 | 6,238,994 | 4,431,139 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | | |
| Unrefrigerated Warehouse-No Rail | 92.40 | 92.40 | 92.40 | 396,000 | 281,252 |
| Total | 37,349.08 | 43,666.31 | 31,104.19 | 76,154,649 | 54,087,534 |

4.3 Trip Type Information

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 Citadel Expansion - South Coast AQMD Air District, Summer

| | Miles | | | | Trip % | | | Trip Purpose % | | |
|---------------------------------|------------|------------|-------------|------------|------------|-------------|---------|----------------|---------|--|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by | |
| Arena | 16.60 | 8.40 | 6.90 | 0.00 | 81.00 | 19.00 | 66 | 28 | 6 | |
| Enclosed Parking with Elevator | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | |
| Fast Food Restaurant w/o Drive | 16.60 | 8.40 | 6.90 | 1.50 | 79.50 | 19.00 | 51 | 37 | 12 | |
| Fast Food Restaurant with Drive | 16.60 | 8.40 | 6.90 | 2.20 | 78.80 | 19.00 | 29 | 21 | 50 | |
| Fast Food Restaurant with Drive | 16.60 | 8.40 | 6.90 | 2.20 | 78.80 | 19.00 | 29 | 21 | 50 | |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 | |
| High Turnover (Sit Down) | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 | |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 | |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 | |
| Movie Theater (No Matinee) | 16.60 | 8.40 | 6.90 | 1.80 | 79.20 | 19.00 | 66 | 17 | 17 | |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 | |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 | |
| Unenclosed Parking with | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | |
| Unrefrigerated Warehouse-No | 16.60 | 8.40 | 6.90 | 59.00 | 0.00 | 41.00 | 92 | 5 | 3 | |

4.4 Fleet Mix

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Citadel Expansion - South Coast AQMD Air District, Summer

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Arena | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| Enclosed Parking with Elevator | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| Fast Food Restaurant w/o Drive Thru | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| Fast Food Restaurant with Drive Thru | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| General Office Building | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| High Turnover (Sit Down Restaurant) | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| Hotel | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| Movie Theater (No Matinee) | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| Regional Shopping Center | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| Unenclosed Parking with Elevator | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |
| Unrefrigerated Warehouse-No Rail | 0.551582 | 0.041972 | 0.204917 | 0.113538 | 0.013798 | 0.005777 | 0.022002 | 0.036198 | 0.002156 | 0.001623 | 0.004914 | 0.000716 | 0.000809 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Install Energy Efficient Appliances

APPENDICES • VOLUME 1 • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT & 10-ACRE DEVELOPMENT SITE • COMMERCE, CALIFORNIA

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Citadel Expansion - South Coast AQMD Air District, Summer

| Land Use | Natural Gas Use kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | | |
|--------------------------------------|----------------------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------------|-----------------|-------------|-------------|-----------------|--|
| | | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e | |
| Arena | 5950.68 | 0.0642 | 0.5834 | 0.4901 | 3.5000e-003 | | 0.0443 | 0.0443 | | 0.0443 | 0.0443 | | 700.0806 | 700.0806 | 0.0134 | 0.0128 | 704.2408 | |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Fast Food Restaurant w/o Drive Thru | 1985.17 | 0.0214 | 0.1946 | 0.1635 | 1.1700e-003 | | 0.0148 | 0.0148 | | 0.0148 | 0.0148 | | 233.5492 | 233.5492 | 4.4800e-003 | 4.2800e-003 | 234.9371 | |
| Fast Food Restaurant with Drive Thru | 1264.44 | 0.0136 | 0.1240 | 0.1041 | 7.4000e-004 | | 9.4200e-003 | 9.4200e-003 | | 9.4200e-003 | 9.4200e-003 | | 148.7575 | 148.7575 | 2.8500e-003 | 2.7300e-003 | 149.6414 | |
| Fast Food Restaurant with Drive Thru | 4046.2 | 0.0436 | 0.3967 | 0.3332 | 2.3800e-003 | | 0.0302 | 0.0302 | | 0.0302 | 0.0302 | | 476.0239 | 476.0239 | 9.1200e-003 | 8.7300e-003 | 478.8526 | |
| General Office Building | 1996.44 | 0.0215 | 0.1957 | 0.1644 | 1.1700e-003 | | 0.0149 | 0.0149 | | 0.0149 | 0.0149 | | 234.8751 | 234.8751 | 4.5000e-003 | 4.3100e-003 | 236.2709 | |
| High Turnover (Sit Down Restaurant) | 3161.1 | 0.0341 | 0.3099 | 0.2603 | 1.8600e-003 | | 0.0236 | 0.0236 | | 0.0236 | 0.0236 | | 371.8936 | 371.8936 | 7.1300e-003 | 6.8200e-003 | 374.1036 | |
| Hotel | 25756.5 | 0.2778 | 2.5252 | 2.1211 | 0.0152 | | 0.1919 | 0.1919 | | 0.1919 | 0.1919 | | 3,030.175 4 | 3,030.175 4 | 0.0581 | 0.0556 | 3,048.182 2 | |
| Hotel | 47697.2 | 0.5144 | 4.6762 | 3.9280 | 0.0281 | | 0.3554 | 0.3554 | | 0.3554 | 0.3554 | | 5,611.435 9 | 5,611.435 9 | 0.1076 | 0.1029 | 5,644.781 9 | |
| Movie Theater (No Matinee) | 7438.36 | 0.0802 | 0.7293 | 0.6126 | 4.3800e-003 | | 0.0554 | 0.0554 | | 0.0554 | 0.0554 | | 875.1007 | 875.1007 | 0.0168 | 0.0160 | 880.3010 | |
| Regional Shopping Center | 314.255 | 3.3900e-003 | 0.0308 | 0.0259 | 1.8000e-004 | | 2.3400e-003 | 2.3400e-003 | | 2.3400e-003 | 2.3400e-003 | | 36.9712 | 36.9712 | 7.1000e-004 | 6.8000e-004 | 37.1909 | |
| Regional Shopping Center | 753.596 | 8.1300e-003 | 0.0739 | 0.0621 | 4.4000e-004 | | 5.6200e-003 | 5.6200e-003 | | 5.6200e-003 | 5.6200e-003 | | 88.6583 | 88.6583 | 1.7000e-003 | 1.6300e-003 | 89.1852 | |
| Unenclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Unrefrigerated Warehouse-No Rail | 131.096 | 1.4100e-003 | 0.0129 | 0.0108 | 8.0000e-005 | | 9.8000e-004 | 9.8000e-004 | | 9.8000e-004 | 9.8000e-004 | | 15.4231 | 15.4231 | 3.0000e-004 | 2.8000e-004 | 15.5147 | |
| Total | | 1.0838 | 9.8525 | 8.2761 | 0.0591 | | 0.7488 | 0.7488 | | 0.7488 | 0.7488 | | 11,822.94 45 | 11,822.94 45 | 0.2266 | 0.2168 | 11,893.20 23 | |

5.2 Energy by Land Use - Natural Gas

Mitigated

APPENDICES • VOLUME 1 • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT & 10-ACRE DEVELOPMENT SITE • COMMERCE, CALIFORNIA

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CalEEMod Version: CalEEMod.2016.3.2

Citadel Expansion - South Coast AQMD Air District, Summer

| Land Use | Natural Gas Use kBTU/yr | ROG | NOx | CO | SO2 | lb/day | | | | | lb/day | | | | | CO2e | |
|--------------------------------------|----------------------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|---------|-------------|-------------|-------------|-------------|-------------|
| | | | | | | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio-CO2 | NBio-CO2 | Total CO2 | CH4 | | N2O |
| Arena | 5,95068 | 0.0642 | 0.5834 | 0.4901 | 3.5000e-003 | | 0.0443 | 0.0443 | | 0.0443 | 0.0443 | | 700.0806 | 700.0806 | 0.0134 | 0.0128 | 704.2408 |
| Enclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Fast Food Restaurant w/o Drive Thru | 1,98517 | 0.0214 | 0.1946 | 0.1635 | 1.1700e-003 | | 0.0148 | 0.0148 | | 0.0148 | 0.0148 | | 233.5492 | 233.5492 | 4.4800e-003 | 4.2800e-003 | 234.9371 |
| Fast Food Restaurant with Drive Thru | 1,26444 | 0.0136 | 0.1240 | 0.1041 | 7.4000e-004 | | 9.4200e-003 | 9.4200e-003 | | 9.4200e-003 | 9.4200e-003 | | 148.7575 | 148.7575 | 2.8500e-003 | 2.7300e-003 | 149.6414 |
| Fast Food Restaurant with Drive Thru | 4,0462 | 0.0436 | 0.3967 | 0.3332 | 2.3800e-003 | | 0.0302 | 0.0302 | | 0.0302 | 0.0302 | | 476.0239 | 476.0239 | 9.1200e-003 | 8.7300e-003 | 478.8526 |
| General Office Building | 1,99644 | 0.0215 | 0.1957 | 0.1644 | 1.1700e-003 | | 0.0149 | 0.0149 | | 0.0149 | 0.0149 | | 234.8751 | 234.8751 | 4.5000e-003 | 4.3100e-003 | 236.2709 |
| High Turnover (Sit Down Restaurant) | 3,1611 | 0.0341 | 0.3099 | 0.2603 | 1.8600e-003 | | 0.0236 | 0.0236 | | 0.0236 | 0.0236 | | 371.8936 | 371.8936 | 7.1300e-003 | 6.8200e-003 | 374.1036 |
| Hotel | 25,7565 | 0.2778 | 2.5252 | 2.1211 | 0.0152 | | 0.1919 | 0.1919 | | 0.1919 | 0.1919 | | 3,030.1754 | 3,030.1754 | 0.0581 | 0.0556 | 3,048.1822 |
| Hotel | 47,6972 | 0.5144 | 4.6762 | 3.9280 | 0.0281 | | 0.3554 | 0.3554 | | 0.3554 | 0.3554 | | 5,611.4359 | 5,611.4359 | 0.1076 | 0.1029 | 5,644.7819 |
| Movie Theater (No Matinee) | 7,43836 | 0.0802 | 0.7293 | 0.6126 | 4.3800e-003 | | 0.0554 | 0.0554 | | 0.0554 | 0.0554 | | 875.1007 | 875.1007 | 0.0168 | 0.0160 | 880.3010 |
| Regional Shopping Center | 0,314255 | 3.3900e-003 | 0.0308 | 0.0259 | 1.8000e-004 | | 2.3400e-003 | 2.3400e-003 | | 2.3400e-003 | 2.3400e-003 | | 36.9712 | 36.9712 | 7.1000e-004 | 6.8000e-004 | 37.1909 |
| Regional Shopping Center | 0,753596 | 8.1300e-003 | 0.0739 | 0.0621 | 4.4000e-004 | | 5.6200e-003 | 5.6200e-003 | | 5.6200e-003 | 5.6200e-003 | | 88.6583 | 88.6583 | 1.7000e-003 | 1.6300e-003 | 89.1852 |
| Unenclosed Parking with Elevator | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unrefrigerated Warehouse-No Rail | 0,131096 | 1.4100e-003 | 0.0129 | 0.0108 | 8.0000e-005 | | 9.8000e-004 | 9.8000e-004 | | 9.8000e-004 | 9.8000e-004 | | 15.4231 | 15.4231 | 3.0000e-004 | 2.8000e-004 | 15.5147 |
| Total | | 1.0838 | 9.8525 | 8.2761 | 0.0591 | | 0.7488 | 0.7488 | | 0.7488 | 0.7488 | | 11,822.9445 | 11,822.9445 | 0.2266 | 0.2168 | 11,893.2023 |

6.0 Area Detail

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Citadel Expansion - South Coast AQMD Air District, Summer

6.1 Mitigation Measures Area

| Category | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|-------------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-----|--------|
| Mitigated | 38,1824 | 3,4500e-003 | 0.3806 | 3,0000e-005 | 1,3500e-003 | 1,3500e-003 | 1,3500e-003 | 1,3500e-003 | 1,3500e-003 | 1,3500e-003 | | 0.8179 | 0.8179 | 2,1300e-003 | | 0.8711 |
| Unmitigated | 38,1824 | 3,4500e-003 | 0.3806 | 3,0000e-005 | 1,3500e-003 | 1,3500e-003 | 1,3500e-003 | 1,3500e-003 | 1,3500e-003 | 1,3500e-003 | | 0.8179 | 0.8179 | 2,1300e-003 | | 0.8711 |

6.2 Area by SubCategory

Unmitigated

| SubCategory | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 38,1474 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 0.0350 | 3,4500e-003 | 0.3806 | 3,0000e-005 | | 1,3500e-003 | 1,3500e-003 | | 1,3500e-003 | 1,3500e-003 | | 0.8179 | 0.8179 | 2,1300e-003 | | 0.8711 |
| Total | 38,1824 | 3,4500e-003 | 0.3806 | 3,0000e-005 | | 1,3500e-003 | 1,3500e-003 | | 1,3500e-003 | 1,3500e-003 | | 0.8179 | 0.8179 | 2,1300e-003 | | 0.8711 |

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Citadel Expansion - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

| SubCategory | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|----------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|----------------|--------------------|--------------------|----------|---------------|---------------|--------------------|-----|---------------|
| | | | | | | | | | | | | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 38.1474 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Landscaping | 0.0350 | 3.4500e-003 | 0.3806 | 3.0000e-005 | 1.3500e-003 | 1.3500e-003 | 1.3500e-003 | | 1.3500e-003 | 1.3500e-003 | | 0.8179 | 0.8179 | 2.1300e-003 | | 0.8711 |
| Total | 38.1824 | 3.4500e-003 | 0.3806 | 3.0000e-005 | 1.3500e-003 | 1.3500e-003 | 1.3500e-003 | | 1.3500e-003 | 1.3500e-003 | | 0.8179 | 0.8179 | 2.1300e-003 | | 0.8711 |

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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 Citadel Expansion - South Coast AQMD Air District, Summer

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
|----------------|--------|-----------|-----------|-------------|-------------|-----------|

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Boilers

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

11.0 Vegetation

APPENDIX B

NOISE WORKSHEETS

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APPENDICES • VOLUME 1 • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT & 10-ACRE DEVELOPMENT SITE • COMMERCE, CALIFORNIA

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|---|---|------------------------------------|---|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="27779"/> | <input type="text" value="27779"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="2.777"/> | <input type="text" value="2.777"/> | |
| Number of heavy trucks/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface help | <input type="text" value="Smooth asphalt"/> ▼ | | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="16"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | |
| | <input type="text" value="87"/> |
| Night LAeq is | |
| | <input type="text" value="81"/> |

Top: Existing Noise Levels along Telegraph Road without Project 50 feet

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|---|---|------------------------------------|---|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="27779"/> | <input type="text" value="27779"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="2.777"/> | <input type="text" value="2.777"/> | |
| Number of heavy trucks/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface help | <input type="text" value="Smooth asphalt"/> ▼ | | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="280"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | |
| | <input type="text" value="70"/> |
| Night LAeq is | |
| | <input type="text" value="64"/> |

Bottom: Existing Noise Levels along Telegraph Road without Project 70 dBA/Ldn

APPENDICES • VOLUME 1 • SCH#2016091024
CITADEL OUTLETS EXPANSION PROJECT & 10-ACRE DEVELOPMENT SITE • COMMERCE, CALIFORNIA

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|---|-------------------------------------|-------------------------------------|---|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="27.779"/> | <input type="text" value="27.779"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="2.777"/> | <input type="text" value="2.777"/> | |
| Number of heavy trucks/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface help | <div>Smooth asphalt ▾</div> | | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <small>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</small> | <input type="text" value="580"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <small>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</small> | |
| Night LAeq is | |
| | <input type="text" value="58"/> |

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Top: Existing Noise Levels along Telegraph Road without Project 65 dBA/Ldn

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|---|------------------------------------|------------------------------------|---|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="27779"/> | <input type="text" value="27779"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Number of heavy trucks/hr | <input type="text" value="2777"/> | <input type="text" value="2777"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="0"/> | |
| Road surface help | <div>Smooth asphalt ▾</div> | | |

| data on geometry help | |
|---|-----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <small>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</small> | <input type="text" value="1000"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <small>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</small> | |
| Night LAeq is | |
| | <input type="text" value="53"/> |

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Bottom: Existing Noise Levels along Telegraph Road without Project 60 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|---|--|------------------------------------|---|
| Road traffic input data help Day: 7.00-22.00 Night: 22.00-7.00 | | | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="29087"/> | <input type="text" value="29087"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Number of heavy trucks/hr | <input type="text" value="2908"/> | <input type="text" value="2908"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface | help Smooth asphalt ▼ | | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="16"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | |
| | <input type="text" value="89"/> |
| Night LAeq is | |
| | <input type="text" value="83"/> |

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Top: Existing Noise Levels along Telegraph Road with Project 50 feet

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|---|--|-----------------------------------|---|
| Road traffic input data help Day: 7.00-22.00 Night: 22.00-7.00 | | | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="8036"/> | <input type="text" value="8036"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Number of heavy trucks/hr | <input type="text" value="803"/> | <input type="text" value="803"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface | help Smooth asphalt ▼ | | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="170"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | |
| | <input type="text" value="70"/> |
| Night LAeq is | |
| | <input type="text" value="64"/> |

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Bottom: Existing Noise Levels along Telegraph Road with Project 70 dBA/Ldn

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CITADEL OUTLETS EXPANSION PROJECT & 10-ACRE DEVELOPMENT SITE • COMMERCE, CALIFORNIA

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | |
|---|---|------------------------------------|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Cars per hour | <input type="text" value="29087"/> | <input type="text" value="29087"/> |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Number of heavy trucks/hr | <input type="text" value="2908"/> | <input type="text" value="2908"/> |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Road surface help | Smooth asphalt <input type="button" value="v"/> | |
| <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour | | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="720"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | <input type="text" value="65"/> |
| Night LAeq is | <input type="text" value="59"/> |

Top: Existing Noise Levels along Telegraph Road with Project 65 dBA/Ldn

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | |
|---|---|------------------------------------|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Cars per hour | <input type="text" value="29087"/> | <input type="text" value="29087"/> |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Number of heavy trucks/hr | <input type="text" value="2908"/> | <input type="text" value="2908"/> |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Road surface help | Smooth asphalt <input type="button" value="v"/> | |
| <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour | | |

| data on geometry help | |
|---|-----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="1240"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | <input type="text" value="60"/> |
| Night LAeq is | <input type="text" value="54"/> |

Bottom: Existing Noise Levels along Telegraph Road with Project 60 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | |
|---|-----------------------------------|-----------------------------------|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Cars per hour | <input type="text" value="8036"/> | <input type="text" value="8036"/> |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Number of heavy trucks/hr | <input type="text" value="803"/> | <input type="text" value="803"/> |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Road surface help | Smooth asphalt ▼ | |
| <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour | | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="16"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) | |
| <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | |
| Night LAeq is | |
| <input type="text" value="84"/> | |
| <input type="text" value="77"/> | |

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Top: Existing Noise Levels along Washington Boulevard without Project 50 feet

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | |
|---|-----------------------------------|-----------------------------------|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Cars per hour | <input type="text" value="8036"/> | <input type="text" value="8036"/> |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Number of heavy trucks/hr | <input type="text" value="803"/> | <input type="text" value="803"/> |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Road surface help | Smooth asphalt ▼ | |
| <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour | | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="170"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) | |
| <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | |
| Night LAeq is | |
| <input type="text" value="70"/> | |
| <input type="text" value="64"/> | |

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Bottom: Existing Noise Levels along Washington Boulevard without Project 70 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|---|---|-----------------------------------|---|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="8036"/> | <input type="text" value="8036"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Number of heavy trucks/hr | <input type="text" value="803"/> | <input type="text" value="803"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface help | <input type="text" value="Smooth asphalt"/> ▼ | | |

| data on geometry help | |
|--|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <small>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</small> | <input type="text" value="340"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <small>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</small> | |
| | <input type="text" value="65"/> |
| Night LAeq is | |
| | <input type="text" value="59"/> |

Top: Existing Noise Levels along Washington Boulevard without Project 65 dBA/Ldn

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|---|---|-----------------------------------|---|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="8036"/> | <input type="text" value="8036"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Number of heavy trucks/hr | <input type="text" value="803"/> | <input type="text" value="803"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface help | <input type="text" value="Smooth asphalt"/> ▼ | | |

| data on geometry help | |
|--|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <small>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</small> | <input type="text" value="680"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <small>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</small> | |
| | <input type="text" value="60"/> |
| Night LAeq is | |
| | <input type="text" value="54"/> |

Bottom: Existing Noise Levels along Washington Boulevard without Project 60 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|--|---|-----------------------------------|---|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="8590"/> | <input type="text" value="8590"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="859"/> | <input type="text" value="859"/> | |
| Number of heavy trucks/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface help | <input type="text" value="Smooth asphalt"/> | | |

| data on geometry help | |
|---|----------------------------------|
| Heigth of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="16"/> |
| Heigth of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Heigth of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) | |
| <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | |
| | <input type="text" value="83"/> |
| Night LAeq is | |
| | <input type="text" value="76"/> |

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Top: Existing Noise Levels along Washington Boulevard with Project 50 feet

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | | |
|--|---|-----------------------------------|---|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 | |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Cars per hour | <input type="text" value="8590"/> | <input type="text" value="8590"/> | |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour |
| Number of vans/hr | <input type="text" value="859"/> | <input type="text" value="859"/> | |
| Number of heavy trucks/hr | <input type="text" value="0"/> | <input type="text" value="0"/> | |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> | |
| Road surface help | <input type="text" value="Smooth asphalt"/> | | |

| data on geometry help | |
|---|----------------------------------|
| Heigth of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <i>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</i> | <input type="text" value="160"/> |
| Heigth of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Heigth of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) | |
| <i>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</i> | |
| | <input type="text" value="70"/> |
| Night LAeq is | |
| | <input type="text" value="63"/> |

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Bottom: Existing Noise Levels along Washington Boulevard with Project 70 dBA/Ldn

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Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | |
|---|---|-----------------------------------|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Cars per hour | <input type="text" value="8590"/> | <input type="text" value="8590"/> |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> |
| | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour | |
| Number of vans/hr | <input type="text" value="859"/> | <input type="text" value="859"/> |
| Number of heavy trucks/hr | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Road surface help | Smooth asphalt ▼ | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <small>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</small> | <input type="text" value="320"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <small>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</small> | <input type="text" value="65"/> |
| Night LAeq is | <input type="text" value="59"/> |

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Top: Existing Noise Levels along Washington Boulevard with Project 65 dBA/Ldn

Calculation of ROAD traffic noise.

This Java-program calculates Ldn-levels of road traffic on a straight road without barriers or obstacles. There is more [explanation here](#).
[Full screen](#)

| Data on road | | |
|---|---|-----------------------------------|
| Road traffic input data help | Day: 7.00-22.00 | Night: 22.00-7.00 |
| Motorcycles per hour | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Cars per hour | <input type="text" value="8590"/> | <input type="text" value="8590"/> |
| Speed cars | <input type="text" value="40"/> | <input type="text" value="40"/> |
| | <input type="radio"/> kilometers per hour <input checked="" type="radio"/> miles per hour | |
| Number of vans/hr | <input type="text" value="859"/> | <input type="text" value="859"/> |
| Number of heavy trucks/hr | <input type="text" value="0"/> | <input type="text" value="0"/> |
| Speed trucks | <input type="text" value="40"/> | <input type="text" value="40"/> |
| Road surface help | Smooth asphalt ▼ | |

| data on geometry help | |
|---|----------------------------------|
| Height of road | <input type="text" value="0"/> |
| Horizontal distance in meters from center of road <small>Fill in 0 (zero, not blank!) when you want to calculate the distance for a given noise level</small> | <input type="text" value="640"/> |
| Height of house or observer | <input type="text" value="5"/> |
| View angle (127 grad= full view) | <input type="text" value="127"/> |
| Fraction sound absorbing soil (0=all hard, non absorbing; 1= all absorbing) | <input type="text" value="0"/> |
| Percentage reflection from opposite side (0=no surface; 1= all reflective). | <input type="text" value="0"/> |
| Distance to reflective surface on opposite side | <input type="text" value="0"/> |
| Height of reflecting object (must be at least 5 m) | <input type="text" value="0"/> |
| Distance to intersection | <input type="text" value="0"/> |
| Calculated Noise Level (Ldn) <small>(Or fill in (>40) if you want to calculate distance; distance must be set to zero)</small> | <input type="text" value="60"/> |
| Night LAeq is | <input type="text" value="53"/> |

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Bottom: Existing Noise Levels along Washington Boulevard with Project 60 dBA/Ldn

APPENDIX C

UTILITIES WORKSHEETS

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AREA 1

| Table 1 Project Name: Citadel Area 1 | | |
|---|--------------|------------------|
| Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development). | | |
| Land Use | Independent | Factor |
| Residential Uses | Variable | Total Units |
| Single-Family Residential | No. of Units | 0 |
| Medium Density Residential | No. of Units | 0 |
| Multiple-Family Residential | No. of Units | 0 |
| Mobile Home | No. of Units | 0 |
| Office Uses | Variable | Total Floor Area |
| Office | Sq. Ft. | 0 |
| Medical Office Building | Sq. Ft. | 0 |
| Office Park | Sq. Ft. | 0 |
| Bank/Financial Services | Sq. Ft. | 0 |
| Commercial Uses | Variable | Floor Area/Rooms |
| Specialty Retail Commercial | Sq. Ft. | 0 |
| Convenience Store | Sq. Ft. | 0 |
| Movie Theater | Sq. Ft. | 0 |
| Shopping Center | Sq. Ft. | 122,150 |
| Sit-Down Restaurant | Sq. Ft. | 0 |
| Fast-Food Restaurant | Sq. Ft. | 45,571 |
| Hotel | Rooms | 270 |
| Manufacturing Uses | Variable | Total Floor Area |
| Industrial Park | Sq. Ft. | 0 |
| Manufacturing | Sq. Ft. | 0 |
| General Light Industry | Sq. Ft. | 0 |
| Warehouse | Sq. Ft. | 0 |
| Public/Institutional | Variable | Total Floor Area |
| Public/Institutional | Sq. Ft. | 0 |
| Open Space | Sq. Ft. | 0 |

| Table 2: Projected Utility Consumption and Generation | | |
|---|----------------|--------|
| Summary of Project Impacts - Results of analysis identified below. No modifications should be made to this Table. | | |
| Utilities Consumption and Generation | Factor | Rates |
| Electrical Consumption | kWh/day | 24,769 |
| Natural Gas Consumption | cubic feet/day | 1,333 |
| Water Consumption | gallons/day | 52,268 |
| Sewage Generation | gallons/day | 42,084 |
| Solid Waste Generation | pounds/day | 13,987 |

| Table 3: Electrical Consumption | | | | |
|--|-------------------------|---------------------------|------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | kWh | Variable | kWh/Unit/Day |
| Single-Family Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Medium Density Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Multiple-Family Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Mobile Home | 0 | 4,644.00 | kWh/Unit/Year | 0.0 |
| Office Uses | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Office | 0 | 20.80 | kWh/Sq. Ft./Year | 0.0 |
| Medical Office Building | 0 | 14.20 | kWh/Sq. Ft./Year | 0.0 |
| Office Park | 0 | 20.80 | kWh/Sq. Ft./Year | 0.0 |
| Bank/Financial Services | 0 | 20.80 | kWh/Sq. Ft./Year | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | kWh | Variable | kWh/Sq. Ft./Day |
| Specialty Retail Commercial | 0 | 16.00 | kWh/Sq. Ft./Year | 0.0 |
| Convenience Store | 0 | 16.00 | kWh/Sq. Ft./Year | 0.0 |
| Movie Theater | 0 | 16.00 | kWh/Sq. Ft./Year | 0.0 |
| Shopping Center | 122,150 | 35.90 | kWh/Sq. Ft./Year | 12,014 |
| Sit-Down Restaurant | 0 | 49.10 | kWh/Sq. Ft./Year | 0.0 |
| Fast-Food Restaurant | 45,571 | 49.10 | kWh/Sq. Ft./Year | 6,130.2 |
| Hotel | 270 | 8,955.00 | kWh/Sq. Ft./Year | 6,624.2 |
| Manufacturing Uses | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Industrial Park | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Manufacturing | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| General Light Industry | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Warehouse | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Public/Institutional | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Public/Institutional | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Open Space | 0 | 0.00 | kWh/Sq. Ft./Year | 0.0 |
| Total Daily Electrical Consumption (kWh/day) | | | | 24,768.7 |
| Sources: | | | | |
| Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993). | | | | |
| All other rates are from Common Forecasting Methodology VII Demand Forms, 1989 | | | | |

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| Table 4: Natural Gas Consumption | | | | |
|--|-------------------------|----------------------------|---------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Single-Family Residential | 0 | 6,665.00 | Cu. Ft./Mo./Unit | 0.0 |
| Medium Density Residential | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Multiple-Family Residential | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Mobile Home | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Office Uses | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Office | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Office Park | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Specialty Retail Commercial | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Convenience Store | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Movie Theater | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Shopping Center | 122,150 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 970.5 |
| Sit-Down Restaurant | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 45,571 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 362.1 |
| Hotel | 270 | | Cu. Ft./Mo./Room | 0.0 |
| Manufacturing Uses | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Industrial Park | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Manufacturing | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| General Light Industry | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Warehouse | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Public/Institutional | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Open Space | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Total Daily Natural Gas Consumption (cubic feet/day) | | | | 1,332.6 |
| Sources: | | | | |
| South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993 | | | | |

| Table 4: Natural Gas Consumption | | | | |
|---|-------------------------|----------------------------|---------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Single-Family Residential | 0 | 6,665.00 | Cu. Ft./Mo./Unit | 0.0 |
| Medium Density Residential | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Multiple-Family Residential | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Mobile Home | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Office Uses | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Office | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Office Park | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Specialty Retail Commercial | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Convenience Store | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Movie Theater | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Shopping Center | 122,150 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 970.5 |
| Sit-Down Restaurant | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 45,571 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 362.1 |
| Hotel | 270 | | Cu. Ft./Mo./Room | 0.0 |
| Manufacturing Uses | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Industrial Park | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Manufacturing | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| General Light Industry | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Warehouse | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Public/Institutional | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Open Space | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Total Daily Natural Gas Consumption (cubic feet/day) | | | | 1,332.6 |
| Sources: South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993 | | | | |

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| Table 5: Water Consumption | | | | |
|--|-------------------------|---------------------------|-------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | Gals. of Water | Variable | Gals./Day |
| Single-Family Residential | 0 | 250.00 | Gals./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Mobile Home | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Office | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Office Park | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Room | Gals. of Water | Variable | Gals./Day |
| Specialty Retail Commercial | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Convenience Store | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Movie Theater | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Shopping Center | 122,150 | 0.10 | Gals./Day/Sq. Ft. | 12,337.2 |
| Sit-Down Restaurant | 0 | 0.40 | Gals./Day/Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 45,571 | 0.11 | Gals./Day/Sq. Ft. | 4,830.5 |
| Hotel | 270 | 130.00 | Gals./Day/Room. | 35,100.0 |
| Manufacturing Uses | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Industrial Park | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Manufacturing | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| General Light Industry | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Warehouse | 0 | 0.01 | Gals./Day/Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Public/Institutional | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Open Space | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Total Daily Water Consumption (gallons/day) | | | | 52,267.7 |
| Sources: | | | | |
| Source: Derived from Orange County Sanitation District rates (150% of effluent generation). | | | | |

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| Table 6: Sewage Generation | | | | |
|--|------------------|-------------------|-------------------|-----------------------|
| Project Component | Units of Measure | Generation Factor | | Projected Consumption |
| Residential Uses | No. of Units | Gals. of Effluent | Variable | Gals./Day |
| Single-Family Residential | 0 | 230.00 | Gals./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 120.00 | Gals./Day/Unit | 0.0 |
| Mobile Home | 0 | 180.00 | Gals./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Office | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Office Park | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Gals. of Effluent | Variable | Gals./Day |
| Specialty Retail Commercial | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Convenience Store | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Movie Theater | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Shopping Center | 122,150 | 0.08 | Gals./Day/Sq. Ft. | 9,869.7 |
| Sit-Down Restaurant | 0 | 0.30 | Gals./Day/Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 45,571 | 0.08 | Gals./Day/Sq. Ft. | 3,864.4 |
| Hotel | 270 | 105 | Gals./Day/Room. | 28,350.0 |
| Manufacturing Uses | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Industrial Park | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Manufacturing | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| General Light Industry | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Warehouse | 0 | 0.01 | Gals./Day/Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Public/Institutional | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Open Space | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Total Daily Sewage Generation (gallons/day) | | | | 42,084.1 |
| Source: Orange County Sanitation Districts. | | | | |

| Table 7: Solid Waste Generation | | | | |
|--|------------------|-------------------|------------------------|----------------------|
| Project Component | Units of Measure | Generation Factor | | Projected Generation |
| Residential Uses | No. of Units | Lbs. of Waste | Variable | Lbs./Day |
| Single-Family Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Mobile Home | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Office | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Office Park | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Lbs. of Waste | Variable | Lbs./Day |
| Specialty Retail Commercial | 0 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Convenience Store | 0 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Movie Theater | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Shopping Center | 122,150 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 732.9 |
| Sit-Down Restaurant | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 45,571 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 1,914.0 |
| Hotel | 270 | 42.00 | Lbs./Day/Room | 11,340.0 |
| Manufacturing Uses | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Industrial Park | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Manufacturing | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| General Light Industry | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Warehouse | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Public/Institutional | 0 | 4.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Open Space | 0 | 3.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Total Daily Solid Waste Generation | | | | 13,986.9 |
| Source: City of Los Angeles Average Solid Waste Generation Rates, April 1981 | | | | |

AREA 2

| Table 1 Project Name: Citadel Area 2 | | |
|---|--------------|------------------|
| Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development). | | |
| Land Use | Independent | Factor |
| Residential Uses | Variable | Total Units |
| Single-Family Residential | No. of Units | 0 |
| Medium Density Residential | No. of Units | 0 |
| Multiple-Family Residential | No. of Units | 0 |
| Mobile Home | No. of Units | 0 |
| Office Uses | Variable | Total Floor Area |
| Office | Sq. Ft. | 0 |
| Medical Office Building | Sq. Ft. | 0 |
| Office Park | Sq. Ft. | 0 |
| Bank/Financial Services | Sq. Ft. | 0 |
| Commercial Uses | Variable | Floor Area/Rooms |
| Specialty Retail Commercial | Sq. Ft. | 120,000 |
| Convenience Store | Sq. Ft. | 0 |
| Movie Theater | Sq. Ft. | 150,000 |
| Shopping Center | Sq. Ft. | 66,941 |
| Sit-Down Restaurant | Sq. Ft. | 0 |
| Fast-Food Restaurant | Sq. Ft. | 3,140 |
| Hotel | Rooms | 500 |
| Manufacturing Uses | Variable | Total Floor Area |
| Industrial Park | Sq. Ft. | 0 |
| Manufacturing | Sq. Ft. | 0 |
| General Light Industry | Sq. Ft. | 0 |
| Warehouse | Sq. Ft. | 0 |
| Public/Institutional | Variable | Total Floor Area |
| Public/Institutional | Sq. Ft. | 0 |
| Open Space | Sq. Ft. | 0 |

| Table 2: Projected Utility Consumption and Generation | | |
|---|----------------|--------|
| Summary of Project Impacts - Results of analysis identified below. No modifications should be made to this Table. | | |
| Utilities Consumption and Generation | Factor | Rates |
| Electrical Consumption | kWh/day | 31,109 |
| Natural Gas Consumption | cubic feet/day | 2,702 |
| Water Consumption | gallons/day | 99,364 |
| Sewage Generation | gallons/day | 79,991 |
| Solid Waste Generation | pounds/day | 27,474 |

| Table 3: Electrical Consumption | | | | |
|--|-------------------------|---------------------------|------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | kWh | Variable | kWh/Unit/Day |
| Single-Family Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Medium Density Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Multiple-Family Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Mobile Home | 0 | 4,644.00 | kWh/Unit/Year | 0.0 |
| Office Uses | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Office | 0 | 20.80 | kWh/Sq. Ft./Year | 0.0 |
| Medical Office Building | 0 | 14.20 | kWh/Sq. Ft./Year | 0.0 |
| Office Park | 0 | 20.80 | kWh/Sq. Ft./Year | 0.0 |
| Bank/Financial Services | 0 | 20.80 | kWh/Sq. Ft./Year | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | kWh | Variable | kWh/Sq. Ft./Day |
| Specialty Retail Commercial | 120,000 | 16.00 | kWh/Sq. Ft./Year | 5,260.3 |
| Convenience Store | 0 | 16.00 | kWh/Sq. Ft./Year | 0.0 |
| Movie Theater | 150,000 | 16.00 | kWh/Sq. Ft./Year | 6,575.3 |
| Shopping Center | 66,941 | 35.90 | kWh/Sq. Ft./Year | 6,584 |
| Sit-Down Restaurant | 0 | 49.10 | kWh/Sq. Ft./Year | 0.0 |
| Fast-Food Restaurant | 3,140 | 49.10 | kWh/Sq. Ft./Year | 422.4 |
| Hotel | 500 | 8,955.00 | kWh/Sq. Ft./Year | 12,267.1 |
| Manufacturing Uses | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Industrial Park | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Manufacturing | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| General Light Industry | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Warehouse | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Public/Institutional | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Public/Institutional | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Open Space | 0 | 0.00 | kWh/Sq. Ft./Year | 0.0 |
| Total Daily Electrical Consumption (kWh/day) | | | | 31,109.2 |
| Sources: | | | | |
| Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993). | | | | |
| All other rates are from Common Forecasting Methodology VII Demand Forms, 1989 | | | | |

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| Table 4: Natural Gas Consumption | | | | |
|--|-------------------------|----------------------------|---------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Single-Family Residential | 0 | 6,665.00 | Cu. Ft./Mo./Unit | 0.0 |
| Medium Density Residential | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Multiple-Family Residential | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Mobile Home | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Office Uses | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Office | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Office Park | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Specialty Retail Commercial | 120,000 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 953.4 |
| Convenience Store | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Movie Theater | 150,000 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 1,191.8 |
| Shopping Center | 66,941 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 531.9 |
| Sit-Down Restaurant | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 3,140 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 24.9 |
| Hotel | 500 | | Cu. Ft./Mo./Room | 0.0 |
| Manufacturing Uses | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Industrial Park | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Manufacturing | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| General Light Industry | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Warehouse | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Public/Institutional | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Open Space | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Total Daily Natural Gas Consumption (cubic feet/day) | | | | 2,702.0 |
| Sources: South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993 | | | | |

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| Table 5: Water Consumption | | | | |
|---|-------------------------|---------------------------|-------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | Gals. of Water | Variable | Gals./Day |
| Single-Family Residential | 0 | 250.00 | Gals./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Mobile Home | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Office | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Office Park | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Room | Gals. of Water | Variable | Gals./Day |
| Specialty Retail Commercial | 120,000 | 0.10 | Gals./Day/Sq. Ft. | 12,120.0 |
| Convenience Store | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Movie Theater | 150,000 | 0.10 | Gals./Day/Sq. Ft. | 15,150.0 |
| Shopping Center | 66,941 | 0.10 | Gals./Day/Sq. Ft. | 6,761.0 |
| Sit-Down Restaurant | 0 | 0.40 | Gals./Day/Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 3,140 | 0.11 | Gals./Day/Sq. Ft. | 332.8 |
| Hotel | 500 | 130.00 | Gals./Day/Room. | 65,000.0 |
| Manufacturing Uses | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Industrial Park | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Manufacturing | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| General Light Industry | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Warehouse | 0 | 0.01 | Gals./Day/Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Public/Institutional | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Open Space | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Total Daily Water Consumption (gallons/day) | | | | 99,363.9 |
| Sources: | | | | |
| Source: Derived from Orange County Sanitation District rates (150% of effluent generation). | | | | |

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| Table 6: Sewage Generation | | | | |
|--|-------------------------|--------------------------|-------------------|------------------------------|
| Project Component | Units of Measure | Generation Factor | | Projected Consumption |
| Residential Uses | No. of Units | Gals. of Effluent | Variable | Gals./Day |
| Single-Family Residential | 0 | 230.00 | Gals./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 120.00 | Gals./Day/Unit | 0.0 |
| Mobile Home | 0 | 180.00 | Gals./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Office | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Office Park | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Gals. of Effluent | Variable | Gals./Day |
| Specialty Retail Commercial | 120,000 | 0.08 | Gals./Day/Sq. Ft. | 9,696.0 |
| Convenience Store | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Movie Theater | 150,000 | 0.08 | Gals./Day/Sq. Ft. | 12,120.0 |
| Shopping Center | 66,941 | 0.08 | Gals./Day/Sq. Ft. | 5,408.8 |
| Sit-Down Restaurant | 0 | 0.30 | Gals./Day/Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 3,140 | 0.08 | Gals./Day/Sq. Ft. | 266.3 |
| Hotel | 500 | 105 | Gals./Day/Room. | 52,500.0 |
| Manufacturing Uses | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Industrial Park | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Manufacturing | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| General Light Industry | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Warehouse | 0 | 0.01 | Gals./Day/Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Public/Institutional | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Open Space | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Total Daily Sewage Generation (gallons/day) | | | | 79,991.1 |
| Source: Orange County Sanitation Districts. | | | | |

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| Table 7: Solid Waste Generation | | | | |
|--|-------------------------|--------------------------|------------------------|-----------------------------|
| Project Component | Units of Measure | Generation Factor | | Projected Generation |
| Residential Uses | No. of Units | Lbs. of Waste | Variable | Lbs./Day |
| Single-Family Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Mobile Home | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Office | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Medical Office Building | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Office Park | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Lbs. of Waste | Variable | Lbs./Day |
| Specialty Retail Commercial | 120,000 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 5,040.0 |
| Convenience Store | 0 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Movie Theater | 150,000 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 900.0 |
| Shopping Center | 66,941 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 401.6 |
| Sit-Down Restaurant | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Fast-Food Restaurant | 3,140 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 131.9 |
| Hotel | 500 | 42.00 | Lbs./Day/Room | 21,000.0 |
| Manufacturing Uses | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Industrial Park | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Manufacturing | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| General Light Industry | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Warehouse | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Public/Institutional Use | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Public/Institutional | 0 | 4.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Open Space | 0 | 3.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Total Daily Solid Waste Generation | | | | 27,473.5 |
| Source: City of Los Angeles Average Solid Waste Generation Rates, April 1981 | | | | |

AREA 3

| | | |
|---|-----------------|-------------------------|
| Table 1 Project Name: CITADEL Area 3 | | |
| Definition of Project Parameters - Enter independent variable (no. of units or floor area) in the shaded area. The independent variable to be entered is the number of units (for residential development) or the gross floor area (for non-residential development). | | |
| Land Use | Independent | Factor |
| Residential Uses | Variable | Total Units |
| Single-Family Residential | No. of Units | 0 |
| Medium Density Residential | No. of Units | 0 |
| Multiple-Family Residential | No. of Units | 0 |
| Mobile Home | No. of Units | 0 |
| Office Uses | Variable | Total Floor Area |
| Office | Sq. Ft. | 70,000 |
| Medical Office Building | Sq. Ft. | 0 |
| Office Park | Sq. Ft. | 0 |
| Bank/Financial Services | Sq. Ft. | 0 |
| Commercial Uses | Variable | Floor Area/Rooms |
| Specialty Retail Commercial | Sq. Ft. | 0 |
| Convenience Store | Sq. Ft. | 0 |
| Movie Theater | Sq. Ft. | 0 |
| Shopping Center | Sq. Ft. | 0 |
| Sit-Down Restaurant | Sq. Ft. | 5,000 |
| Fast-Food Restaurant | Sq. Ft. | 12,400 |
| Hotel | Rooms | 0 |
| Manufacturing Uses | Variable | Total Floor Area |
| Industrial Park | Sq. Ft. | 0 |
| Manufacturing | Sq. Ft. | 0 |
| General Light Industry | Sq. Ft. | 0 |
| Warehouse | Sq. Ft. | 55,000 |
| Public/Institutional | Variable | Total Floor Area |
| Public/Institutional | Sq. Ft. | 0 |
| Open Space | Sq. Ft. | 0 |

| | | |
|---|----------------|--------|
| Table 2: Projected Utility Consumption and Generation | | |
| Summary of Project Impacts - Results of analysis identified below. No modifications should be made to this Table. | | |
| Utilities Consumption and Generation | Factor | Rates |
| Electrical Consumption | kWh/day | 7,053 |
| Natural Gas Consumption | cubic feet/day | 1,230 |
| Water Consumption | gallons/day | 13,804 |
| Sewage Generation | gallons/day | 10,944 |
| Solid Waste Generation | pounds/day | 1,481 |

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| Table 3: Electrical Consumption | | | | |
|--|-------------------------|---------------------------|------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | kWh | Variable | kWh/Unit/Day |
| Single-Family Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Medium Density Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Multiple-Family Residential | 0 | 5,625.00 | kWh/Unit/Year | 0.0 |
| Mobile Home | 0 | 4,644.00 | kWh/Unit/Year | 0.0 |
| Office Uses | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Office | 70,000 | 20.80 | kWh/Sq. Ft./Year | 3,989.0 |
| Medical Office Building | 0 | 14.20 | kWh/Sq. Ft./Year | 0.0 |
| Office Park | 0 | 20.80 | kWh/Sq. Ft./Year | 0.0 |
| Bank/Financial Services | 0 | 20.80 | kWh/Sq. Ft./Year | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | kWh | Variable | kWh/Sq. Ft./Day |
| Specialty Retail Commercial | 0 | 16.00 | kWh/Sq. Ft./Year | 0.0 |
| Convenience Store | 0 | 16.00 | kWh/Sq. Ft./Year | 0.0 |
| Movie Theater | 0 | 16.00 | kWh/Sq. Ft./Year | 0.0 |
| Shopping Center | 0 | 35.90 | kWh/Sq. Ft./Year | 0 |
| Sit-Down Restaurant | 5,000 | 49.10 | kWh/Sq. Ft./Year | 672.6 |
| Fast-Food Restaurant | 12,400 | 49.10 | kWh/Sq. Ft./Year | 1,668.1 |
| Hotel | 0 | 8,955.00 | kWh/Sq. Ft./Year | 0.0 |
| Manufacturing Uses | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Industrial Park | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Manufacturing | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| General Light Industry | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Warehouse | 55,000 | 4.80 | kWh/Sq. Ft./Year | 723.3 |
| Public/Institutional | Sq. Ft. | kWh | Variable | kWh/Sq. Ft./Day |
| Public/Institutional | 0 | 4.80 | kWh/Sq. Ft./Year | 0.0 |
| Open Space | 0 | 0.00 | kWh/Sq. Ft./Year | 0.0 |
| Total Daily Electrical Consumption (kWh/day) | | | | 7,053.0 |
| Sources: | | | | |
| Residential rates were derived from the SCAQMD's CEQA Air Quality Handbook (April 1993). | | | | |
| All other rates are from Common Forecasting Methodology VII Demand Forms, 1989 | | | | |

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| Table 4: Natural Gas Consumption | | | | |
|--|-------------------------|----------------------------|---------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Single-Family Residential | 0 | 6,665.00 | Cu. Ft./Mo./Unit | 0.0 |
| Medium Density Residential | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Multiple-Family Residential | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Mobile Home | 0 | 4,011.50 | Cu. Ft./Mo./Unit | 0.0 |
| Office Uses | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Office | 70,000 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 383.6 |
| Medical Office Building | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Office Park | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 2.00 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Specialty Retail Commercial | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Convenience Store | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Movie Theater | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Shopping Center | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Sit-Down Restaurant | 5,000 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 39.7 |
| Fast-Food Restaurant | 12,400 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 98.5 |
| Hotel | 0 | | Cu. Ft./Mo./Room | 0.0 |
| Manufacturing Uses | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Industrial Park | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Manufacturing | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| General Light Industry | 0 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Warehouse | 55,000 | 4.70 | Cu. Ft./Mo./Sq. Ft. | 708.2 |
| Public/Institutional Use | Sq. Ft. | Cu. Ft. of Nat. Gas | Variable | Cu. Ft./Day |
| Public/Institutional | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Open Space | 0 | 2.90 | Cu. Ft./Mo./Sq. Ft. | 0.0 |
| Total Daily Natural Gas Consumption (cubic feet/day) | | | | 1,230.0 |
| Sources: | | | | |
| South Coast Air Quality Management District, CEQA Air Quality Handbook. April 1993 | | | | |

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| Table 5: Water Consumption | | | | |
|---|-------------------------|---------------------------|-------------------|------------------------------|
| Project Component | Units of Measure | Consumption Factor | | Projected Consumption |
| Residential Uses | No. of Units | Gals. of Water | Variable | Gals./Day |
| Single-Family Residential | 0 | 250.00 | Gals./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Mobile Home | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Office | 70,000 | 0.14 | Gals./Day/Sq. Ft. | 9,940.0 |
| Medical Office Building | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Office Park | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Room | Gals. of Water | Variable | Gals./Day |
| Specialty Retail Commercial | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Convenience Store | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Movie Theater | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Shopping Center | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Sit-Down Restaurant | 5,000 | 0.40 | Gals./Day/Sq. Ft. | 2,000.0 |
| Fast-Food Restaurant | 12,400 | 0.11 | Gals./Day/Sq. Ft. | 1,314.4 |
| Hotel | 0 | 130.00 | Gals./Day/Room. | 0.0 |
| Manufacturing Uses | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Industrial Park | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Manufacturing | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| General Light Industry | 0 | 0.14 | Gals./Day/Sq. Ft. | 0.0 |
| Warehouse | 55,000 | 0.01 | Gals./Day/Sq. Ft. | 550.0 |
| Public/Institutional Use | Sq. Ft. | Gals. of Water | Variable | Gals./Day |
| Public/Institutional | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Open Space | 0 | 0.10 | Gals./Day/Sq. Ft. | 0.0 |
| Total Daily Water Consumption (gallons/day) | | | | 13,804.4 |
| Sources: | | | | |
| Source: Derived from Orange County Sanitation District rates (150% of effluent generation). | | | | |

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| Table 6: Sewage Generation | | | | |
|--|-------------------------|--------------------------|-------------------|------------------------------|
| Project Component | Units of Measure | Generation Factor | | Projected Consumption |
| Residential Uses | No. of Units | Gals. of Effluent | Variable | Gals./Day |
| Single-Family Residential | 0 | 230.00 | Gals./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 200.00 | Gals./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 120.00 | Gals./Day/Unit | 0.0 |
| Mobile Home | 0 | 180.00 | Gals./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Office | 70,000 | 0.11 | Gals./Day/Sq. Ft. | 7,952.0 |
| Medical Office Building | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Office Park | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Gals. of Effluent | Variable | Gals./Day |
| Specialty Retail Commercial | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Convenience Store | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Movie Theater | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Shopping Center | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Sit-Down Restaurant | 5,000 | 0.30 | Gals./Day/Sq. Ft. | 1,500.0 |
| Fast-Food Restaurant | 12,400 | 0.08 | Gals./Day/Sq. Ft. | 1,051.5 |
| Hotel | 0 | 105 | Gals./Day/Room. | 0.0 |
| Manufacturing Uses | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Industrial Park | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Manufacturing | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| General Light Industry | 0 | 0.11 | Gals./Day/Sq. Ft. | 0.0 |
| Warehouse | 55,000 | 0.01 | Gals./Day/Sq. Ft. | 440.0 |
| Public/Institutional Use | Sq. Ft. | Gals. of Effluent | Variable | Gals./Day |
| Public/Institutional | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Open Space | 0 | 0.08 | Gals./Day/Sq. Ft. | 0.0 |
| Total Daily Sewage Generation (gallons/day) | | | | 10,943.5 |
| Source: Orange County Sanitation Districts. | | | | |

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| Table 7: Solid Waste Generation | | | | |
|---|-------------------------|--------------------------|------------------------|-----------------------------|
| Project Component | Units of Measure | Generation Factor | | Projected Generation |
| Residential Uses | No. of Units | Lbs. of Waste | Variable | Lbs./Day |
| Single-Family Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Medium Density Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Multiple-Family Residential | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Mobile Home | 0 | 4.00 | Lbs./Day/Unit | 0.0 |
| Office Uses | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Office | 70,000 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 420.0 |
| Medical Office Building | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Office Park | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Bank/Financial Services | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Commercial Uses | Sq. Ft./Rooms | Lbs. of Waste | Variable | Lbs./Day |
| Specialty Retail Commercial | 0 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Convenience Store | 0 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Movie Theater | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Shopping Center | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Sit-Down Restaurant | 5,000 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 210.0 |
| Fast-Food Restaurant | 12,400 | 42.00 | Lbs./Day/1,000 Sq. Ft. | 520.8 |
| Hotel | 0 | 42.00 | Lbs./Day/Room | 0.0 |
| Manufacturing Uses | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Industrial Park | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Manufacturing | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| General Light Industry | 0 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Warehouse | 55,000 | 6.00 | Lbs./Day/1,000 Sq. Ft. | 330.0 |
| Public/Institutional Use | Sq. Ft. | Lbs. of Waste | Variable | Lbs./Day |
| Public/Institutional | 0 | 4.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Open Space | 0 | 3.00 | Lbs./Day/1,000 Sq. Ft. | 0.0 |
| Total Daily Solid Waste Generation | | | | 1,480.8 |
| Source: City of Los Angeles Average Solid Waste Generation Rates, April 1981 | | | | |