



Chick-fil-A

(GPA 2019-0001/ZC 2019-0001/LCPA 2019-0002/
AMEND 2019-0004/PUD 2019-0003/CDP 2019-0007)

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April 2021

**PUBLIC REVIEW DRAFT
INITIAL STUDY**

Chick-fil-A

**(GPA 2019-0001 / ZC 2019-0001 / LCPA 2019-0002 / AMEND 2019-0004 /
PUD 2019-0003 / CDP 2019-0007)**



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1.0 INTRODUCTION

The proposed Chick-fil-A (project) is located at 5850 Avenida Encinas, in the City of Carlsbad, California. The project would demolish an existing two-story commercial office building and surface parking lot and construct a new Chick-fil-A restaurant. The Chick-fil-A restaurant would be a 3,945 square-foot (gross area), one-story building (up to 24 feet in height) with 36 vehicle parking spaces, as well as landscaping and required utilities.

Following a preliminary review of the proposed project, the City of Carlsbad determined that the proposed project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study analyzes the potential direct, indirect, and cumulative environmental effects of the proposed project.

1.1 CEQA STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with Sections 15051 and 15367 of the California Code of Regulations (CCR), the city is identified as the Lead Agency for the proposed project. Under CEQA (Public Resources Code Section 21000-21177) and pursuant to Section 15063 of the CCR, the city is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration (or Mitigated Negative Declaration). Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Section 21080[c], Public Resources Code).

The environmental documentation, which is ultimately selected by the city in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits, and other discretionary approvals would be required.

1.2 PURPOSE

CEQA Guidelines Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- An identification of the environmental setting;
- An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;

- A discussion of ways to mitigate significant effects identified, if any;
- An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

1.3 CONSULTATION

Pursuant to CEQA Guidelines Section 15063(g), as soon as the Lead Agency (in this case, the City of Carlsbad) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, in order to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study, the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.4 INCORPORATION BY REFERENCE

The long-range planning documents listed below were utilized during the preparation of this Initial Study. These documents are available for review at the City of Carlsbad Planning Division, 1635 Faraday Avenue, Carlsbad, California, 92008.

- Carlsbad General Plan (September 2015). The *Carlsbad General Plan* (General Plan), dated September 2015, is a policy document that guides decisions related to protecting, enhancing, and providing those things the community values most, such as open space, habitat conservation, beach preservation, arts, and community character. The General Plan includes the following nine elements: Land Use and Community Design; Mobility; Open Space, Conservation, and Recreation; Noise; Public Safety; Arts, History, Culture, and Education; Economy, Business Diversity, and Tourism; Sustainability; and Housing. The General Plan is used for general background information on the city and is referenced throughout the document.
- Carlsbad General Plan & Climate Action Plan Final Environmental Impact Report (September 2015). The *Carlsbad General Plan & Climate Action Plan Final Environmental Impact Report* (General Plan EIR), adopted September 2015, is a program level analysis that addresses potential impacts of activities associated with implementation of the General Plan. Specifically, the General Plan EIR analyzes environmental topical areas related to: aesthetics; air quality; biological resources; energy, greenhouse gases, and climate change; geology, soils and seismicity; hazardous materials, airport safety, and wildfires; historical, archaeological, and paleontological resources; hydrology and flooding/water quality; land use; housing and population; noise; public facilities and services; public utilities and infrastructure; transportation; and agricultural resources. According to the General Plan EIR, implementation of the General Plan would result in significant and unavoidable impacts related to air quality and transportation. The General Plan EIR is used for general background information on the city and is referenced throughout the document.

- *City of Carlsbad Local Coastal Program (August 2017)*. The *City of Carlsbad Local Coastal Program* (LCP) ensures that development within the city's coastal zone protects and enhances coastal resources and is consistent with the California Coastal Act. The LCP consists of six geographic segments: the Agua Hedionda Lagoon LCP segment comprised of approximately 1,100 acres; the Carlsbad Mello I segment with 2,000 acres; the Carlsbad Mello II segment with approximately 5,300 acres; the West Batiquitos Lagoon/Sammis Properties segment with approximately 200 acres; the East Batiquitos Lagoon/Hunt Properties segment with approximately 1,000 acres; and the Village-Barrio segment comprising approximately 148 acres. The project site is located within the Mello II segment of the LCP. The Mello II LCP was approved by the Coastal Commission in June 1981 and is referenced throughout this document. It is acknowledged that the City of Carlsbad is currently preparing an update to the LCP.
- *Habitat Management Plan for Natural Communities in the City of Carlsbad (November 2004)*. The *Habitat Management Plan for Natural Communities in the City of Carlsbad* (Carlsbad HMP) proposes a comprehensive citywide program to identify how the city, in cooperation with Federal and State wildlife agencies, can preserve the diversity of habitat and protect sensitive biological resources within the city while allowing for additional development consistent with the city's General Plan and its Growth Management Plan. The Carlsbad HMP includes specific biological, conservation, land use, and economic objectives. The Carlsbad HMP is referenced in the project's biological resources analysis; refer to Section 4.4, *Biological Resources*.
- *Carlsbad Municipal Code*. The *Carlsbad Municipal Code* (Carlsbad Municipal Code) consists of codes and ordinances adopted by the city. These include standards intended to regulate land use, development, health and sanitation, water quality, public facilities, and public safety. Title 21, *The Zoning Ordinance* (Zoning Ordinance), includes an official land-use plan for the city is adopted and established to serve the public health, safety and general welfare and to provide the economic and social advantages resulting from an orderly planned use of land resources. The Carlsbad Municipal Code, containing specific rules and regulations pertaining to the city, is referenced throughout the document.

These documents, incorporated by reference, were utilized throughout this document as the fundamental planning documents that may apply to the project. Background information and policy information, as well as specific adopted rules and regulations pertaining to the city were also relied upon throughout this document and are referenced accordingly.

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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The City of Carlsbad (city) is located along the northern coast of San Diego County (County), approximately 30 miles north of San Diego and about 90 miles south of Los Angeles; refer to [Exhibit 2-1, *Regional Vicinity*](#). The city consists of approximately 39 square miles. Surrounding jurisdictions include the City of Oceanside to the north, the cities of Vista and San Marcos and unincorporated San Diego County to the east, and the City of Encinitas to the south.

The proposed Chick-fil-A (project) site involves an approximately 0.89-acre triangular-shaped parcel located at 5850 Avenida Encinas (Assessor's Parcel Numbers [APNs] 210-170-08-00 and -09-00); refer to [Exhibit 2-2, *Site Vicinity*](#). Regional access to the project site is provided via the San Diego Freeway (Interstate 5 [I-5]). Local access to the project site is provided via Palomar Airport Road and Avenida Encinas.

2.2 ENVIRONMENTAL SETTING

The project site is currently developed with a 10,977-square-foot two-story commercial (office) building (constructed in 1972) and surface parking lot with 34 spaces. The commercial (office) building is currently operational and has three tenants and approximately 25 employees. The project site is accessed via two existing driveways along the site's western boundary at Avenida Encinas. The north project driveway provides right-in/right-out access to Avenida Encinas, while the south project driveway provides full access to/from Avenida Encinas.

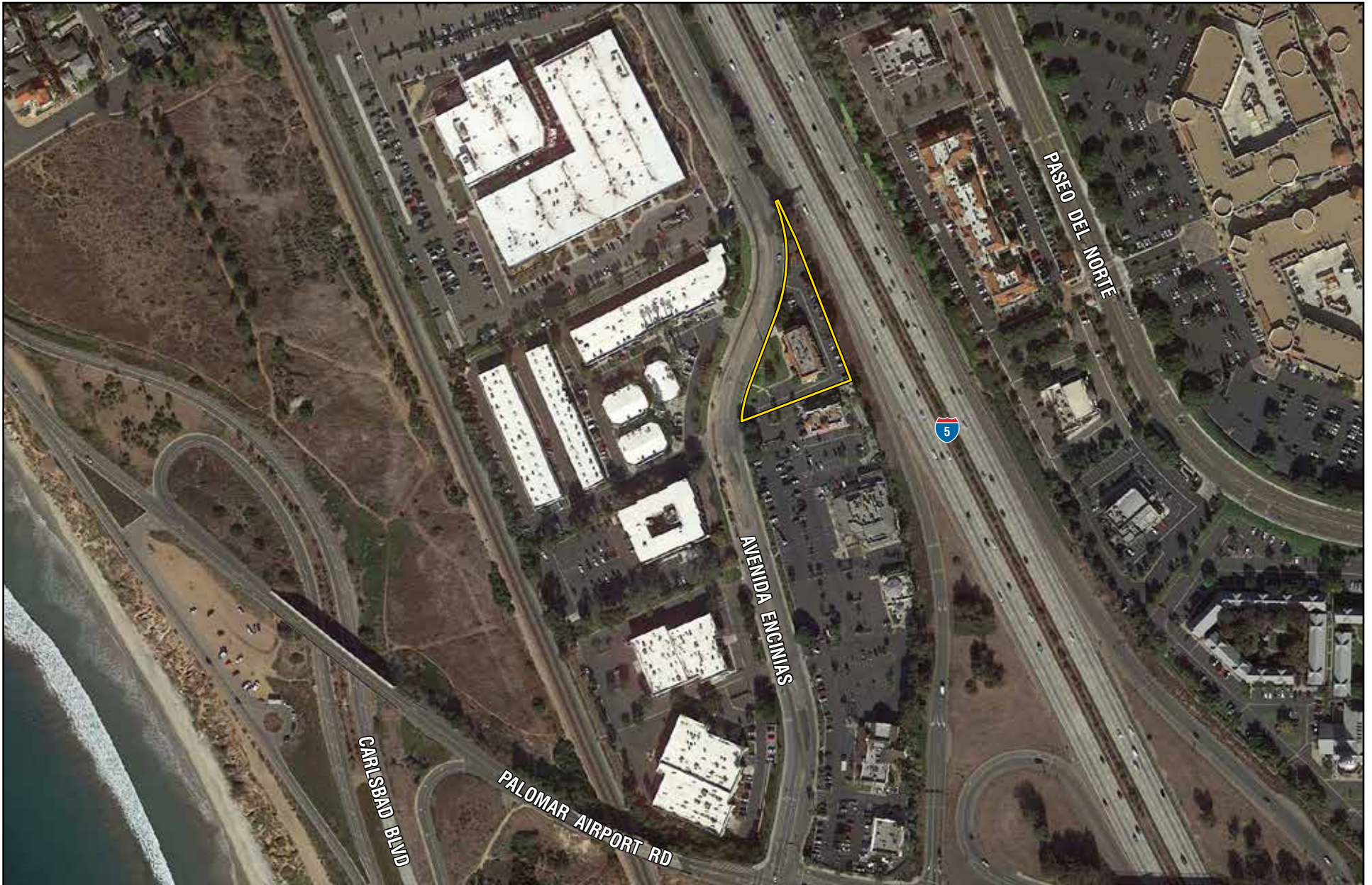
The project site is currently landscaped with 20 trees, including manna gum, fern pine, and Mondell pine, and a variety of shrubs. The majority of the project's landscaping is concentrated at the commercial (office) building's frontage and along the surface parking lot's perimeter. Currently, lighting at the project site includes building, parking lot, and security lighting. The topography of the project site is generally flat and slopes downward to the southwest. Existing undergrounded utility service connections (i.e., water, wastewater, gas, and electricity) connect the project site to existing facilities aligned within Avenida Encinas right-of-way. The surface parking lot currently drains surface runoff via a concrete v-gutter to the north and west and ultimately into Avenida Encinas.

GENERAL PLAN LAND USE DESIGNATION AND ZONING

Based on the General Plan Land Use Map, the project site is designated Planned Industrial (PI). The project site is zoned Planned Industrial (P-M) with a Commercial/Visitor-Serving Overlay by the City of Carlsbad Zoning Map. The project site is located within the Mello II Segment of the Local Coastal Program (LCP) and is also located within the Palomar Place Site Development Plan (SDP 83-11).

SURROUNDING USES

The project site is bounded by transportation, light industrial, and commercial uses. Surrounding land uses in proximity to the project site include the following:



Source: Google Earth Pro, July 2019

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— PROJECT SITE

CHICK-FIL-A I-5 & PALOMAR AIRPORT RD FSU
INITIAL STUDY

Site Vicinity

Exhibit 2-2

- North: Transportation-related uses (Avenida Encinas and I-5) and office buildings, zoned Planned Industrial (P-M) with a Commercial/Visitor-Serving Overlay, are located to the north of the project site.
- East: I-5 bounds the project site to the east. A retail shopping center, zoned Commercial-Tourist (C-T) with a Commercial/Visitor-Serving Overlay, is located to the east of I-5.
- South: Areas to the south of the project site include commercial (restaurant) uses (In-N-Out, Draft Republic, and Toast) zoned C-T with a Commercial/Visitor-Serving Overlay.
- West: Avenida Encinas bounds the project site to the west with light industrial and commercial uses (CosmoProf, Perfectfitusa Kettlebell Training, MassageX, Skin Fitness Etc., Hardbody Personal Training, Milton's Craft Bakers, among others), zoned P-M with a Commercial/Visitor-Serving Overlay, located west of Avenida Encinas.

2.3 BACKGROUND AND HISTORY

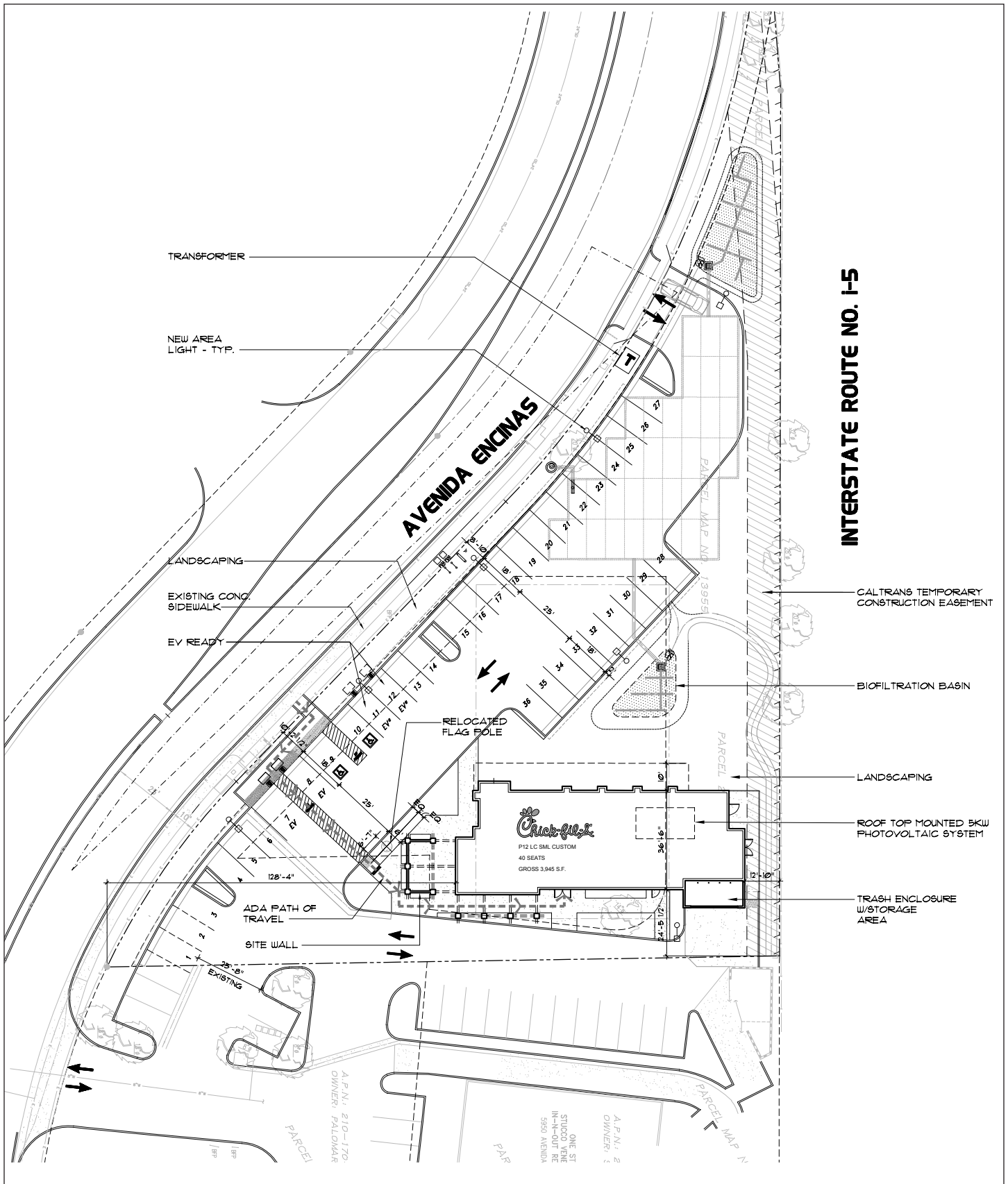
As discussed, the project site is currently developed with a commercial office building and surface parking lot. The project site and surrounding properties were undeveloped or used for agricultural purposes until 1972, when the current two-story office building and associated surface parking lot were constructed. Avenida Encinas and surrounding commercial uses were also developed at approximately the same time. Excluding minor tenant improvements and routine building repairs, the project site has remained relatively unchanged since construction. The existing on-site commercial office building is currently occupied with tenants.

2.4 PROJECT CHARACTERISTICS

The project proposes to demolish the two-story commercial office building and surface parking lot and construct a new Chick-fil-A restaurant. The Chick-fil-A restaurant would be a 3,945 square-foot (gross area), one-story building (up to 24 feet in height); refer to Exhibit 2-3, *Conceptual Site Plan*. The restaurant would have a traditional layout (52 total seats) with an indoor dining area (40 indoor seats), outdoor dining area (12 outdoor seats), kitchen area, and service area. The kitchen area includes a freezer, a cooler, stacked convention ovens, and preparation and finishing tables. The restaurant would also include office space for managerial purposes, a multi-purpose work area, an employee bike storage room, and men's and women's restrooms. The lighting at the project site would include building, signage, parking lot, and security lighting. In addition, the project would relocate the existing flagpole to the west of the proposed Chick-fil-A restaurant.

The proposed hours of operation would be 6:00 a.m. to 12:00 a.m. Monday through Saturday. The restaurant would be closed on Sundays. The proposed Chick-fil-A restaurant would result in approximately 60 to 80 full and/or part time employees; with a maximum of 10 to 15 employees on shift at any one time.

The Chick-fil-A restaurant would have a maximum height of 24 feet and would be designed with various architectural building elements, including burnished concrete, precast concrete, dark-bronze aluminum, three varieties of stucco paint (Grecian Ivory, Studio Taupe, and Grizzle Gray), and illuminated restaurant identification signage on the building's east, south, and west elevations; refer to Exhibit 2-4, *Proposed Building Elevations*.



Source: CRHO Architects, Sheet Number SP-1, Site Plan, July 11, 2019.

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CHICK-FIL-A I-5 & PALOMAR AIRPORT RD FSU
INITIAL STUDY

Conceptual Site Plan

Exhibit 2-3



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION



NORTH ELEVATION

Source: CRHO Architects, *Preliminary Elevations*, July 10, 2019.

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PROJECT SITE

CHICK-FIL-A I-5 & PALOMAR AIRPORT RD FSU
INITIAL STUDY

Proposed Building Elevations

Exhibit 2-4

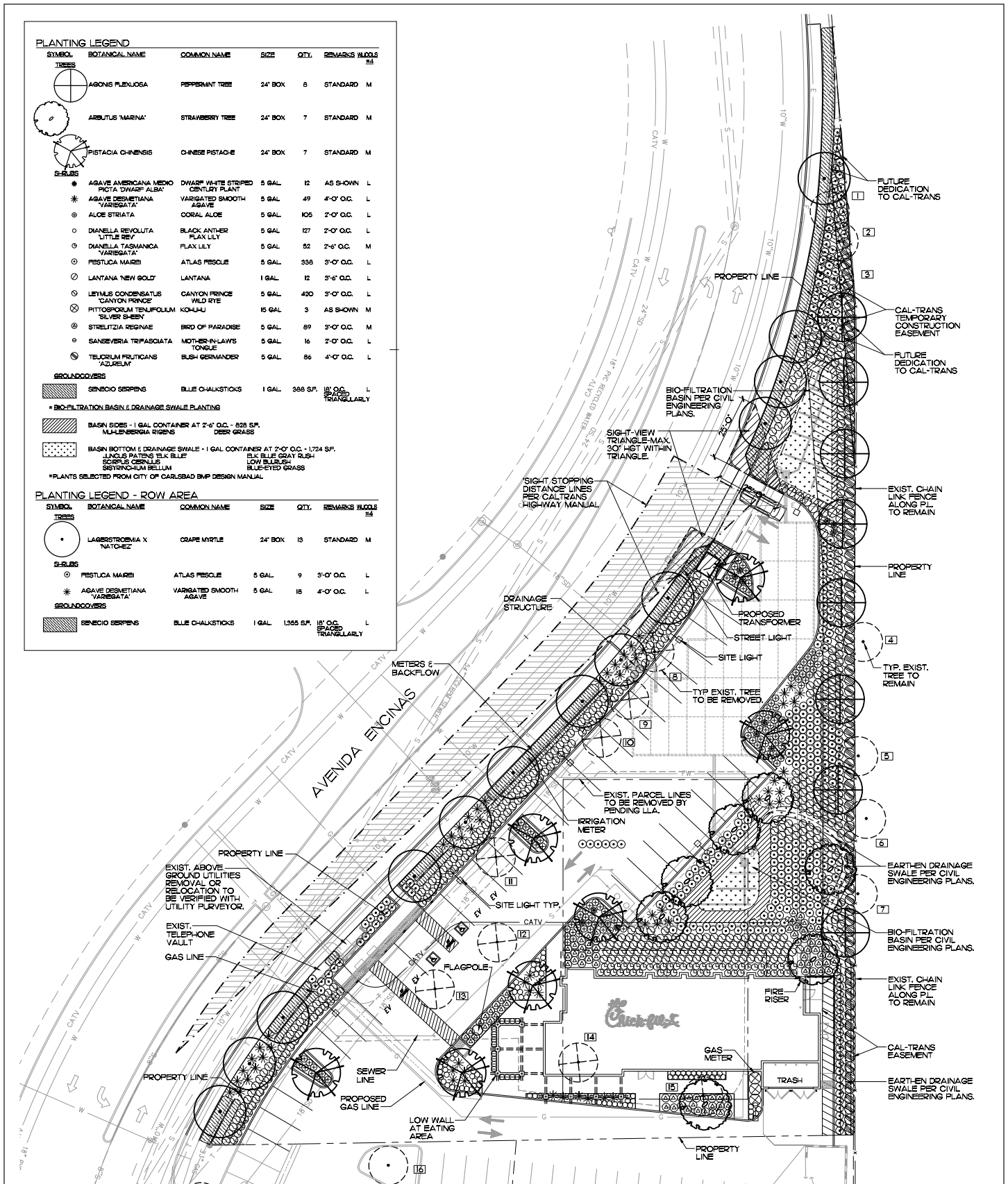
Truck deliveries would mostly occur between 11:00 p.m. and 6:00 a.m., Monday through Saturday. Truck deliveries would include one small truck two to three times a week for food (excluding produce and bread) and dry supplies, one small truck five times a week for bread deliveries, and one small truck three to five days a week for produce. In some cases, truck deliveries may need to occur during the day; however, in these cases, Chick-fil-A would ensure that these deliveries do not occur during the afternoon or peak hours to avoid interference with restaurant operations.

Project ingress/egress would occur using the site's two existing driveways. The North Project Driveway provides right-in/right-out access to Avenida Encinas, while the south project driveway (the Main Project Driveway) provides full access to/from Avenida Encinas. The proposed project would install a new signal and a dedicated westbound left-turn lane at the Main Project Driveway. The project proposes to install "Keep Clear" pavement legend markings adjacent to the first internal curb-cut at this driveway to maintain access from Avenida Encinas to the primary drive-aisle along the proposed building's west side. Two-way on-site circulation is proposed on-site parallel to Avenida Encinas, between the North Project Driveway and Main Project Driveway. The project would provide 36 vehicle parking spaces (30 standard spaces, two designated electric vehicle spaces, two electric vehicle-ready spaces, and two handicap spaces).

Ornamental landscaping would be installed throughout the project site; refer to Exhibit 2-5, *Conceptual Landscape Plan*. Planting materials would include a mix of trees (such as peppermint tree, strawberry tree, Chinese pistache, and crape myrtle), shrubs, and grasses. The project would result in the removal of eight out of 20 existing on-site trees. Specifically, the project would remove six Mondell pine and two fern pine. However, tree removal activities would be more than offset through the project's proposed planting of 35 trees; refer to Exhibit 2-5.

The project would receive water services from Carlsbad Municipal Water District (CMWD) for domestic and irrigation purposes. Existing on-site laterals would be removed and new water service connections would be made from the project site to an existing 10-inch water main aligned within Avenida Encinas right-of-way. The proposed project's irrigation system would be designed to accommodate future recycled water services from CMWD. CMWD would also provide the project's sewer services. Sewer system connections would be made from the project site to an existing trunk sewer within Avenida Encinas right-of-way.

The existing on-site stormwater drainage system would be demolished and proposed on-site stormwater runoff would be collected and directed to two proposed on-site biofiltration basins (Basin No. 1 and Basin No. 2); refer to Exhibit 2-6, *Conceptual Drainage Plan*. Basin No. 1 would be installed at the northernmost corner of the project site within Drainage Management Area 1 [DMA-1]. Surface water from DMA-1 would be directed to a v-gutter which would convey collected runoff to the curb and gutter along the parking stalls following Avenida Encinas. The collected runoff would travel through this curb and gutter until reaching Basin No. 1, which is its final confluence point. Basin No. 2 would be located within the center of the project site, just north of the proposed building in a landscaped planter [DMA-2] and would collect runoff from the building roof and landscaped areas just east of the building. Surface water from DMA-2 would be directed through an earthen swale that discharges to the west within the project parking lot. A curb and gutter would collect runoff from this area to discharge through a curb opening and into Basin No. 2. Treated runoff would be discharged into the existing catch basin in Avenida Encinas.



Source: Hourian Associates, Inc., Sheet Number LI.O, Preliminary Landscape Plan, July 12, 2019.

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CHICK-FIL-A I-5 & PALOMAR AIRPORT RD FSU
INITIAL STUDY

Conceptual Landscape Plan

Exhibit 2-5

Both basins would direct collected runoff either through the underdrain as treated stormwater or through an overflow grated inlet for heavier storm events. Once runoff has entered the outlet pipe of each corresponding basin, the storm drain pipe system would direct stormwater to a proposed storm capture vault system before discharging into the existing storm drain in Avenida Encinas (similar to the existing condition). The existing storm drain in Avenida Encinas travels north for ultimate conveyance to the Agua Hedionda Lagoon.

PROJECT ENTITLEMENTS

As discussed, the project site is designated PI in the General Plan and is zoned P-M with a Commercial/Visitor-Serving Overlay. The project site is also located within the Mello II Segment of the LCP, which designated the project site as PI as well. To allow for the restaurant use and provide consistency with the surrounding land use designations, legislative actions are proposed. Specifically, a General Plan Amendment is proposed to change the land use designation from PI to Visitor Commercial (VC); a Zone Change is proposed to change the Zoning designation from P-M with a Commercial/Visitor-Serving Overlay to Commercial Tourist with a Qualified Development Overlay and a Commercial/Visitor-Serving Overlay (C-T-Q); and a Local Coastal Program Amendment is proposed to change the LCP land use designation from PI to VC. Additional discretionary permits required include a Site Development Plan 83-11 Amendment, Non-Residential Planned Development Permit, and a Coastal Development Permit.

2.5 PHASING AND CONSTRUCTION

Project construction is anticipated to occur in a single phase over six months beginning in summer 2022 and ending in winter 2023. Proposed activities include site demolition and clearing, grading, and construction. Proposed grading would include 2,360 cubic yards of cut, 20 cubic yards of fill, and approximately 2,290 cubic yards of soil export.

2.6 PERMITS AND APPROVALS

The City of Carlsbad is the Lead Agency for the project and has discretionary authority over the project proposal, which includes the following:

- Certification of the CEQA Clearance Document;
- General Plan Amendment (GPA2019-0001);
- Zone Change (ZC2019-0001);
- Local Coastal Program Amendment (LCPA2019-0002);
- Site Development Plan Amendment (AMEND2019-004);
- Non-residential Planned Development Permit (PUD2019-0003); and
- Coastal Development Permit (CDP2019-0007).

In addition, the following permits/approvals may be required of other agencies:

- California Coastal Commission
 - Local Coastal Program Amendment (LCPA2019-0002); and
- San Diego Regional Water Quality Control Board Municipal Separate Storm Sewer (MS4) Permit.

Initial Study

INITIAL STUDY

1. **PROJECT NAME:** Chick-fil-A
2. **PROJECT NO:** GPA2019-0001, ZC2019-0001, LCPA2019-0002, AMEND2019-0004, PUD2019-0003, CDP2019-0007 (DEV2018-0177)
3. **LEAD AGENCY:**
City of Carlsbad
Planning Division
1635 Faraday Avenue
Carlsbad, CA 92008
4. **PROJECT APPLICANT:**
Ms. Jennifer M. Daw
Design & Construction
Chick-fil-A, Inc.
15635 Alton Parkway, Suite 350
Irvine, CA 92618
5. **LEAD AGENCY CONTACT PERSON:** Shannon Harker, Associate Planner, (760) 602-4621
6. **PROJECT LOCATION:** The proposed Chick-fil-A (project) site involves an approximately 0.89-acre triangular-shaped parcel located at 5850 Avenida Encinas (Assessor's Parcel Numbers [APNs] 210-170-08-00 and -09-00); refer to [Exhibit 2-2, Site Vicinity](#). Regional access to the project site is provided via the San Diego Freeway (Interstate 5 [I-5]). Local access to the project site is provided via Palomar Airport Road and Avenida Encinas.
7. **GENERAL PLAN LAND USE DESIGNATION:** Based on the General Plan Land Use Map, the project site is designated Planned Industrial (PI).
8. **ZONING:** The project site is zoned Planned Industrial (P-M) with a Commercial/Visitor-Serving Overlay by the City of Carlsbad Zoning Map.
9. **PROJECT DESCRIPTION:** The proposed project would demolish an existing two-story commercial office building and surface parking lot and construct a new Chick-fil-A restaurant. The Chick-fil-A restaurant would be a 3,945 square-foot (gross area), one-story building (up to 24 feet in height) with 36 vehicle parking spaces, as well as landscaping and required utilities. Refer to [Section 2.0, Project Description](#).
10. **ENVIRONMENTAL SETTING/SURROUNDING LAND USES:** Refer to [Section 2.2, Environmental Setting](#).
11. **OTHER REQUIRED AGENCY APPROVALS** (e.g., permits, financing approval or participation agreements): Refer to [Section 2.6, Permits and Approvals](#).
12. **CALIFORNIA NATIVE AMERICAN TRIBES CONSULTATION.**
 - a. Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to public resources code section 21080.3.1?

☒ **Yes** ☐ **No**

- b. If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

☒ Yes ☐ No

On February 11, 2020, the city initiated the tribal consultation process for the purposes of Assembly Bill 52 (AB 52). Those tribes that have requested to be listed on the city's notification list for the purposes of AB 52 were notified in writing via U.S. Certified Mail. In addition, tribal consultation letters under Senate Bill 18 (SB 18) were sent out by the City of Carlsbad on August 11, 2019. Those tribes listed by the Native American Heritage Commission (NAHC) were notified pursuant to SB 18. As part of this process, the city provided notification to each of these listed tribes the opportunity to consult with the city regarding the proposed project. Consultation letters for the project were received from the Rincon Band of Luiseño Indians, dated August 14, 2019, the Viejas Band of Kumeyaay Indians, dated August 15, 2019, and the San Luis Rey Band of Mission Indians, dated March 5, 2020. On August 19, 2019, the Agua Caliente Band of Cahuilla Indians indicated that the project is not located within the tribe's Traditional Use area and declined consultation for the purposes of AB 52. On September 18, 2020, the Rincon Band of Luiseño Indians confirmed receipt of the draft mitigation measure proposed to be included in this Initial Study and indicated they had no additional comments at this time. The city consulted with the San Luis Rey Band of Mission Indians and a verbal agreement was reached on the proposed mitigation measure on January 7, 2021; refer to Section 4.18, Tribal Cultural Resources. As such, the city's SB 18 and AB 52 consultations are concluded.

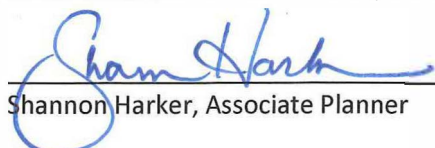
13. PREVIOUS ENVIRONMENTAL DOCUMENTATION: None.

14. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The summary of environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," or "Less Than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

15. PREPARATION: The Initial Study for the subject project was prepared by:

 4-14-21
Shannon Harker, Associate Planner Date

16. DETERMINATION: *(to be completed by Lead Agency)*

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described herein have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact(s)" on the environment, but at least one potentially significant impact 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 herein. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, nothing further is required.

17. ENVIRONMENTAL DETERMINATION: The initial study for this project has been reviewed and the environmental determination, indicated above, is hereby approved.



Don Neu, City Planner

4/15/2021

Date

18. APPLICANT CONCURRENCE WITH MITIGATION MEASURES: This is to certify that I have reviewed the mitigation measures in the Initial Study and concur with the addition of these measures to the project.



4/13/2021

Signature

Date

Jennifer M. Daw

Print Name

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.
9. Tribal consultation, if requested as provided in Public Resources Code Section 21080.3.1, must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Information provided through tribal consultation may inform the lead agency's assessment as to whether tribal cultural resources are present, and the significance of any potential impacts to such resources. Prior to beginning consultation, lead agencies may request information from the Native American Heritage Commission regarding its Sacred Lands File, per Public Resources Code sections 5097.9 and 5097.94, as well as the California Historical Resources Information System administered by the California Office of Historic Preservation.

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4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study/Environmental Checklist. Explanations are provided for each item.

4.1 AESTHETICS Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light and glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

No Impact. According to the General Plan EIR, scenic vistas in Carlsbad consist of the scenic corridors and views to and from the coastline, open space, and hillsides. Vistas of the ocean can be seen from much of Carlsbad Boulevard, particularly along its central and southern portions. Although the project is located within the Coastal Zone, views to the Pacific Ocean are obstructed by intervening structures and existing topography. As a result, the project site does not afford views of city-designated scenic vistas. Further, there are no specifically identified designated scenic corridors located near the project site. The project site is not located within a Scenic Preservation Overlay Zone as identified by the Zoning Code and would not obstruct visual access of the Carlsbad coastline (LCP Policy 7-13, Visual Access). Project implementation would not result in any view blockage of scenic resources and no impacts to scenic vistas would result.

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

No Impact. According to the General Plan EIR, there are no designated or eligible State scenic highways located in the City of Carlsbad. Thus, no impact would result in this regard.

- c. *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

No Impact. As discussed in Section 2.4, *Project Characteristics*, the project site is located in an urbanized area and is currently developed with a two-story commercial (office) building and surface parking. Surrounding land uses include transportation, light industrial, and commercial uses; refer to Exhibit 4.1-1, *Existing Conditions Photographs*.

The project site is zoned Planned Industrial (P-M) with a Commercial/Visitor-Serving Overlay. The project site is also located within the Mello II Segment of the LCP. To provide consistency with the Zoning designation of the adjacent land uses, a Zone Change and Local Coastal Program Amendment are proposed to change the designation from P-M to C-T-Q. Refer to Section 4.11 for a discussion concerning the project's consistency with other applicable zoning requirements.

As noted, the project site is located within the Mello II Segment of the LCP. The LCP includes policies applicable to the Mello II Segment intended to protect scenic and visual resources. The proposed project is not adjacent to the shoreline and, therefore, would not conflict with any of the LCP policies relating to public or visual access to the coastline.

The proposed project would be consistent with applicable Carlsbad Municipal Code and LCP requirements that may govern scenic quality. It is further noted that the project would not involve removal of street trees; thus, the project would be in compliance with Carlsbad Municipal Code Chapter 11.12, *Trees and Shrubs*. With adherence to Carlsbad Municipal Code and applicable LCP policies, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. As such, no impacts would result in this regard.

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

Less Than Significant Impact. A potentially significant impact would occur if a new source of substantial light or glare causes an adverse effect on day or nighttime views. Light impacts are typically associated with the use of artificial light during the evening and nighttime hours. Glare may be a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass and reflective cladding materials, and may interfere with the safe operation of a motor vehicle on adjacent streets. Daytime glare generation is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprising



View of existing on-site commercial (office) building.



Avenida Encinas and commercial uses associated with the Pacific Point Business Center to the west of the project site.



Avenida Encinas and commercial uses associated with the Pacific View Plaza to the southwest of the project site.



Commercial uses (In-N-Out) to the south of the project site.



View of transportation uses (Interstate 5 [I-5]) to the east of the project site.



View of the eastern portion of the project site.

highly reflective glass or mirror-like materials. Nighttime glare is primarily associated with bright point source lighting that contrasts with existing low ambient light conditions.

Project Construction

Project construction could involve temporary glare impacts as a result of construction equipment and materials. However, based on the project's limited scope of activities, these sources of glare would not be substantial. Pursuant to Carlsbad Municipal Code Section 8.48.010, *Construction Hours Limitations*, no construction activities would occur after 6:00 p.m. on any day, before 7:00 a.m. Monday through Friday, and before 8:00 a.m. on Saturday. Construction would be prohibited on Sundays and all Federal holidays. Thus, as no construction activities would be permitted after 6:00 p.m. on any day, short-term construction related impacts to nighttime lighting would be less than significant.

Project Operations

The project site is located within a commercial area and currently consists of a two-story commercial office building and surface parking; refer to [Exhibit 4.1-1](#). Currently, lighting at the project site includes building, parking lot, and security lighting. Street lighting is also present along Avenida Encinas. Lighting in the surrounding area includes interior lighting and exterior lighting associated with surrounding light industrial and commercial uses, as well as vehicle headlights associated with I-5.

The proposed project would increase nighttime lighting at the project site compared to existing conditions, as the existing commercial office building typically operates during standard business hours (8:00 a.m. to 5:00 p.m. Monday through Friday) and the proposed Chick-fil-A would operate between 6:00 a.m. and 12:00 a.m. Monday through Saturday. However, the proposed lighting would be consistent with surrounding commercial restaurant uses. Further, no sensitive uses are located within the project vicinity. As such, increases in nighttime lighting would be nominal compared to the existing surrounding environment and impacts in this regard would be less than significant.

A 5-kilowatt photovoltaic array would be installed on the eastern portion of the building roof. However, glare from photovoltaic arrays would be minimal, as these systems absorb light rather than reflect it. Therefore, potential increased glare impacts resulting from the photovoltaic array would not result in significant glare impacts.

4.2 AGRICULTURAL AND FORESTRY RESOURCES <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

No Impact. According to the California Department of Conservation's California Important Farmland Finder, the project site is made up of urban and built-up land.¹ Further, the project site is designated Planned Industrial (PI) in the General Plan and zoned Planned Industrial (P-M) with a

¹ California Department of Conservation, *California Important Farmland Finder*, <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed July 22, 2019.

Commercial/Visitor-Serving Overlay. The proposed project would demolish an existing two-story commercial office building and surface parking lot to construct a new Chick-fil-A restaurant. Thus, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur in this regard.

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

No Impact. As stated in Response 4.2(a), the project site is zoned P-M with a Commercial/Visitor-Serving Overlay. The existing zoning does not include any agricultural-related zoning designations, nor is the site part of a Williamson Act contract. Additionally, the land uses surrounding the project site are not zoned for agricultural uses or in a Williamson Act contract. Therefore, project implementation would not conflict with existing zoning for agricultural use, or a Williamson Act contract and no impact would occur in this regard.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The project site is not occupied by or used for forest land or timberland purposes and is not zoned Timberland Production. Further, project implementation would not result in the rezoning of forest land, timberland, or timberland zoned Timberland Production. Therefore, no impact to forest land or timberland would occur as a result of the proposed project.

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

No Impact. The project site is not occupied by or used for forest land. Therefore, no impact to forest land would occur as a result of the proposed project.

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

No Impact. Refer to Responses 4.2(a) through 4.2(d). As the project site occurs within an urban and built-up area, implementation of the proposed project would not result in the conversion of designated farmland or forest land to non-agricultural/non-forest land use and no impacts would occur in this regard.

4.3 AIR QUALITY <i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The information presented in this analysis has been supplemented with the *Chick-fil-A – I-5 & Palomar Airport Road Air Quality Assessment* prepared for the proposed project by Scientific Resources Associated, dated May 14, 2020; refer to [Appendix A, Air Quality Assessment](#).

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

Less Than Significant Impact. Air quality plans describe air pollution control strategies to be implemented by a city, county or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS) into compliance pursuant to the Clean Air Act and California Clean Air Act. NAAQS and CAAQS have been established for the following criteria pollutants: ozone (O₃), carbon monoxide (CO), sulfur dioxide, nitrogen dioxide (NO_x), particulate matter less than 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), and lead.

The proposed project is located within the San Diego Air Basin (Basin), which is governed by the San Diego Air Pollution Control District (APCD). The San Diego APCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing air quality plans for the Basin, specifically the State Implementation Plan (SIP) and the San Diego County Regional Air Quality Strategy (RAQS). The SIP and RAQS rely on information from the California Air Resources Board (CARB) and SANDAG, including mobile, area source emissions, and projected growth.^{1,2}

If a project proposes development that is greater than that anticipated in the General Plan, the project might be in conflict with the RAQS. The project site is designated Planned Industrial (PI) and zoned Planned Industrial (P-M) with a Commercial/Visitor-Serving Overlay. The project proposes to change

¹ California Air Resources Board, *2018 Updates to the California State Implementation Plan*, October 25, 2018.

² San Diego Air Pollution Control District, *2016 Revision of Regional Air Quality Strategy for San Diego County*, December 2016.

the General Plan land use designation to Visitor Commercial (VC) and rezone the site to Commercial Tourist with a Qualified Development Overlay and a Commercial/Visitor-Serving Overlay (C-T-Q).

To determine if the project would conflict or obstruct the RAQS, project emissions are evaluated based on the quantitative emission thresholds established by the San Diego APCD. As part of its air quality permitting process, the San Diego APCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIA). Table 4.3-1, San Diego Air Pollution Control District Air Quality Significance Thresholds lists the thresholds established by the San Diego APCD.

Table 4.3-1
San Diego Air Pollution Control District Air Quality Significance Thresholds

Pollutant	Construction Emissions (pounds per day)	Operational Emissions (pounds per day)
Particulate Matter (PM ₁₀)	150	150
Fine Particulate Matter (PM _{2.5})	55	55
Carbon Monoxide (CO)	550	550
Nitrogen Dioxide (NO ₂)	100	55
Sulfur Dioxide (SO ₂)	150	150
Lead and Lead Compounds	Not Applicable	3
Volatile Organic Compounds (VOC)	75*	55*

Notes:

* VOC threshold is based on the threshold of significance for VOCs from the South Coast Air Quality Management District as stated in the San Diego Guidelines for Determining Significance.

Source: Refer to Appendix A, *Air Quality Assessment*.

As detailed in Response 4.3(b), project-generated air quality emissions do not exceed San Diego APCD's significance thresholds; refer to Table 4.3-3, Short-Term Construction Emissions, and 4.3-4, Long-Term Operational Emissions, below. Therefore, the project would not conflict or obstruct implementation of the RAQS or SIP and impacts would be less than significant.

b. 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?

Less Than Significant Impact. Air pollutant emissions associated with construction of the proposed project would be generated from the exhausts of construction equipment, soil hauling trucks, delivery trucks, and worker vehicles. Particulate matter emissions would result from soil movement and wind-blown dust from disturbed surfaces, and organic pollutant emissions would result from painting. Operational emissions would be released from the exhausts of on-road vehicles and from stationary sources, including water, natural gas, and electricity consumption.

Criteria Pollutants

Ozone (O₃). O₃ occurs in two layers of the atmosphere. The layer surrounding the Earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric layer (the "good" O₃ layer) extends upward from about 10 to 30 miles and protects life on Earth from the sun's harmful ultraviolet rays. "Bad" O₃ is a

photochemical pollutant and needs volatile organic compounds (VOCs), NO_x, and sunlight to form; therefore, VOCs and NO_x are O₃ precursors. To reduce O₃ concentrations, it is necessary to control the emissions of these O₃ precursors. Significant O₃ formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O₃ concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O₃ in the upper atmosphere (stratosphere) protects the Earth from harmful ultraviolet radiation, high concentrations of ground-level O₃ (in the troposphere) can adversely affect the human respiratory system and other tissues. O₃ is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O₃. Short-term exposure (lasting for a few hours) to O₃ at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O₃ to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant. The terms VOC and ROG (see below) are often used interchangeably.

Reactive Organic Gases (ROG). Similar to VOCs, ROG are also precursors in forming O₃ and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROG are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant.

Coarse Particulate Matter (PM₁₀). PM₁₀ refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM₁₀ arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM₁₀ scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, CARB adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter (PM_{2.5}). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal PM_{2.5} standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the U.S. Environmental Protection Agency (EPA) announced new PM_{2.5} standards. Industry groups challenged the new standard in court

and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards. On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal PM_{2.5} standards. On June 20, 2002, CARB adopted amendments for Statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the Statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions.

CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of carbon monoxide.

Nitrogen Dioxide (NO₂). NO_x are a family of highly reactive gases that are a primary precursor to the formation of ground-level O₃ and react in the atmosphere to form acid rain. NO₂ (often used interchangeably with NO_x) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO₂ occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO₂ can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO₂ concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO₂ may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Sulfur Dioxide (SO₂). SO₂ is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with SO_x and lead. Exposure of a few minutes to low levels of SO₂ can result in airway constriction in some asthmatics.

Table 4.3-2, San Diego Air Pollution Control District Attainment Status, lists the attainment status for criteria pollutants in the Basin. As shown in Table 4.3-2, the Basin is in nonattainment for O₃, PM₁₀, and PM_{2.5}.

Table 4.3-2
San Diego Air Pollution Control District Attainment Status

Pollutant	California Attainment Status	Federal Attainment Status
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Nonattainment	Attainment ¹
Particulate Matter (PM ₁₀)	Nonattainment	Unclassifiable ²
Fine Particulate Matter (PM _{2.5})	Nonattainment	Attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO ₂)	Attainment	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment

Notes:

1. The Federal 1-hour standard of 12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plan.
2. At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Source: San Diego Air Pollution Control District, *Attainment Status*, www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html, accessed July 30, 2019.

Short-Term Construction Impacts

Short-term air quality emissions are anticipated during project-related construction activities. Temporary air emissions would result from the following activities:

- Earth-moving activities (producing particulate [fugitive dust] emissions); and
- Grading/construction equipment and the motor vehicles of construction crews (producing exhaust emissions).

Construction activities are anticipated to occur for a six-month period and would consist of demolition, grading, paving, building construction, and architectural coating. Proposed grading activities during construction would consist of approximately 2,360 cubic yards of cut and 20 cubic yards of fill, with approximately 2,290 cubic yards of export. Grading activities would be short-term and would cease following the completion of the construction activities. Mobile source emissions would result from the use of construction equipment such as excavators, graders, dozers, scrapers, tractors, loaders, and backhoes. The assessment of construction air quality impacts considers each of these potential sources.

Construction emissions were estimated using the California Emissions Estimator Model version 2016.3.2 (CalEEMod) based on the construction information compiled for the project. Results of the construction emission modeling are shown in [Table 4.3-3, *Short-Term Construction Emissions*](#). Emitted pollutants would include ROG, CO, NO_x, SO_x, PM₁₀, and PM_{2.5}. The largest amount of CO and NO_x emissions would occur during the earthwork phase. PM₁₀ and PM_{2.5} emissions would occur from fugitive dust (due to earthwork and excavation) and from construction equipment exhaust. The

majority of PM₁₀ and PM_{2.5} emissions would be generated by fugitive dust from demolition and grading activities. Exhaust emissions from grading and construction activities include emissions from the transport of machinery and supplies to and from the project site and emissions produced on-site as the equipment is used.

As depicted in Table 4.3-3, construction-related emissions would not exceed the established significance thresholds for criteria pollutants.

Table 4.3-3
Short-Term Construction Emissions

Emissions Source	Pollutant (pounds/day) ^{1,2}					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Demolition						
Fugitive Dust	-	-	-	-	0.36	0.05
Off-Road Diesel	0.80	7.25	7.57	0.01	0.41	0.39
On-Road Diesel	0.03	1.07	0.26	0.003	0.08	0.02
Worker Travel	0.03	0.02	0.27	0.0008	0.08	0.02
TOTAL	0.86	8.34	8.10	0.01	0.93	0.48
<i>Significance Thresholds</i>	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Grading						
Fugitive Dust	-	-	-	-	0.31	0.16
Off-Road Diesel	0.80	7.25	7.57	0.01	0.41	0.39
On-Road Diesel	0.07	2.29	0.56	0.01	0.16	0.05
Worker Travel	0.03	0.02	0.27	0.0008	0.08	0.02
TOTAL	0.90	9.56	8.40	0.02	0.96	0.52
<i>Significance Thresholds</i>	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Building Construction						
Off-Road Diesel	0.78	7.99	7.26	0.01	0.45	0.41
On-Road Diesel	0.01	0.31	0.08	0.0008	0.02	0.006
Worker Travel	0.003	0.002	0.03	0.0001	0.008	0.002
TOTAL	0.79	8.30	7.34	0.01	0.47	0.42
<i>Significance Thresholds</i>	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Paving						
Asphalt Offgassing	0.02	-	-	-	-	-
Off-Road Diesel	0.72	6.72	7.09	0.01	0.35	0.33
Worker Travel	0.06	0.04	0.48	0.001	0.15	0.04
TOTAL	0.80	6.76	7.57	0.01	0.50	0.37

Emissions Source	Pollutant (pounds/day) ^{1,2}					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
<i>Significance Thresholds</i>	75	100	550	150	150	55
<i>Threshold Exceeded?</i>	No	No	No	No	No	No
Architectural Coatings						
Architectural Coatings Offgassing	1.30	-	-	-	-	-
Architectural Coatings Off-Road Diesel	0.22	1.53	1.82	0.003	0.09	0.09
Worker Travel	0.003	0.002	0.03	0.0001	0.008	0.002
TOTAL	1.52	1.53	1.85	0.003	0.10	0.09
<i>Significance Thresholds</i>	75	100	550	150	150	55
<i>Threshold Exceeded?</i>	No	No	No	No	No	No
Maximum Simultaneous Construction Emissions						
Maximum Simultaneous Construction Emissions	3.13	16.59	16.94	0.03	1.13	0.90
<i>Significance Thresholds</i>	75	100	550	150	150	55
<i>Threshold Exceeded?</i>	No	No	No	No	No	No

Notes:

1. Emissions were calculated using California Emissions Estimator Model version 2016.3.2 (CalEEMod).
2. Refer to Appendix A, *Air Quality Assessment*, for assumptions used in this analysis.

Source: Refer to [Appendix A, Air Quality Assessment](#).

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by CARB in 1986. Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released into the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the California Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, dated August 2000, serpentinite and ultramafic rocks are not known to occur within the project area.³ Thus, there would be no impact regarding naturally occurring asbestos.

³ California Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, August 2000.

Long-Term Operational Emissions

The following is an analysis of the project's long-term operational emissions.

Mobile Source Emissions

Mobile source emissions include emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_x, SO_x, PM₁₀, and PM_{2.5} are all pollutants of regional concern (NO_x and ROG react with sunlight to form O₃ [photochemical smog], and wind currents readily transport SO_x, PM₁₀, and PM_{2.5}). However, CO tends to be a localized pollutant, dispersing rapidly at the source. Table 4.3-4, Long-Term Operational Emissions, presents the project's anticipated operational emissions.

Table 4.3-4
Long-Term Operational Emissions

Emissions Source	Pollutant (pounds/day) ^{1, 2}					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer						
Mobile Emissions	2.88	10.17	21.50	0.06	4.95	1.36
Area Source Emissions	0.08	0.00	0.00	0.00	0.00	0.00
Energy Use Emissions	0.02	0.16	0.13	0.00	0.01	0.01
Total Emissions	2.98	10.33	21.63	0.06	4.96	1.37
<i>Significance Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No
Winter						
Mobile Emissions	2.78	10.24	22.79	0.06	4.95	1.36
Area Source Emissions	0.08	0.00	0.00	0.00	0.00	0.00
Energy Use Emissions	0.02	0.16	0.13	0.00	0.01	0.01
Total Emissions	2.88	10.40	22.92	0.06	4.96	1.37
<i>Significance Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Notes:

1. Based on CalEEMod modeling results, worst-case seasonal emissions for area and mobile emissions have been modeled.
2. Refer to Appendix A, Air Quality Assessment for assumptions used in this analysis.

Source: Refer to Appendix A, Air Quality Assessment.

Mobile Emissions

As shown in Table 4.3-4, emissions generated by vehicle traffic associated with the proposed project would not exceed established significance thresholds. Impacts from mobile source air emissions would be less than significant and would not require mitigation.

Area Source Emissions

Area source emissions would be generated from consumer products, architectural coatings, and landscaping. As shown in Table 4.3-4, area source emissions from the proposed project would not exceed significance thresholds for ROG, NO_x, CO, SO_x, PM₁₀, or PM_{2.5}.

Energy Use Emissions

Energy use emissions would be generated as a result of electricity and natural gas (non-hearth) usage associated with the proposed project. The primary use of electricity and natural gas by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. As shown in Table 4.3-4, energy source emissions from the proposed project would not exceed significance thresholds for ROG, NO_x, CO, SO_x, PM₁₀, or PM_{2.5}.

Total Operational Emissions

As indicated in Table 4.3-4, total operational emissions from the proposed project would not exceed significance thresholds. Thus, operational air quality impacts would be less than significant.

Air Quality Health Impacts⁴

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals [e.g., age, gender]). In particular, O₃ precursors (volatile organic compounds [VOCs] and nitrous oxide [NO_x]) affect air quality on a regional scale. Health effects related to O₃ are therefore the product of emissions generated by numerous sources throughout a region. Existing models such as AERMOD, CALINE3, and CALPUFF have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

CEQA allows Lead Agencies to rely on standards and guidance promulgated by other agencies. As such, this analysis utilizes guidance developed by the South Coast Air Quality Management District (SCAQMD) as an expert agency regarding air quality and its health effects. The SCAQMD noted in its *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and [Proposed] Brief of Amicus Curiae* (SCAQMD Amicus Brief, 2015) for the Supreme Court of California decision for *Sierra Club vs. County of Fresno (Friant Ranch L.P.)*, that it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Furthermore, as noted by the San Joaquin Valley Air Pollution Control District (SJVAPCD) in the *Application for Leave to File Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party of Interest and Respondent, Friant Ranch, L.P.* (April 13, 2015), currently available modeling tools are not

⁴ In accordance with the California Supreme Court decision for *Sierra Club v. County of Fresno* (S219783), December 24, 2018, this discussion has been included to disclose the potential human health impacts from the project's air emissions.

equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

Additionally, the SCAQMD acknowledges that health effects quantification from O₃, as an example, is correlated with the increases in ambient level of O₃ in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae goes on to state that it would take a large amount of additional emissions to cause a modeled increase in ambient O₃ levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO_x and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O₃ levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O₃-related health impacts caused by NO_x or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the project would not exceed San Diego APCD's thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts.

Cumulative Impacts

If emissions exceed the thresholds shown in Tables 4.3-3 and 4.3-4 for nonattainment pollutants (O₃, with O₃ precursors NO_x and VOCs, PM₁₀, and PM_{2.5}), the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality. However, as shown in Tables 4.3-3 and 4.3-4, project emissions would not exceed the significance thresholds and therefore would not result in a cumulatively significant increase of any nonattainment criteria pollutant. Impacts would be less than significant.

c. *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses.⁵ Examples of these sensitive receptors are residences, schools, hospitals, daycare centers, and places of worship. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The closest sensitive receptors to the project site are residences located approximately 1,500 feet to the northwest. Project construction may include emissions of pollutants identified by the State and Federal government as toxic air contaminants (TACs) or Hazardous Air Pollutants (HAPs). San Diego APCD Regulation XII establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1210, emissions of TACs that result in a cancer risk of 10 in 1 million or less and a health hazard index of one or less would not be required to notify the public of potential health risks. As evaluated above, the project's construction and long-term operational emissions would not exceed the most stringent applicable Federal or State ambient air quality standards for CO, NO_x, PM₁₀, or PM_{2.5} emissions, which were developed to represent levels

⁵ Per the definition in the SCAQMD *Final Localized Significance Threshold Methodology*, revised July 2008, and various SCAQMD Rules (such as Rule 1470, paragraph [b][60]). The San Diego APCD defers to the SCAQMD's definition.

at which the most susceptible persons (children and the elderly) are protected from health effects. As such, impacts would be less than significant in this regard.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (e.g., adversely affecting residents, school children, hospital patients, and the elderly).

The Basin is designated as an attainment area for the Federal and State CO standards. There has been a decline in CO emissions even though vehicle miles traveled (VMT) on U.S. urban and rural roads have increased; estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions.⁶ Three major control programs have contributed to the reduced per-vehicle CO emissions, including exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

According to the SCAQMD *CEQA Air Quality Handbook*, a potential CO hotspot may occur at any location where the background CO concentration already exceeds 9.0 parts per million (ppm), which is the 8-hour California ambient air quality standard. The closest CO monitoring station to the project site is the San Diego – Rancho Carmel Drive station, which is located approximately 17 miles southeast of the project site. The CO concentration at San Diego – Rancho Carmel Drive station was measured at 4.1 ppm in 2019. Given that the background CO concentration does not currently exceed 9.0 ppm, a CO hotspot would not occur at the project site. Therefore, CO hotspot impacts would be less than significant in this regard.

d. Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. During construction, diesel equipment operating at the site may generate some nuisance odors, however due to the distance of sensitive receptors from the project site and the temporary nature of construction, odors associated with construction would not be significant.

According to the SCAQMD's *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any of these uses or odor sources. However, due to the nature of the proposed project (restaurant), there is the potential for uses within the immediate area to experience odors associated with restaurant operations. The project would be required to comply with San Diego APCD Rule 51 (Public Nuisance) which prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. Compliance with San Diego APCD Rule 51 would ensure potential restaurant-related odors during operation would not

⁶ U.S. Environmental Protection Agency, *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed September 3, 2020.

create objectionable odors affecting a substantial number of people. Impacts would be less than significant in this regard.

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

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. The project site is fully developed with a two-story office building, surface parking lot, and ornamental landscaping within a commercial center. Nearby uses include commercial restaurants within the same commercial center to the south and office buildings to the west of Avenida Encinas. Interstate 5 is adjacent to the eastern project boundary. Overall, the project area is developed and urbanized. Additionally, according to General Plan EIR Figure 3.3-1, *Proposed General Plan HMP Preserve Areas*, the project site is not identified as a preserve area. Based on the site's urban condition and its location outside of a designated preserve area, no endangered, rare, threatened, or special status plant species (or associated habitats) or wildlife species designated by the U.S. Fish and Wildlife

Service, California Department of Fish and Wildlife (CDFW), or California Native Plant Society have potential to occur on-site. As such, project implementation would not result in a substantial adverse effect, either directly or through habitat modifications, on any sensitive species. No impacts would result in this regard.

- b. 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 Services?***

No Impact. Refer to Response 4.4(a). The project site is entirely built out within a commercial center. There is no riparian habitat or other sensitive natural communities on-site. As such, project implementation would not impact riparian habitat or other sensitive natural community.

- c. Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

No Impact. According to the General Plan EIR, jurisdictional wetlands and waters occur within the city primarily in the vicinity of the Batiquitos, Agua Hedionda, and Buena Vista lagoons. Other wetland habitats occur along creeks and drainages, and vernal pools occur in several scattered locations throughout the city on marine terraces. The project site is not located near the city's lagoons, creeks, drainages, or vernal pools. No hydrology, soils, or vegetation occur on-site that could result in wetlands. Thus, there are no State or Federally protected wetlands present. Project implementation would not impact State or Federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site?***

Less Than Significant Impact With Mitigation Incorporated. No identified wildlife corridors or native wildlife nurseries occur within the boundaries of the project site. The site is entirely built out, located within a commercial center, and surrounded by urban uses on all sides. According to Exhibit 2-5, Conceptual Landscape Plan, there are 20 existing ornamental trees on-site. Of the 20 existing trees, eight would be removed, and in their place, 35 trees would be planted. The trees proposed for removal could provide nesting opportunities for birds. The Migratory Bird Treaty Act (MBTA) governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. To reduce potential impacts to nesting birds, Mitigation Measure BIO-1 requires a pre-construction nesting bird clearance survey to determine the presence/absence, location, and status of any active nests on or adjacent to the project site. If the nesting bird clearance survey indicates the presence of nesting birds, Mitigation Measure BIO-1 requires buffers to ensure that any nesting birds are protected pursuant to the MBTA. With implementation of Mitigation Measure BIO-1, the project's potential construction-related impacts to migratory birds would be reduced to a less than significant level.

Mitigation Measures:

BIO-1 In the event that vegetation and tree removal should occur between January 15 and September 15, the project applicant shall retain a qualified biologist to conduct a nesting bird survey no more than three days prior to commencement of construction activities. The biologist conducting the clearance survey shall document the negative results if no active bird nests are observed on the project site or within the vicinity during the clearance survey with a brief letter report, submitted to the City of Carlsbad Planning Division prior to construction, indicating that no impacts to active bird nests would occur before construction can proceed. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a 300-foot buffer around the active nest. For listed and raptor species, this buffer shall be 500 feet. A biological monitor shall be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by construction activity. Prior to the commencement of construction activities and the issuance of any permits, results of the pre-construction survey and any subsequent monitoring shall be provided to the City of Carlsbad Planning Division.

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

No Impact. There is no wildlife habitat, sensitive animal, or sensitive plant species on-site. As discussed above, eight existing ornamental trees on-site would be removed as part of the project. However, the city does not have a tree preservation policy or ordinance. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and no impact would occur. Refer to Response 4.4(f) regarding the project's consistency with the *Habitat Management Plan for Natural Communities in the City of Carlsbad*.

f. Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. According to the CDFW's *California Natural Community Conservation Plan Map*¹, the proposed project is located within the *San Diego Multiple Habitat Conservation Program* (MHCP) and the Carlsbad subarea. The MHCP was adopted and certified by the San Diego Association of Governments in March 2003 with the intent that each participating North San Diego County jurisdiction will implement their respective portions of the MHCP through citywide subarea plans. As such, the city prepared the *Habitat Management Plan for Natural Communities in the City of Carlsbad* (Carlsbad HMP), which was adopted in November 2004. The Carlsbad HMP outlines specific conservation, management, facility siting, land use, and other measures that the city plans to take in order to preserve the diversity of habitat and protect sensitive biological resources while also allowing for future development and growth as anticipated under the General Plan. As shown on General Plan EIR Figure 3.3-1, *Proposed General Plan HMP Preserve Areas*, the project site and surrounding areas are not located within any HMP preserve area. Additionally, the project site is not identified as part of an HMP core, linkage, or special resource area; refer to Carlsbad HMP Figure 4, *Focus Planning*

¹ California Department of Fish and Wildlife, *California Regional Conservation Plans*, October 2017, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>, accessed July 19, 2019.

*Areas.*² Therefore, the project would not be subject to habitat in-lieu fee mitigation and project development would not conflict with the MHCP or Carlsbad HMP.

No other approved local, regional, or State habitat conservation plans apply to the project site. Thus, no impacts would occur in this regard.

² City of Carlsbad, *Habitat Management Plan for Natural Communities in the City of Carlsbad*, November 2004, <http://www.carlsbadca.gov/civicax/filebank/blobdload.aspx?BlobID=27193>, accessed July 19, 2019.

4.5 CULTURAL RESOURCES <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The information presented in this analysis has been supplemented with the *Cultural Resources Assessment for the Chick-fil-A and Palomar Airport Rd FSU Project, City of Carlsbad, California* (Cultural Resources Assessment) prepared for the proposed project by Rincon Consultants, Inc. (Rincon), dated August 22, 2019; refer to [Appendix B, Cultural Resources Assessment](#).

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. As part of the Cultural Resources Assessment, a records search of the California Historical Resources Information System (CHRIS) at the South Coastal Information Center (SCIC) located at San Diego State University was conducted on July 31, 2019. The search was conducted to identify previously recorded cultural resources and previously conducted cultural resources studies within a 0.5-mile radius of the project site. The CHRIS search included a review of the National Register of Historic Places, California Register of Historic Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, and the Archaeological Determinations of Eligibility list.

The SCIC records search identified 35 previously conducted cultural resources studies within a 0.5-mile radius of the project site. A portion of 10 of these studies overlap with the project site. The records search also identified six previously recorded cultural resources within a 0.5-mile radius of the project site; however, none of these cultural resources are located within the project site. All of the known resources date to the prehistoric period and include two shell and lithic scatters, one midden, and three prehistoric isolated artifacts. However, none of the previously recorded resources are located within or adjacent to the project site. As such, the site contains no known prehistoric or historic below-grade cultural resources that are significant under CEQA

Literature and background research were also conducted for the proposed project. Research efforts included a review of historic maps and aerial photographs available online at NETR. On August 2, 2019, a field survey was conducted on the project site. The field survey consisted of a visual inspection of all built environment features on the property, including the existing commercial (office) building, as well as areas of exposed ground surface.

As a result of the records search, literature and background research, and field survey, one built environment property over 45 years of age was identified within the project area: the existing commercial (office) building. According to the Office of Historic Preservation Guidelines, all buildings constructed over 45 years ago and that possess historical significance may be considered potential historic resources. According to Public Resources Code Section 5024.1(c)(1–4), a resource is considered historically significant if it: 1) retains substantial integrity, and 2) meets at least one of the following California Register criteria.

- Criterion 1: The resource is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- Criterion 2: The resource is associated with the lives of persons important in our past.
- Criterion 3: The resource embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values.
- Criterion 4: The resource has yielded or may be likely to yield information important in prehistory or history.

The building was recorded on California Department of Parks and Recreation 523 series forms and evaluated for listing in the CRHR and for inclusion in the City of Carlsbad historic resources inventory based on the abovementioned criteria. The Cultural Resources Assessment details the existing commercial (office) building’s architectural description and property history; refer to [Appendix B](#). The existing commercial (office) building was found to be ineligible for the CRHR or local designation. The Cultural Resources Assessment determined the building was not important in any historical context identified in the Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines, or in the context of any other event significant in the history of the City, region, State, or nation (Criterion 1). Although the property was once owned by significant San Diego County-based horticulturists (the family of Paul and Magdalena Ecke), it is not associated with their poinsettia growing operations or with any other activities from which the Eckes’ significance might derive. As a result, it is recommended ineligible under Criterion 2. Architecturally, the existing building is an ordinary commercial office building with Spanish-inspired elements. It does not embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, or possess high artistic values (Criterion 3). There is no evidence indicating the existing building may yield important information about prehistory or history (Criterion 4). The project site is also not a contributor to any existing or potential historic district or any other geographically definable area with a concentration of buildings, structures, improvements, or objects in which the collective value of the improvements may be greater than the value of each individual improvement. As such, the existing building is not a historical resource under CEQA, and development of the proposed project would not result in impacts to historic resources.

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

Less Than Significant Impact With Mitigation Incorporated. As discussed in Response 4.5(a), a records search of the CHRIS was conducted at the SCIC on July 31, 2019. The search was conducted to identify previously recorded cultural resources and previously conducted cultural resources studies within a 0.5-mile radius of the project site. A portion of 10 previously conducted studies overlap with

the project site; however, no previously recorded cultural resources are located on or adjacent to the project site. In addition, a pedestrian field survey of the project site was conducted on August 2, 2019. Results of this survey indicate the property is entirely developed with a building, pavement, and landscaping. No archaeological resources were identified during the background research or pedestrian field survey.

Although no prehistoric or historic period archaeological resources were documented on the project site as part of the Cultural Resources Assessment, a number of prehistoric archaeological resources have been identified in the project vicinity. Due to the level of past disturbance on-site, the potential for uncover of intact subsurface archaeological deposits during construction is considered low. Notwithstanding, given the sensitivity of the area, the project would be required to comply with Mitigation Measure CUL-1, which would require a qualified archaeologist monitor to be present during the construction phases of the project. In the event that archaeological resources are encountered during grading activities, work in the immediate area of the find is halted until the archaeologist would be required to evaluate the find. Mitigation Measure CUL-1 would also ensure the treatment of cultural resources is in compliance with the *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines*, which were prepared in September 2017 to establish standards of performance for resource investigation and present a systematic method of preserving identified resources. With compliance with Mitigation Measure CUL-1, impacts to potential archaeological resources would be reduced to less than significant levels. See also Section 4.18, Tribal Cultural Resources.

Mitigation Measures:

CUL-1 The project Applicant shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology, prior to the issuance of a grading permit. The project's Pre-Excavation Agreement (Mitigation Measure TCR-1) shall include the roles and powers of the archaeologist and the Luiseño Native American monitors (identified per Mitigation Measure TCR-1). The qualified archaeologist shall be present on-site during the construction phases that involve ground-disturbing activities. Ground-disturbing activities are defined as activities that may include, but are not limited to pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The qualified archaeologist shall complete daily monitoring logs that shall provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the qualified archaeologist deems appropriate, or when the ground-disturbing activities are completed. If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the qualified archaeologist shall evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation, Native American consultation, and archaeological monitoring may be warranted. The treatment of cultural resources discovered during ground-disturbing activities shall comply with the cultural

resources procedures identified in the *City of Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines* (September 2017).

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. No on-site conditions exist that suggest human remains are likely to be found on the project site. Due to the level of past disturbance on-site, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during construction activities. However, if human remains are found, those remains would require proper treatment, in accordance with applicable laws. California Public Resources Health and Safety Code Section 7050.5 through 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the most likely descendant. If human remains are found during excavation, excavation must stop near the find and any area that is reasonably suspected to overlay adjacent remains until the County coroner has been called out, the remains have been investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with existing State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts concerning disturbance of human remains would be less than significant.

4.6 ENERGY <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact.

Regulatory Setting

California Building Energy Efficiency Standards (Title 24)

In 1978, the California Energy Commission (CEC) established Title 24, California's energy efficiency standards for residential and non-residential buildings, in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. The 2016 standards substantially reduce electricity and natural gas consumption. Additional savings result from the application of the standards on building alterations. For example, requirements for cool roofs, lighting, and air distribution ducts are expected to save additional electricity. These savings are cumulative, doubling as years go by. The 2016 standards have been approved and went into effect on January 1, 2017. California's energy efficiency standards are updated on an approximate three-year cycle. The 2019 Title 24 standards took effect on January 1, 2020. Under 2019 Title 24 standards, nonresidential buildings will use about 30 percent less energy, mainly due to lighting upgrades, when compared to 2016 Title 24 standards.¹

California Green Building Standards (CALGreen)

The CALGreen Code (California Code of Regulations, Title 24, Part 11), is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2019 and went into effect on January 1, 2020. CALGreen requires new buildings to reduce

¹ California Energy Commission, 2019 Building Energy Efficiency Standards, March 2018.

water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low pollutant-emitting materials.

California Public Utilities Commission Energy Efficiency Strategic Plan

The California Public Utilities Commission (CPUC) prepared an Energy Efficiency Strategic Plan in 2011 with the goal of promoting energy efficiency and a reduction in greenhouse gases. Assembly Bill 1109, adopted in 2007, also serves as a framework for lighting efficiency. This bill requires the State Energy Resources Conservation and Development Commission to adopt minimum energy efficiency standards as a means to reduce average Statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018. According to the Energy Efficiency Strategic Plan, lighting comprises approximately one-fourth of California's electricity use while nonresidential sector exterior lighting (parking lot, area, walkway, and security lighting) usage comprises 1.4 percent of California's total electricity use, much of which occurs during limited occupancy periods.

City of Carlsbad Requirements

In September 2015, the City of Carlsbad adopted a Climate Action Plan (CAP) that outlines actions the city will undertake to achieve its proportional share of greenhouse gas reductions, including energy conservation. In June 2020, the CAP was amended to correct errors related to the vehicle miles traveled (VMT) assumptions.

As part of the CAP, the City Council adopted several ordinances (March 2019) which require nonresidential buildings to meet specified cost-effective energy efficiency measures for new construction and during a major renovation. Projects requiring building permits will be subject to these ordinances, which include the following:

- Energy Efficiency – Ord. No. CS-347
- Solar Photovoltaic Systems – Ord. No. CS-347
- Water Heating Systems using Renewable Energy (Ord. Nos. CS-347 and CS-348)
- Electric Vehicle Charging – Ord. No. CS-349
- Transportation Demand Management – Ord. No. CS-350

Construction-Related Energy Consumption

Project construction would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction of the proposed project would involve on-site energy demand and consumption related to the use of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-

site lighting, welding, and for supplying energy to areas of the sites where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment. Project construction methods would be typical of current construction practices and would not require the use of more energy intensive machinery or higher than normal volumes of trucks and worker vehicle trips.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site rather than a single location. All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation administered by the California Air Resources Board (CARB). The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. As another benefit of these restrictions, off-road diesel-powered vehicles would consume less fuel and combust fuel more efficiently. The project would also be subject to mandates on portable diesel generators and the California Environmental Protection Agency's (EPA) strict on-road emissions standards for heavy-duty engines. These regulations contain strict air emissions standards that result in efficient engine fuel consumption rates (compared to previous standards). In addition, technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction in California, over the next few years. As such, temporary energy use during construction of the proposed project would not result in a significant increase in peak or base demands on regional energy supplies or require additional capacity from local or regional energy supplies. As such, project construction activities would not result in a wasteful, inefficient, or unnecessary consumption of energy resources.

Further, substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials would employ all reasonable energy conservation practices in the interest of reducing costs.

Operational Energy Consumption

San Diego Gas & Electric (SDGE) would provide electricity and natural gas to the project site. Energy use associated with project operations would be typical of a fast food restaurant. The project does not include any unusual project characteristics or require special equipment that would be more energy intensive than typical commercial uses. The project would install a 5 kilowatt (kW) solar array on the building, which would generate approximately 15.12 kW hours (kWh) per day. The project would be required to include ENERGY STAR-rated appliances, energy-efficient boilers and heating, ventilation, and air conditioning (HVAC) systems, water-efficient landscaping and irrigation systems in compliance with the most current Title 24 energy efficiency standards. Maintenance activities

during operations, such as landscape maintenance, would involve the use of electric- or gas-powered equipment. In addition to on-site energy use, the proposed project would result in the consumption of oil-based fuels associated with vehicle trips generated by the restaurant. With regard to transportation fuel use, the proposed project would not have control over fuel consumption factors such as vehicle type(s), engine efficiency, vehicle miles traveled, etc., for employees and patrons accessing the project site. However, due to CARB's increasing vehicle efficiency standards, it is assumed the long-term transportation fuel consumption from project operations would steadily decline over time and ensure that vehicle fuel consumption is not wasteful or inefficient.

The proposed project would be subject to all relevant provisions of the most recent update of the California Building Energy Efficiency Standards (Title 24) and CALGreen Code. Compliance with these standards would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. Project impacts in this regard would be less than significant.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. State plans for renewable energy and energy efficiency include CPUC's Energy Efficiency Strategic Plan, California Building Energy Efficiency Standards (Title 24), and CALGreen standards. Local regulations include the Energy Efficient Ordinance (Ord. No. CS-347), Solar Photovoltaic Systems Ordinance (Ord. No. CS-347), Water Heating Systems using Renewable Energy (Ord. No. CS-347 and CS-348), Electric Vehicle Charging (Ord. No. CS-349), and Transportation Demand Management (Ord. No. CS-350). Compliance with Title 24 and CALGreen standards would ensure the project incorporates energy-efficient windows, insulation, lighting, ventilation systems, as well as water-efficient fixtures and electric vehicles charging infrastructure. The project would also install a 5 kW solar array on the building, which would generate approximately 15.12 kWh per day. Adherence to the CPUC's energy requirements would ensure conformance with the State's goal of promoting energy and lighting efficiency.

Compliance with State and local energy efficiency requirements would ensure the project does not conflict with or obstruct any plans for renewable energy or energy efficiency. Therefore, the proposed project would result in less than significant impacts in this regard.

4.7 GEOLOGY AND SOILS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<i>Would the project:</i>				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This analysis is based on the *Geotechnical Engineering Exploration and Analysis* (Geotechnical Analysis), prepared by Giles Engineering Associates, Inc., dated March 14, 2019; Appendix C, Geotechnical Analysis.

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. Southern California, including the project area, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that have

experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone.

According to the Geotechnical Analysis, no faults were identified on or within 100 feet of the site by Alquist-Priolo fault zone maps prepared by the California Geological Survey (CGS). In addition, the site is not located within an Alquist-Priolo Earthquake Fault Zone.¹ The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. Since no known faults exist in the immediate site vicinity (the closest faults are located more than four miles away; refer to Response 4.6[a][ii]) and the site is not located within an Alquist-Priolo Earthquake Fault Zone, the project would not result in rupture of a known earthquake fault and impacts would not occur in this regard.

ii. *Strong seismic ground shaking?*

Less Than Significant Impact. Southern California has numerous active seismic faults subjecting residents to potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for residents and structures, categorized either as primary or secondary hazards. Primary hazards include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Primary hazards can also induce secondary hazards such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

As stated above in Response 4.6(a)(i), no faults (active, potentially active, or inactive) are known to exist in the immediate site vicinity. According to the Geotechnical Analysis, the Rose Canyon, Newport Inglewood, Coronado Bank, and Elsinore Faults are the closest known active faults and are located approximately 4.11, 4.11, 20.04, and 23.55 miles from the site, respectively. The Newport Inglewood Fault would likely generate the most severe seismic ground shaking at the site with an anticipated maximum moment magnitude (Mw) of 7.50.

The proposed project would demolish an existing commercial (office) building and surface parking lot to construct a new Chick-fil-A restaurant. The project would be required to demonstrate compliance with applicable seismic-related design requirements to reduce impacts related to strong seismic ground shaking, as well as the site-specific design recommendations identified in the Geotechnical Analysis to minimize the potential for damage and major injury during a seismic event; refer to Section 6.1, *Seismic Design Considerations*, of Appendix C. Pursuant to Carlsbad Municipal Code Chapter 18.04, *Building Code*, the new restaurant would be constructed in accordance with the California Building Code (CBC) in order to minimize risk of collapse during a seismic event. The CBC includes standards related to soils and foundations, structural design, building materials, and structural testing and inspections. Adherence to these building requirements would minimize risks related to seismic ground shaking. Therefore, the project would not expose people or structures to potential adverse effects of strong seismic ground shaking and impacts would be less than significant.

¹ California Department of Conservation, *CGS Information Warehouse: Regulatory Maps*, <https://maps.conservation.ca.gov/cgs/informationwarehouse/>, accessed August 8, 2019.

iii. *Seismic-related ground failure, including liquefaction?*

Less Than Significant Impact. Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking. Liquefaction is defined as the transformation of granular material from a solid state into a liquefied state as a consequence of increased pore-water pressure. During liquefaction, soil strata behave similarly to a heavy liquid. According to Figure 3.4-3, *Proposed General Plan Liquefaction Hazards*, of the General Plan EIR, the project site is not located within a Seismic Hazard Zone for Liquefaction Potential. Groundwater was encountered at a depth of approximately 17 to 18 feet below ground surface (bgs) during the Geotechnical Analysis' subsurface investigation. Based on the Geotechnical Analysis, seismic-induced ground settlement at the project site would be negligible (0.01-inch) and impacts concerning liquefaction would not be significant. Therefore, the project would not expose people or structures to potential adverse effects due to liquefaction and a less than significant impact regarding seismic-related ground failure, including liquefaction would occur.

iv. *Landslides?*

No Impact. According to the General Plan EIR, the city does not include any areas identified as being susceptible to landslides and the overall risk of landslides is low. Further, the project site is generally flat and would not create substantial slopes or features that increase the landslide potential beyond existing conditions. No impact with regard to landslides would occur.

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

Less Than Significant Impact. The primary concern in regard to soil erosion or loss of topsoil would be from construction activities associated with the project (e.g., earthwork and grading). Construction activities associated with the project would expose soils to short-term erosion by wind and water. However, as the project would require a grading permit, the project would require preparation of a Storm Water Pollution Prevention Plan (SWPPP) for approval by the City Engineer prior to construction; refer to Carlsbad Municipal Code Section 15.16.085, *Construction Stormwater Pollution Prevention Plan (SWPPP)*. The SWPPP would identify best management practices (BMPs) to be implemented with the project in order to prevent erosion, minimize siltation impacts, and protect water quality. Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from project-related grading and construction activities. Following compliance with the established regulatory framework (i.e., Carlsbad Municipal Code Section 15.16.085), project construction would result in less than significant impacts involving soil erosion and loss of topsoil.

c. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less Than Significant Impact. Refer to Responses 4.7(a)(iii), 4.7(a)(iv), and 4.7(d) for a discussion concerning liquefaction, landslides, and expansive soils, respectively.

Lateral Spreading

Lateral spreading is a phenomenon in which large blocks of intact, non-liquefied soil move down slope on a liquefied soil layer. Lateral spreading is often a regional event. For lateral spreading to occur, the

liquefiable soil zone must be laterally continuous, unconstrained laterally, and free to move along sloping ground. The project site's potential for lateral spreading is considered low based on its low liquefaction potential; refer to Response 4.7(a)(iii). Less than significant impacts would occur in this regard.

Soil Shrinkage and Subsidence

According to the General Plan EIR, most of the soils in the city have low shrink-swell potential and there have been no documented incidents of subsidence in the city or county. Nonetheless, the project would be required to demonstrate compliance with applicable CBC design requirements to reduce impacts related to unstable soil conditions, including the site-specific design recommendations identified in Sections 6.2 through 6.7 of the Geotechnical Analysis. Pursuant to Carlsbad Municipal Code Section 15.16.067, *Information on Grading Plans, Specifications or Engineering Reports*, the recommendations included in the project's Geotechnical Engineering and Exploration Analysis shall be incorporated into the project's grading plans and/or specifications. Compliance with CBC design requirements and the recommendations identified in the Geotechnical Analysis would reduce impacts to less than significant levels.

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

Less Than Significant Impact. Expansive soils are those that undergo volume changes as moisture content fluctuates, swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement, and distorting structural elements. According to the Geotechnical Analysis, the project site has a very low expansion potential. Nonetheless, the project would be subject to compliance with applicable CBC requirements, including the site-specific design recommendations identified in the Geotechnical Analysis. Pursuant to Carlsbad Municipal Code Section 15.16.067, recommendations included in the project's Geotechnical Analysis would be incorporated into the project's grading plans and/or specifications. Compliance with CBC design requirements and the recommendations identified in the Geotechnical Analysis would reduce impacts. Impacts in this regard are less than significant.

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

No Impact. The project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impacts would occur regarding septic tanks or alternative wastewater disposal systems.

- f. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

Less Than Significant Impact With Mitigation Incorporated. According to the General Plan EIR, the city contains several geologic formations that include a sequence of marine and non-marine sedimentary rock units that record portions of the last 140 million years of earth history. The geologic formations found in the city are primarily the Lusardi Formation of the Cretaceous Age, as well as the Santiago Formation and Del Mar Formation of the Tertiary Age that overlie the Lusardi Formation. The Lusardi Formation consistently produces significant fossils and consists of sandstones and conglomerate that were deposited in a shallow sea that covered the region approximately 74 million

years ago. The Santiago Formation and Del Mar Formation make up the sandstones and siltstones of the La Jolla Group which is approximately 45 million years old and has produced a large number of vertebrate and invertebrate fossils. The La Jolla Group has a high potential for containing significant fossils. Loma Linda Terrace Deposits of the Quaternary Age have the potential to contain fossiliferous rock from Pleistocene terrace deposits of not more than 2 million years in age.

The project site was previously disturbed and graded during development of the existing commercial (office) building and surface parking lot. Based on the Geotechnical Analysis, the site is generally underlain by artificial fill soils extending to depths of three feet bgs, and is underlain by Old Paralic Deposits. The proposed project would result in an average excavation depth of approximately five feet bgs, with a maximum depth of approximately 6.5 feet bgs to install the underground detention basins. As a result of the placement of past fill materials and the nominal depth of excavation into native soils, it is not expected that paleontological resources would be encountered during project grading activities. However, according to the *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines* Figure 4, *Paleontology Sensitivity Model*, and Table 1, *Summary of Paleontological Sensitivity by Map Unit*, the project site (underlain by Old Paralic Deposits) is located in a high sensitivity area for paleontological resources. As such, the project would be required to comply with Mitigation Measure GEO-1, which would require a principal paleontologist to be retained to prepare a Paleontological Mitigation and Monitoring Plan in accordance with the *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines*. In the event that paleontological resources are discovered during project earthwork or excavation, Mitigation Measure GEO-2 would require all project construction activities to halt until a paleontologist identifies the paleontological significance of the find and recommends a course of action. Thus, following implementation of Mitigation Measures GEO-1 and GEO-2, impacts would be less than significant.

Mitigation Measures:

GEO-1 The project Applicant shall retain a principal paleontologist to prepare a Paleontological Mitigation and Monitoring Plan in accordance with the *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines* prior to the issuance of a grading permit. The Paleontological Mitigation and Monitoring Plan shall address the following information , as applicable and appropriate:

- the level of monitoring (spot checks, part time or full time), protocols and authorization for work stoppages, and safety procedures;
- the need for Contractor Awareness Training for all earthmoving personnel for any projects where a monitor will not be present full time;
- a research design listing the research questions and the data requirements for those questions;
- the level and type of assistance from the contractor needed by the paleontologist to take bulk samples and place them into a safe area for processing;
- the methods for fossil collection, fossil preparation, fossil identification, stratigraphic profiles, and curation;

- the types of progress reports that will be provided to the project proponent and city (weekly or monthly);
- the schedule for reporting;
- a recommendation for the updating of the paleontology sensitivity model, which takes into consideration the presence or absence of paleontological resources, the amount of ground disturbance, and the potential for future discoveries; and
- the identity of the financially-responsible party.

GEO-2 If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Carlsbad Planning Division. With direction from the City of Carlsbad Planning Division, a qualified paleontologist shall evaluate the find prior to resuming grading in the immediate vicinity of the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of identified resources.

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

The information presented in this analysis has been supplemented with the *Greenhouse Gas Analysis for the Chick-fil-A Carlsbad Project* (Greenhouse Gas Analysis) prepared for the proposed project by Scientific Resources Associated, dated August 7, 2020; refer to Appendix D, Greenhouse Gas Analysis.

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

Less Than Significant Impact. Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone, and certain hydro-fluorocarbons. These gases, known as greenhouse gases (GHGs), allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the Earth's temperature. Emissions of GHGs in excess of natural ambient concentrations are thought to be responsible for the enhancement of the greenhouse effect and contribute to what is termed "global warming," the trend of the warming of the Earth's climate from anthropogenic activities.

California is a substantial contributor of global GHGs, emitting over 400 million tons of CO₂ per year.¹ Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit over the next century. CH₄ is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the Earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent on the point of emission.

¹ California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2017*, https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf, accessed August 6, 2020.

Regulations and Significance Criteria

The Intergovernmental Panel on Climate Change (IPCC) developed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 parts per million CO₂ equivalent² (CO₂e) concentration is required to keep global mean warming below two degrees Celsius, which in turn is assumed to be necessary to avoid significant levels of climate change.

Federal

Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (2007) 549 U.S. 497, the U.S. Supreme Court held that the U.S. Environmental Protection Agency (USEPA) has authority under the Clean Air Act to regulate CO₂ emissions if those emissions pose an endangerment to the public health or welfare.

In 2009, the USEPA issued an “endangerment finding” under the Clean Air Act, concluding that GHGs threaten the public health and welfare of current and future generations and that motor vehicles contribute to GHG emissions. These findings provide the basis for adopting national regulations to mandate GHG emission reductions under the Clean Air Act.

State

Executive Order S-3-05

In 2005, former Governor Schwarzenegger signed Executive Order S-3-05, which established the following GHG emission reduction goals for California: (1) by 2010, reduce GHG emissions to 2000 levels; (2) by 2020, reduce GHG emissions to 1990 levels; and (3) by 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, was enacted after considerable study and expert testimony before the Legislature. The heart of AB 32 is the requirement that Statewide GHG emissions be reduced to 1990 levels by 2020. In order to achieve this reduction mandate, AB 32 requires the California Air Resources Board (CARB) to adopt rules and regulations in an open public process that achieve the maximum technologically feasible and cost-effective GHG reductions.

In response to the adoption of AB 32, in 2007, CARB approved a Statewide limit on the GHG emissions level for year 2020 consistent with the determined 1990 baseline. In 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (2008 Scoping Plan). The 2008 Scoping Plan establishes an overall framework for the measures that have been adopted to reduce California’s GHG emissions for various emission sources/sectors to 1990 levels by 2020.

² Carbon Dioxide Equivalent (CO₂e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (2014 Scoping Plan).³ The stated purpose of the 2014 Scoping Plan is to “highlight California’s success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.”⁴ The 2014 Scoping Plan found that California is on track to meet the 2020 emissions reduction mandate established by AB 32. The 2014 Scoping Plan also noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the State realizes the expected benefits of existing policy goals.⁵

In conjunction with the 2014 Scoping Plan, CARB identified “six key focus areas comprising major components of the State’s economy to evaluate and describe the larger transformative actions that will be needed to meet the State’s more expansive emission reduction needs by 2050.”⁶ Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and, (6) natural and working lands. The 2014 Scoping Plan identifies key recommended actions for each sector that will facilitate achievement of the 2050 reduction target.

Based on CARB’s research efforts, it has a “strong sense of the mix of technologies needed to reduce emissions through 2050.”⁷ Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies.

In December 2017, CARB adopted *California’s 2017 Climate Change Scoping Plan* (2017 Scoping Plan). The 2017 Scoping Plan addresses the Statewide emissions reduction target established pursuant to SB 32 and Executive Order B-30-15, as discussed below. The 2017 Scoping Plan includes continuation of the Cap-and-Trade Program through 2030, and incorporates a Mobile Source Strategy (also developed by CARB) that is intended to increase zero emission vehicle fleet penetration and establish a more stringent Low Carbon Fuel Standard target by 2030.

When discussing project-level GHG emissions reduction actions and thresholds in the 2017 Scoping Plan, CARB states “[a]chieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.”⁸ However, CARB also recognizes that “[a]chieving net zero ... may not be feasible or appropriate for every project ... and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.”⁹ To the extent that a project’s CEQA analysis recommends mitigation to reduce

³ Health & Safety Code section 38561(h) requires CARB to update the Scoping Plan every five years.

⁴ ARB, *First Update* (May 2014), p. 4.

⁵ *Id.* at p. 34.

⁶ *Id.* at p. 6.

⁷ *Id.* at p. 32.

⁸ CARB, *Second Update* (November 2017), p. 101.

⁹ *Id.* at p. 102.

GHG emissions, CARB “recommends that lead agencies prioritize on-site design features that reduce emissions, especially from vehicle miles traveled (VMT), and direct investments in GHG reductions within the project’s region that contribute potential air quality, health, and economic co-benefits locally.”¹⁰

Senate Bill 32, and Assembly Bill 197

Enacted in 2016, SB 32 codifies the 2030 emissions reduction goal of Executive Order B-30-15 by requiring CARB to ensure that Statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030.

SB 32 was coupled with a companion bill: AB 197. Designed to improve the transparency of CARB’s regulatory and policy-oriented processes, AB 197 created the Joint Legislative Committee on Climate Change Policies, a committee with the responsibility to ascertain facts and make recommendations to the Legislature concerning Statewide programs, policies and investments related to climate change. AB 197 also requires CARB to make certain GHG emissions inventory data publicly available; consider the social costs of GHG emissions when adopting rules and regulations designed to achieve GHG emission reductions; and, include specified information in all Scoping Plan updates for the emission reduction measures contained therein.

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options.¹¹ SB 375 specifically requires the Metropolitan Planning Organization (MPO) relevant to the project area (i.e., the San Diego Association of Governments [SANDAG]) to include a Sustainable Communities Strategy in its Regional Transportation Plan that will achieve GHG emission reduction targets set by CARB by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

For the area under SANDAG’s jurisdiction, including the project site, CARB adopted regional targets for reduction of mobile source-related GHG emissions by 7 percent for 2020 and by 13 percent for 2035. (These targets are expressed by CARB as a percent change in per capita GHG emissions relative to 2005 levels.)

Pursuant to Government Code Section 65080(b)(2)(K), a Sustainable Communities Strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city’s or county’s land use policies and regulations, including those in a general plan, be consistent with it.

¹⁰ Id. at p. 102.

¹¹ ARB, First Update (May 2014), pp. 49-50.

Local

San Diego Forward

In October 2015, and in accordance with the requirements established by SB 375 (discussed above), SANDAG adopted *San Diego Forward: The Regional Plan* (San Diego Forward). The plan establishes a planning framework and implementation actions that increase the region's sustainability and encourage "smart growth while preserving natural resources and limiting urban sprawl."

In December 2015, CARB accepted SANDAG's GHG emissions quantification determination for the San Diego Forward plan and found that it would meet the regional emission reduction targets adopted by CARB in furtherance of SB 375. Emission reduction targets beginning October 1, 2018 for SANDAG are 15 percent in 2020 and 19 percent in 2035.

City of Carlsbad Requirements

In September 2015, the City of Carlsbad adopted a Climate Action Plan (CAP) that outlines actions that the city will undertake to achieve its proportional share of GHG reductions. As part of the CAP, the city developed programs designed to require new development to meet the city's GHG reduction goals.

In March 2019, the City Council adopted several ordinances aimed at reducing GHGs in new construction and alterations to existing buildings. Projects requiring building permits will be subject to these ordinances, which include the following:

- Energy Efficiency – Ord. No. CS-347
- Solar Photovoltaic Systems – Ord. No. CS-347
- Water Heating Systems using Renewable Energy (Ord. Nos. CS-347 and CS-348)
- Electric Vehicle Charging – Ord. No. CS-349
- Transportation Demand Management – Ord. No. CS-350

In January 2020, the city's CAP was determined not to be a qualified CAP under CEQA due to errors in VMT calculations. The city subsequently developed an updated qualified CAP. The updated CAP was adopted by the City Council in May 2020. The CAP is designed to reduce the city's GHG emissions and streamline environmental review of future development projects in the city in accordance with CEQA.

The CAP includes goals, policies, and actions for the city to reduce GHG emissions and combat climate change include:

- An inventory of the city's citywide and local government GHG emissions;
- Forecasts of future citywide and local government GHG emissions;
- A comprehensive, citywide strategy and actions to manage and reduce GHG emissions, with emission targets through 2035; and

- Actions that demonstrate the city’s commitment to achieve State GHG reduction targets by creating enforceable measures, and monitoring and reporting processes to ensure targets are met.

The timeframe for the CAP extends from the date of adoption through 2035.

The forecast emissions in the CAP incorporate reductions from (1) State and Federal actions, (2) General Plan land use and roadways, and (3) additional General Plan policies and actions. This chapter describes additional GHG reduction measures to close the emissions “gap” between emissions targets and forecast emissions for 2035. The GHG reduction measures include:

- Residential, commercial and industrial photovoltaic systems
- Building cogeneration
- Single-family, multi-family and commercial efficiency retrofits
- Commercial commissioning
- CALGreen building code
- Solar water heater/heat pump installation
- Efficient lighting standards
- Increased zero-emissions vehicle travel
- Transportation Demand Management (TDM)
- Citywide renewable projects
- Water delivery and conservation

The city’s General Plan adopted policies to implement the CAP, including the following:

- 9-P.1 - Enforce the Climate Action Plan as the city’s strategy to reduce greenhouse gas emissions.
- 9-P.2 - Continue efforts to decrease use of energy and fossil fuel consumption in municipal operations, including transportation, waste reduction and recycling, and efficient building design and use

General Plan Policy 3-P.11 requires implementation of transportation demand management (TDM) and transportation systems management (TSM) strategies. The city has also passed a TDM ordinance to establish policies and guidelines for transportation demand management in the city. The ordinance supports the Climate Action Plan and seeks to reduce the number of Carlsbad employees driving alone to and from work and increase alternative commuting options like transit, biking, carpool, and vanpool to meet 2035 greenhouse gas reduction targets.

Existing Conditions

The project site is currently occupied by a 10,977-square foot commercial office building. To calculate the emissions associated with the existing building, the California Emissions Estimator Model version 2016.3.2 (CalEEMod) was used. The model was run in year 2022 to provide a similar base of comparison with the proposed project, which has an anticipated buildout year of 2022. Table 4.8-1, Summary of Existing Operational Greenhouse Gas Emissions, shows the GHG emissions generated by the existing building.

Table 4.8-1
Summary of Existing Operational Greenhouse Gas Emissions

Emission Source	Annual Emissions (Metric Tons/Year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Operational Emissions				
Area Sources	2.00E-04	0.0000	0.0000	2.10E-04
Energy Use	54	0.00191	0.00057	55
Water Use	9.7	0.0640	0.00157	12
Solid Waste Management	1.0	0.0612	0.0000	3
Vehicle Emissions	168	0.0088	0.0000	168
Total Existing Emissions	233	0.1359	0.0021	237
Global Warming Potential Factor	1	25	298	
CO₂ Equivalent Emissions	233	3	1	237

Note: CO₂ is defined as having a global warming potential factor of 1; therefore, CO₂ equivalent (CO₂e) emissions are calculated based on multiplication of the emissions of each GHG times its global warming potential factor. This provides an estimate of the contribution of each GHG based on the contribution of equivalent amounts of CO₂.

Source: Refer to Appendix D, Greenhouse Gas Analysis.

As shown in Table 4.8-1, the existing office building generates approximately 237 MTCO₂e per year.

Project-Related Sources of Greenhouse Gases

The proposed project would result in direct and indirect emissions of CO₂, CH₄, and N₂O, and would not result in substantial emissions of other GHGs that would facilitate a meaningful analysis. Therefore, this analysis focuses on these three forms of GHG emissions. Direct proposed project-related GHG emissions include emissions from construction activities, area sources, and mobile sources, while indirect sources include emissions from electricity consumption, water demand, and solid waste generation. Operational GHG estimations are based on energy emissions from natural gas usage and automobile emissions. Estimated CO₂, CH₄, and N₂O emissions for the proposed project are presented in Table 4.8-2, Estimated Greenhouse Gas Emissions. The CalEEMod outputs are detailed in Appendix D.

Direct Project-Related GHG Emissions

Construction Emissions. Construction GHG emissions are typically summed and amortized over the lifetime of a project (assumed to be 30 years), then added to the operational emissions.¹² As shown in Table 4.8-2, the proposed project would result in 4 MTCO₂e per year (amortized over 30 years).

Area Source. Area source emissions occur from architectural coatings, landscaping equipment, and consumer products. CalEEMod assumes that area source emissions associated with the project would include minor emissions from landscaping equipment and maintenance of the building. As such, area source emissions noted in Table 4.8-2 would be negligible.

**Table 4.8-2
Estimated Greenhouse Gas Emissions**

Emission Source	Annual Emissions Annual Emissions (Metric Tons/Year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Direct Emissions				
Construction (amortized over 30 years)	4	0.0000	0.0000	4
Area Source	7.00E-04	0.0000	0.0000	7.50E-04
Mobile Source	866	0.0558	0.0000	867
Indirect Emissions				
Energy Consumption	63	0.00189	0.00083	64
Water Demand	3	0.0273	0.00066	4
Solid Waste Disposal	4	0.2370	0.0000	10
Total	940	0.3220	0.0015	949
Global Warming Potential Factor	1	25	298	
CO₂ Equivalent Emissions	940	8	1	949
Existing CO₂ Equivalent Emissions	233	3	1	237
Net CO₂ Equivalent Emissions	707	5	0	712

Note: CO₂ is defined as having a global warming potential factor of 1; therefore, CO₂ equivalent (CO₂e) emissions are calculated based on multiplication of the emissions of each GHG times its global warming potential factor. This provides an estimate of the contribution of each GHG based on the contribution of equivalent amounts of CO₂.

Source: Refer to Appendix D, Greenhouse Gas Analysis.

Mobile Source. The analysis of GHG emissions from vehicles is based on total VMT annually. According to the Transportation Impact Analysis, the Chick-fil-A restaurant would generate 700 daily trips per 1,000 square foot of building space, and the pass-by trip rate would be 25 percent, the diverted trip rate would be 25 percent, and primary trips would be 50 percent. The proposed project would be operational Monday through Saturday. As such, the Transportation Impact Analysis trip generation rate was used for all six days of operation. The proposed project's pedestrian network improvements include a traffic signal at the main entrance to provide a controlled pedestrian crossing to the west side of Avenida Encinas. Based on CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*, the project's pedestrian network improvements would reduce VMT by approximately one percent. Therefore, the VMT reduction of approximately one percent was accounted for in CalEEMod. As

¹² The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District ([http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-13/ghg-meeting-13-minutes.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-13/ghg-meeting-13-minutes.pdf?sfvrsn=2)).

shown in [Table 4.8-2](#), the proposed project would directly result in approximately 867 MTCO₂e per year of mobile source-generated GHG emissions.

Indirect Proposed Project-Related Sources of Greenhouse Gases

Energy Consumption. Energy consumption emissions were calculated using CalEEMod and project-specific land use data. Electricity would be provided to the project site via San Diego Gas & Electric. The project would install a 5 kilowatt (kW) solar array on the building. The solar array would generate approximately 15.12 kW hours (kWh) per day and has been accounted for within CalEEMod. The proposed project would indirectly result in 64 MTCO₂e per year due to energy consumption; refer to [Table 4.8-2](#).

Water Demand. The proposed project's operations would result in a demand of approximately 0.89 million gallons of water per year. For the purpose of this analysis, it was assumed that the project would be equipped with low-flow fixtures and would utilize water-efficient irrigation. Emissions from indirect energy impacts due to water supply would result in 4 MTCO₂e per year; refer to [Table 4.8-2](#).

Solid Waste. The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation and disposal rates were calculated using CalEEMod, assuming landfilling of solid waste with flaring. Based on Statewide solid waste reduction goals per SB 341, it was assumed that solid waste generation would be reduced by 50 percent. As shown in [Table 4.8-2](#), solid waste associated with operations of the proposed project would result in 10 MTCO₂e per year.

2030 and 2035 Operational Emissions Summary

As previously discussed, the State has established a target reduction of 40 percent below 1990 levels by 2030 and the city has implemented GHG reduction goals based on 2035. Therefore, net project GHG emissions were calculated with CalEEMod for 2030 and 2035. The project would result in 583 MTCO₂e in 2030 and 555 MTCO₂e in 2035; refer to [Appendix D](#). The 2030 and 2035 operational GHG emissions include reductions for further implementation of the Renewable Portfolio Standard (RPS) and increased efficiency for vehicle emissions standards. Therefore, 2030 and 2035 emissions would not exceed the CAP's 900 MTCO₂e threshold.

Conclusion

According to the city's CAP guidance, projects that are projected to emit fewer than 900 MTCO₂e annually would not make a considerable contribution to the cumulative impact of climate change. As detailed in [Table 4.8-2](#), the project would result in a net increase of 712 MTCO₂e per year. Further, as discussed above, the project's 2030 and 2035 GHG emissions would not exceed the CAP's 900 MTCO₂e threshold. Therefore, impacts in this regard would be less than significant.

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

Less Than Significant Impact.

City of Carlsbad Climate Action Plan

As shown in Table 4.8-2, the project would generate approximately 712 net MTCO₂e per year, which is below the city's CAP screening threshold of 900 MTCO₂e. According to the city's CAP guidance, projects that are projected to emit fewer than 900 MTCO₂e annually would not make a considerable contribution to the cumulative impact of climate change, and therefore, do not need to demonstrate consistency with the CAP.

Regardless of this screening threshold, all projects requiring building permits are subject to the previously mentioned CAP ordinances. The project is therefore required to show compliance with the CAP ordinances. As discussed in the Greenhouse Gas Analysis, the project would be consistent with the city's GHG reduction ordinances; refer to Appendix D. Therefore, the proposed project would not conflict with the city's CAP and impacts would be less than significant in this regard.

2017 Scoping Plan

As stated above, the goal to reduce GHG emissions to 1990 levels by 2020 (Executive Order S-3-05) was codified by the California Legislature as AB 32. In 2008, CARB approved a Scoping Plan as required by AB 32. The Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The 2017 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan (2014 Scoping Plan). Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted subsequently as required to achieve Statewide GHG emissions targets.

The project would be consistent with the following 2017 Scoping Plan policies:

- **State 2030 GHG Emissions Target.** By implementing GHG reduction measures in the project's design, the project will be consistent with the State and the city goals of reducing emissions by 40 percent below 1990 levels in 2030.
- **Air Quality Co-Benefits.** The project would provide co-benefits to air quality through its GHG reduction measures, including meeting CALGreen requirements, installation of a solar photovoltaic system, use of renewable energy for water heating, and installation of electric vehicle (EV) charging stations on-site.

- **Reduce GHG Emissions in the Electricity Sector.** The project would install a solar photovoltaic system and would use renewable energy for water heating, thus reducing its grid-based electricity demand.
- **Mobile Source Strategy.** The project would install EV charging stations which would encourage the use of EVs. Furthermore, the project would provide pedestrian access through installation of a traffic signal between the existing employment uses and the Chick-fil-A restaurant.
- **Waste Reduction.** The project would be consistent with Statewide solid waste reduction goals and include waste recycling.

As summarized above, the project would not conflict with any of the provisions of the 2017 Scoping Plan and would support the goals of the 2017 Scoping Plan through energy efficiency, EV charging stations, and recycling. Therefore, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHGs, and impacts would be less than significant.

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4.9 HAZARDS AND HAZARDOUS MATERIALS <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk or loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This section is based on the *Phase I Environmental Site Assessment, Proposed Chick-fil-A Restaurant No. 4306 I-5 and Palomar FSU* (Phase I ESA), prepared by Giles Engineering Associates, Inc., dated September 24, 2018 (refer to Appendix E, Phase I Environmental Site Assessment).

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

Less Than Significant Impact. Substantial risks associated with hazardous materials are not typically associated with restaurant uses. Minor cleaning products along with the occasional use of pesticides and herbicides for landscape maintenance of the project site are generally the extent of hazardous materials that would be routinely utilized on-site. Thus, as the presence and on-site storage of these materials are common for restaurant uses and would not be stored in substantial quantities

(quantities required to be reported to a regulatory agency), impacts in this regard are less than significant.

Limited amounts of some hazardous materials could be used in the short-term construction of the project, including standard construction materials (e.g., paints and solvents), vehicle fuel, and other hazardous materials. The routine transportation, use, and disposal of these materials would be required to adhere to State and local standards and regulations for handling, storage, and disposal of hazardous substances. With compliance with the existing State and local procedures that are intended to minimize potential health risks associated with their use or the accidental release of such substances, impacts associated with the handling, storage, and transport of these hazardous materials during construction would be less than significant.

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

Less Than Significant With Mitigation Incorporated.

Construction Activities

During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid or minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law.

Based on the Phase I ESA, no evidence of recognized or conditionally recognized environmental conditions were found in connection with the project site. Based on the findings and conclusions of the Phase I ESA, no existing hazardous contamination is anticipated to be present in the soil, soil gas, or groundwater at the project site. As such, no impacts are anticipated in this regard.

Construction activities would include demolition of the existing commercial (office) building. As the commercial (office) building was constructed in 1972, it may be associated with hazardous materials (e.g., asbestos-containing materials [ACMs] and/or lead-based paint [LBP]). In the last 25 years, LBP has been phased out of use due to concerns over the health effects associated with lead. Additionally, prior to the 1940s and up until the early 1970s, ACMs were used in many building materials and can result in serious health problems if inhaled. Demolition of the structure could expose construction personnel and the public to ACMs or LBPs. As such, the Phase I ESA recommends conducting a comprehensive, pre-demolition LBP and ACM survey in accordance with the sampling protocol of the Asbestos Hazard Emergency Response Act (AHERA) prior to any activities with the potential to disturb building materials (Mitigation Measures HAZ-1 and HAZ-2). Mitigation Measure HAZ-1 would require asbestos removal to be performed in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403. Mitigation Measure HAZ-2 would require lead-based paint removal and disposal to be performed in accordance with California Code of Regulations (CCR) Title 8, Section 1532.1. Implementation of Mitigation Measures HAZ-1 and HAZ-2 would ensure project compliance

with Federal and State regulations, including SCAQMD Rule 1403 and CCR Title 8, Section 1532.1, which would reduce potential impacts pertaining to ACMs and LBPs to less than significant levels.

Operational Activities

Operational activities would include typical restaurant practices. Minor cleaning products along with the occasional use of pesticides and herbicides for landscape maintenance of the project site are generally the extent of hazardous materials that would be routinely utilized on-site. There is limited potential for activities of this nature to cause upset or accidental conditions involving a significant hazardous materials release to the environment. Thus, impacts in this regard would be less than significant.

Mitigation Measures:

- HAZ-1 Prior to demolition activities, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and California Division of Occupational Safety and Health (Cal/OSHA) certified building inspector to determine the presence or absence of asbestos containing-materials (ACMs). If ACMs are located, abatement of asbestos shall be completed prior to any activities that would disturb ACMs or create an airborne asbestos hazard. Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403.
- HAZ-2 If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste shall be evaluated independently from the building material by a qualified Environmental Professional. If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist prior to any activities that would create lead dust or fume hazard. Lead-based paint removal and disposal shall be performed in accordance with California Code of Regulation Title 8, Section 1532.1, which specifies exposure limits, exposure monitoring and respiratory protection, and mandates good worker practices by workers exposed to lead. Contractors performing lead-based paint removal shall provide evidence of abatement activities to the City of Carlsbad Engineer.

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

No Impact. The project site is not located within one-quarter mile of a school. The nearest school to the project site is Futures Academy (705 Palomar Airport Road, Carlsbad), located approximately 0.27-mile to the southeast of the project site. Therefore, the project would not emit hazardous emissions or the handle hazardous or acutely hazardous materials, substances, or wastes within 0.25-mile of an existing or proposed school. No impact would occur.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. Government Code Section 65962.5 requires the DTSC and State Water Resources Control Board (SWRCB) to compile and update a regulatory sites listing (per the criteria of the Section). The

California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code. Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations (CCR), to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

Based on the Phase I ESA, the site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, therefore, would not create a significant hazard to the public or the environment. Thus, no impact would result in this regard.

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

Less Than Significant Impact. The nearest airport to the project site is the McClellan-Palomar Airport located approximately two miles to the east. Based on the *McClellan-Palomar Airport Land Use Compatibility Plan*, amended December 1, 2011, the project site is not located within a safety risk or noise exposure zone.¹ Additionally, the project site is not located within the vicinity of a private airstrip or related facilities. Therefore, project implementation would not expose people residing or working in the project area to excessive noise levels or safety hazards associated with aircraft. Impacts in this regard would be less than significant.

- f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Less Than Significant Impact With Mitigation Incorporated. The City of Carlsbad has adopted an Emergency Operations Plan (EOP) which establishes and details emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts of the various emergency staff and service elements. According to the *Carlsbad General Plan* (General Plan), the city's EOP identifies the city's Emergency Operations Center (EOC) as the location from which centralized emergency management would be performed during a major emergency or disaster, including receiving and disseminating information, maintaining contact with other EOCs and providing instructions to the public. Project implementation would have no adverse effect on implementation of the city's EOP, and the project site is not considered a critical facility as defined by the Essential Services Building Seismic Safety Act for buildings that provide essential services after a disaster.

Project construction and operations would not interfere with any daily operations of the city's EOC or the Carlsbad Fire Department (CFD). The project would incorporate all applicable design and safety standards and regulations as set forth by the California Building Code, Carlsbad Municipal Code, and CFD to ensure that it does not interfere with the provision of local emergency services (i.e., provision

¹ San Diego County Airport Land Use Commission and San Diego County Regional Airport Authority, *McClellan-Palomar Airport Land Use Compatibility Plan*; Exhibit III-1, *Combability Policy Map: Noise* and Exhibit III-2, *Combability Policy Map: Safety*, amended December 1, 2011.

of adequate access roads to accommodate emergency response vehicles, minimum turning radii, adequate numbers/locations of fire hydrants, etc.).

Implementation of the proposed project would require installation of a new traffic signal along Avenida Encinas (Mitigation Measure TRA-1). As a result, temporary partial lane closure would be required during construction. During periods when partial road closure is required, the Applicant would be required to implement a traffic management plan (Mitigation Measure TRA-3). The traffic management plan would ensure at least one lane remains open (for Avenida Encinas) and emergency access is maintained.

Thus, with implementation of recommended mitigation, project implementation would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be reduced to less than significant levels in this regard.

Mitigation Measures: Refer to Mitigation Measures TRA-1 and TRA-3.

g. Expose people or structures, either directly or indirectly, to a significant risk or loss, injury or death involving wildland fires?

No Impact. The project site is located in an area surrounded by a built urban environment and is not located in a Very High Fire Hazard Severity Zone.² Therefore, project implementation would not expose people or structures to a significant risk involving wildland fires, and no impacts would occur in this regard.

² California Department of Forestry and Fire Protection, Very High Fire Hazard Severity Zones in LRA As Recommended by CALFIRE, Carlsbad, June 11, 2009, <https://osfm.fire.ca.gov/media/5956/carlsbad.pdf>, accessed July 29, 2019.

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4.10 HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. 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; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The information presented in this analysis has been supplemented with the following:

- *Preliminary Hydrology and Hydraulic Analysis for Chick-fil-A Restaurant #4306* (Hydrology Study), prepared by Joseph C. Truxaw and Associates, Inc., revised September 16, 2019; and
- *Preliminary Priority Development Project Storm Water Quality Management Plan for Chick-fil-A, #4306* (SWQMP), prepared by Joseph C. Truxaw and Associates, Inc., dated December 11, 2019 refer to [Appendix F, Hydrology/Water Quality Documentation](#).

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. As part of Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency (EPA) has established regulations under the National Pollution Discharge

Elimination System (NPDES) program to control direct stormwater discharges. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The project site is located within the jurisdiction of the San Diego RWQCB.

Short-Term Construction Impacts

The proposed project may result in water quality impacts during short-term construction activities. The grading and excavation required for project implementation would result in exposed soils that may be subject to wind and water erosion. However, since the proposed disturbed area (41,147 square feet or 0.945-acre) would be less than one acre in size, the proposed project would not be subject to the requirements of the Construction General Permit under the NPDES program. Short-term construction impacts would be minimal, as grading activities consist of 2,360 cubic yards of cut and 70 cubic yards of fill with 2,290 cubic yards of export. The project would also be required to comply with Carlsbad Municipal Code Chapter 15.16, *Grading and Erosion Control*, to obtain required grading permits for the project. Therefore, short-term construction activities would result in less than significant impacts to water quality in this regard.

Long-Term Operational Impacts

The project would be regulated under the NPDES Phase I Municipal Stormwater (MS4) Permits issued by the San Diego RWQCB for San Diego County (Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, and NPDES Permit No. CAS0109266).¹ Since 1990, operators of MS4s are required to develop a stormwater management program designed to prevent harmful pollutants from impacting water resources via stormwater runoff.

Existing Hydrology

Existing stormwater on-site drains via a concrete v-gutter located within the drive aisles surrounding the existing office building. The v-gutter has a high point at the southeast corner of the site where it drains in two directions:

- ***Northerly***. The v-gutter drains northerly to discharge surface runoff towards the existing driveway and into Avenida Encinas. Once the surface runoff has entered the curb and gutter in Avenida Encinas, it travels south to a municipal curb opening catch basin where it is collected into the municipal storm drain system.

¹ California Regional Water Quality Control Board San Diego Region, *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region*, November 18, 2015.

- Westerly. The v-gutter also drains westerly to convey runoff through the shared drive aisle located south of the existing office building into an existing grated inlet catch basin. Once collected in the private catch basin, runoff is then conveyed through an 18-inch private storm drain and travels north back onto the project site where it discharges into the same curb opening catch basin in Avenida Encinas as described above.

The landscaped area in front of the building drains towards Avenida Encinas but also has multiple small grate inlets spread around the landscaping. The parking row south of the existing office building (outside of the project boundary and property limits) also drains towards the v-gutter on the project site. Therefore, the project site also accepts off-site drainage.

The 18-inch private storm drain on-site also directs concentrated surface runoff from southerly properties through the project site and includes stormwater clarifiers upstream from the project site. Off-site surface flows collected upstream of the project site through this private storm drain are treated by these clarifiers.

Proposed Hydrology

Operational activities would be required to comply with Chapters 15.12, *Stormwater Management and Discharge Control*, and 18.48, *Stormwater Pollution Prevention*, of the Carlsbad Municipal Code. These chapters include conditions and requirements established by the city related to the control of urban pollutants to stormwater runoff. Specifically, Section 18.48.040, *Requirement for permit issuance*, requires project applicants of priority development projects (e.g., the proposed project) to prepare a stormwater management plan in conformance with standard urban stormwater mitigation plan requirements and implement stormwater quality best management practices (BMPs).

The project is required to implement stormwater quality BMPs, including source control, site design, and structural treatment BMPs. Specifically, the project's structural BMPs include two biofiltration basins incorporated into the project design as illustrated in Exhibit 2-6, Conceptual Drainage Plan.

Basin 1 would be located in Drainage Management Area 1 (DMA-1) at the most northerly corner of the site. Surface runoff within DMA-1 would be directed to a v-gutter from around the south side of the proposed restaurant building where it would convey collected runoff to the curb and gutter along the parking stalls adjacent to Avenida Encinas. The collected runoff would travel through the curb and gutter until it reaches Basin 1, which is the final confluence point; refer to Exhibit 2-6.

Basin 2 would be located in Drainage Management Area 2 (DMA-2) in the landscape planter north of the proposed restaurant building. This basin would collect runoff from the building roof, a small portion of parking spaces north of the building, and landscaped area east of the proposed building; refer to Exhibit 2-6.

Both biofiltration basins would collect runoff either through the underdrain, as treated stormwater, or through the overflow grated inlet during heavier storm events. Once runoff has entered the outlet pipe of each corresponding basin, the storm drain system would direct runoff to a proposed storm capture vault system and then to a proposed storm drain manhole before discharging into the municipal storm drain system.

In addition to the biofiltration basins, the project would implement source control and site design BMPs to meet Low Impact Development (LID) performance criteria. LID is a stormwater management strategy with goals to mitigate the impacts of increased runoff and stormwater pollution as close to its source as possible. According to the SWQMP, the project would implement LID BMPs, such as stenciling and signage, installing storm drain inlets, draining landscape/outdoor pesticide use areas to the proposed biofiltration basins, installing a grease waste line to collect food and refuse waste, daily sweeping of sidewalk and patio areas, and planting native/drought tolerant plant species.

Thus, compliance with the SWQMP structural, site design, and source control measures would reduce long-term operational water quality impacts. Further, the project would be required to comply with all applicable local and regional water quality and stormwater plans, including, but not limited to, the city's Grading Ordinance, Storm Water Ordinance, *Standard Urban Storm Water Mitigation Plan* (April 2003), *Carlsbad Drainage Master Plan* (July 2008), *Jurisdictional Urban Runoff Management Plan* (January 2018), and the *San Diego County Hydrology Manual* (2003), as applicable. Impacts in this regard would be less than significant.

b. Substantially deplete groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The project would not substantially deplete groundwater supplies or interfere with groundwater recharge. The project site is developed with an office building, parking lot, and landscaping with approximately 30,239 square feet of impervious areas. The proposed project would increase impervious areas by 2,759 square feet to 32,998 square feet. The project site is not currently utilized for groundwater recharge given its buildout nature and location within an existing commercial center. Therefore, the project's nominal increase in impervious surfaces would not interfere with groundwater recharge.

Additionally, implementation of the project would not create a substantial demand on groundwater sources and would not significantly change the amount of groundwater available and pumped from local wells. The project does not involve the direct withdrawal of groundwater for municipal use and would not substantially interfere with recharge capabilities. Thus, impacts to groundwater supplies and groundwater recharge would be less than significant.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Soil disturbance would temporarily occur during project construction due to earth-moving activities such as excavation, soil compaction and moving, and grading. Disturbed soils can be susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff if construction conditions are not properly controlled.

Short-Term Construction Impacts

Short-term grading and excavation activities associated with the project could result in erosion or siltation on- or -off-site. However, as stated above, since the proposed disturbed area (41,147 square feet or 0.945-acre) would be less than one acre in size, the proposed project would not be subject to the requirements of the Construction General Permit under the NPDES program. Short-term construction impacts would be minimal and result in less than significant impacts to existing drainage patterns on-site. Construction activities would result in less than significant impacts regarding erosion and siltation.

Long-Term Operational Impacts

As noted in Response 4.10(a), the project would be required to comply with the project's SWQMP and Carlsbad Municipal Code Chapters 15.12, *Stormwater Management and Discharge Control*, and 18.48, *Stormwater Pollution Prevention*, which would reduce the potential for sediment-laden runoff discharging from the site. Therefore, project implementation would not substantially alter the existing drainage pattern of the site during operational activities such that substantial erosion or siltation would occur.

Additionally, the Hydrology Study calculated runoff volumes during 10- and 100-year storm events for pre- and post-development conditions; refer to Table 4.10-1, *Pre- and Post-Development Hydrology*. As shown, stormwater runoff during post-development conditions would be less than existing conditions under both 10- and 100-year storm events.

Table 4.10-1
Pre- and Post-Development Hydrology

Storm Event	Pre-Development Condition (cfs)	Post-Development Conditions (cfs)
10-Year	4.04	3.69
100-Year	5.94	5.42

Notes: cfs = cubic feet per second

Source: Joseph C. Truxaw and Associates, Inc., *Preliminary Hydrology and Hydraulic Analysis for Chick-fil-A Restaurant #4306*, revised September 16, 2019; refer to Appendix F.

Thus, no increase in erosion or siltation during operations would result. Given the nature of the proposed use and urbanized project setting, long-term operation of the project would not have the potential to result in substantial erosion or siltation off-site. The project would not include large areas of exposed soils that would be subject to runoff; rather, any non-building areas would be improved with groundcover and landscaping to minimize the potential for erosion/siltation. The project would also be subject to the project's SWQMP and Carlsbad Municipal Code. Thus, impacts in this regard would be less than significant.

- ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?*

Less Than Significant Impact. As detailed in Response 4.10(b), the project would increase impervious surfaces by approximately 2,759 square feet. However, the Hydrology Study determined that implementation of the two biofiltration basins on-site would reduce overall stormwater runoff compared to existing conditions; refer to Table 4.10-1. Therefore, the project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Less than significant impacts would occur in this regard.

- iii. *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Less Than Significant Impact. Refer to Response 4.10(c)(ii). Although implementation of the project would result in an increase in impervious area, the proposed on-site stormwater system would result in less runoff leaving the project site than under existing conditions; refer to Table 4.10-1. Therefore, the proposed project is not expected to exceed the capacity of the existing/planned stormwater drainage systems. Additionally, the project would not result in a substantial change in topography that would alter or change flow patterns in the project area. As discussed in Response 4.10(a), less than significant impacts related to potential polluted runoff from the site would occur. With implementation of Carlsbad Municipal Code regulations, as well as BMPs detailed in the project's SWQMP, impacts would be reduced to less than significant levels in this regard.

- iv. *Impede or redirect flood flows?*

Less Than Significant Impact. No flood flows currently occur on-site. Additionally, as detailed in Response 4.10(c)(ii) and 4.10(c)(iii), the project would not substantially increase the rate or amount of surface runoff on-site in manner that would result in on- or off-site flooding or exceed the capacity of existing or planned stormwater drainage systems. Impacts in this regard would be less than significant.

- d. *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

No Impact.

Flood Hazard

According to the Flood Insurance Rate Map (FIRM) No. 06073C0764G, Panel 0764G, and the General Plan EIR Figure 6-1, *Potential Flood Hazards*, the project site is located outside of the 100-year flood hazard area.² As a result, no impacts would occur in this regard.

² Federal Emergency Management Agency, *Flood Insurance Rate Map No. 06073C0764G, Panel 0764G*, Map Revised May 16, 2012.

Tsunami

A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. The only areas identified within the city as having risk for tsunami run-up are the immediate vicinity of the Buena Vista, Agua Hedionda, and Batiquitos lagoons; refer to General Plan EIR Figure 6-3, *Maximum Tsunami Projected Run-up*. As a result, no impacts would occur in this regard.

Seiche

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. The County maps zones of high risk for dam inundation throughout San Diego County, As shown on General Plan EIR Figure 6-2, *Dam Inundation Areas*, the project site is not located within any dam inundation zones. The site also is not in the vicinity of a reservoir, harbor, lake, or storage tank capable of creating a seiche. Therefore, no impacts would occur in this regard.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The *Water Quality Control Plan for the San Diego Basin* (Basin Plan) establishes water quality standards for ground and surface waters within the San Diego Region, which includes the city, and is the basis for the San Diego RWQCB's regulatory programs.

The 2014 Sustainable Groundwater Management Act requires local public agencies and groundwater sustainability agencies in high- and medium-priority basins to develop and implement groundwater sustainability plans (GSPs) or prepare an alternative to a GSP. The city is not located within a high- or medium-priority groundwater basin.³ Therefore, no sustainable groundwater management plan regulates groundwater use in Carlsbad.

Further, as indicated in Response 4.10(b), the proposed project would not substantially deplete groundwater supplies or interfere with groundwater recharge. Compliance with the project's SWQMP BMPs and Carlsbad Municipal Code regulations would ensure the proposed project does not conflict with or obstruct implementation of the Basin Plan. Impacts would be less than significant in this regard.

³ California Department of Water Resources, *SGMA Basin Prioritization Dashboard*, <https://gis.water.ca.gov/app/bp2018-dashboard/p1/>, accessed July 22, 2019.

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4.11 LAND USE AND PLANNING <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Physically divide an established community?

No Impact. The project site is located within an existing commercial center (*Palomar Place Site Development Plan (SDP 83-11)*) and adjacent to other commercial and office uses. Development of the project would not physically divide an established community as it would not introduce any physical divisions or barriers between the site and surrounding area. Rather, the proposed restaurant would complement the other restaurant uses in the center. As such, no impacts would result in this regard.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The project proposes to demolish an existing office building and construct a Chick-fil-A restaurant in its place. The site is currently designated Planned Industrial (PI) in the General Plan and zoned Planned Industrial (P-M) with a Commercial/Visitor-Serving Overlay. The site is also located within the Mello II Segment of the *City of Carlsbad Local Coastal Program (LCP)* and within the Palomar Place SDP. The project is proposing to re-designate the site to Visitor Commercial (VC) and rezone the site to Commercial Tourist with a Qualified Development Overlay (C-T-Q), which would be consistent with the adjacent uses in the commercial center. The development of the project would require the following discretionary approvals:

- General Plan Amendment;
- Zone Change;
- Non-Residential Planned Development Permit; and
- Site Development Plan 83-11 Amendment.

Because the site is located within the Coastal Zone, the project is also required to obtain the following permits/approvals in accordance with the LCP:

- Local Coastal Program Amendment; and
- Coastal Development Permit.

The following analysis evaluates the project’s consistency with the applicable land use plans, policies, and regulations, including the General Plan, Zoning Code, Palomar Place SDP, and LCP.

General Plan

The project is proposing a General Plan Amendment to re-designate the project site from PI to VC. According to the General Plan, the VC designation is intended to provide sites for commercial uses that serve the travel, retail, shopping, entertainment, and recreation needs of visitors, tourists, and residents, as described in General Plan Table 2-4, *Characteristics of Commercial Land Uses*. The proposed Chick-fil-A restaurant would be considered a “Secondary Tenant” under the VC designation, which can include hotel/motel, restaurant, recreation facilities, museums, travel support uses, visitor-attracting/serving retail, amusement parks, cinemas, and other entertainment uses. As such, the project would be an allowed use under the VC designation.

Table 4.11-1, *Project Consistency with Applicable General Plan Land Use and Community Design Element Policies*, analyzes the project’s consistency with applicable goals and policies in the General Plan Land Use and Community Design Element. As analyzed in Table 4.11-1, the project would be consistent with applicable General Plan policies upon approval of the General Plan Amendment.

Table 4.11-1
Project Consistency with Applicable
General Plan Land Use and Community Design Element Policies

Applicable Land Use and Community Design Element Policies	Project Consistency Analysis
<p><u>Policy 2-P.17</u>. Locate commercial land uses as shown on the Land Use Map. Where applications for the re-designation of land to commercial land uses are submitted, these shall be accompanied by a conceptual development plan of the site and a market study that demonstrates the economic viability of using the land in the way being requested, as well as the impact on the viability of commercial uses designated on the Land Use Map that may compete within shared trade areas.</p>	<p><u>Consistent</u>. The project proposes a General Plan Amendment to re-designate the site to a commercial land use designation, Visitor Commercial (VC). A conceptual development plan is provided and analyzed in this Initial Study; refer to <u>Exhibit 2-3, <i>Conceptual Site Plan</i></u>. The project site is the only non-VC-designated parcel in the existing commercial center. Therefore, re-designating the site would make it more compatible and consistent with other uses in the Palomar Place SDP. The project Applicant has prepared a market study for the proposed project to ensure economic viability of the proposed restaurant. Further, although the proposed Chick-fil-A restaurant would typically be considered a competing use to the existing McDonald’s restaurant, the proposed restaurant would be located on the opposite side within the Palomar Place SDP and would provide a different product/service (no drive-thru has been proposed), as compared to the existing McDonald’s restaurant. Further, the proposed Chick-fil-A restaurant would be located adjacent to the existing In-N-Out restaurant, considered a common partnership since different products are sold. Overall, the proposed project and its associated General Plan Amendment would be more compatible with other uses in the Palomar Place SDP, compared to the existing use, and</p>

Applicable Land Use and Community Design Element Policies	Project Consistency Analysis
<p><u>Policy 2-P.18.</u> Except within the Village, commercial development shall occur in the form of discrete shopping centers, as opposed to generalized retail districts or linear “strip commercial” patterns (i.e. long corridors of commercial uses with numerous curb cuts, unsafe intersection spacing, disharmonious architectural styles, and a proliferation of signs).</p>	<p>would not compete with shared trade areas.</p> <p><u>Consistent.</u> The project proposes to re-designate the site to VC, which would bring the site into conformance with the other VC-designated parcels within the Palomar Place SDP. The existing restaurants within the commercial center each have unique architectural styles specific to each business.</p> <p>The Chick-fil-A restaurant would be sited on the most northern end of the commercial center and be designed with various contemporary architectural building elements, including burnished concrete, precast concrete, dark-bronze aluminum, three varieties of stucco paint (Grecian Ivory, Studio Taupe, and Grizzle Gray), and illuminated restaurant identification signage on the building’s east, south, and west elevations; refer to <u>Exhibit 2-4, Proposed Building Elevations</u>. The project would utilize existing curb cuts for site access and thus, would not construct any additional driveways into the commercial center. Further, proposed signage would only be installed on the restaurant building walls and would not involve any freestanding signs adjacent to Avenida Encinas. As such, the proposed restaurant would not result in additional curb cuts, disharmonious architectural styles, or a proliferation of signs.</p>
<p><u>Policy 2-P.25.</u> Ensure that commercial development is designed to include:</p> <ol style="list-style-type: none"> Integrated landscaping, parking, signs, and site and building design. Common ingress and egress, safe and convenient access and internal circulation, adequate off-street parking and loading facilities. Each commercial site should be easily accessible by pedestrians, bicyclists, and automobiles to nearby residential development. Architecture that emphasizes establishing community identity while presenting tasteful, dignified and visually appealing designs compatible with their surroundings. A variety of courtyards and pedestrian ways, bicycle facilities, landscaped parking lots, and the use of harmonious architecture in the construction of buildings. 	<p><u>Consistent.</u> As detailed in <u>Section 2.0, Project Description</u>, the proposed project would include ornamental landscaping, 36 parking spaces, Chick-fil-A signage on the building (no freestanding signs), and uniform building design; refer to <u>Exhibits 2-3, 2-4, Proposed Building Elevations</u>, and <u>2-5, Conceptual Landscape Plan</u>.</p> <p>Project ingress/egress would occur using the site’s two existing driveways and could also be accessible from entering any of the commercial center’s driveways along Avenida Encinas. Although there are no residential uses nearby, the site is also easily accessible by pedestrians and bicyclists via existing bike lanes and sidewalks along Avenida Encinas, as well as a new signal crossing.</p> <p>The project would be designed similar to other Chick-fil-A restaurants and include various architectural building elements, including burnished concrete, precast concrete, dark-bronze aluminum, three varieties of stucco paint; refer to <u>Exhibit 2-4</u>. Additionally, an outdoor dining area would be provided adjacent to the restaurant building. As shown on <u>Exhibit 2-5</u>, ornamental trees and shrubs would be</p>

Applicable Land Use and Community Design Element Policies	Project Consistency Analysis
	<p>planted along the parking lot and restaurant building perimeter.</p> <p>Overall, the project would be designed with harmonious and integrated site and building design.</p>
<p><u>Policy 2-P.26.</u> When “community” tenants (see Table 2-4, earlier) are included in a local shopping center, they must be fully integrated into the overall function and design of the center, including the architecture, internal circulation and landscaping. The inclusion of such tenants should complement, not supplant the principal function of the center, which is to provide local goods and services.</p> <ul style="list-style-type: none"> a. No community “anchor” tenant may be built as a stand-alone building. It must share (or appear to share) walls and its building facade with other tenants in the center. b. No community “anchor” tenant or secondary tenant may feature corporate architecture or logos (excluding signage) that is not integrated into the overall design of the center. 	<p><u>Consistent.</u> The proposed Chick-fil-A restaurant would complement the existing restaurant businesses in the commercial center. Similar to the existing office building on-site, the proposed project would share the large surface parking lot, internal circulation, and drive aisles with the other commercial center uses. The project would also have similar ornamental landscaping along Avenida Encinas to complement existing landscaping on the southern end of the center. The project is not considered a community “anchor” tenant, and thus, is not required to share (or appear to share) walls with other tenants in the center. As a secondary tenant, the project would only feature the “Chick-fil-A” sign and logo on the proposed building; refer to <u>Exhibit 2-4</u>. Overall, the proposed restaurant would complement other restaurant uses in the existing commercial center and share internal circulation and landscaping.</p>
<p><u>Policy 2-P.45.</u> Evaluate each discretionary application for development of property with regard to the following specific criteria:</p> <ul style="list-style-type: none"> a. Site design and layout of the proposed buildings in terms of size, height and location, to foster harmony with landscape and adjacent development. b. Site design and landscaping to provide buffers and screening where appropriate, conserve water, and reduce erosion and runoff. c. Building design that enhances neighborhood quality and incorporates considerations of visual quality from key vantage points, such as major transportation corridors and intersections, and scenic vistas. d. Site and/or building design features that will reduce greenhouse gas emissions over the life of the project, as outlined in the Climate Action Plan. e. Provision of public and/or private usable open space and/or pathways designated in the Open Space, Conservation, and Recreation Element. f. Contributions to and extensions of existing systems of streets, foot or bicycle paths, trails, 	<p><u>Consistent.</u> Refer to the corresponding lettered analysis below.</p> <ul style="list-style-type: none"> a. Refer to response to Policy 2-P.25 regarding site design, building layout, landscaping, and architectural building design. The proposed building size, height, placement, and landscaping would comply with C-T-Q development standards as detailed in <u>Table 4.11-2, Project Consistency with C-T-Q Zone</u>. Additionally, as part of the project’s plan review, city planning staff will review the proposed project’s site and building design and landscaping plan to ensure compliance with the General Plan, Carlsbad Municipal Code, LCP, and other applicable land use plans. b. Ornamental landscaping would be installed throughout the project site, including the parking lot, restaurant building perimeter, and street frontage to soften and screen views from I-5 and Avenida Encinas; refer to <u>Exhibit 2-5</u>. All landscaping on-site would include native and/or drought-tolerant plant species to conserve water. Further, as detailed in <u>Section 4.10, Hydrology and Water Quality</u>, the project would install two biofiltration

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<p>and the greenbelts provided for in the Mobility, and Open Space, Conservation, and Recreation elements of the General Plan.</p> <p>g. Compliance with the performance standards of the Growth Management Plan.</p> <p>h. Development proposals which are designed to provide safe, easy pedestrian and bicycle linkages to nearby transportation corridors.</p> <p>i. Provision of housing affordable to lower and/or moderate income households. (<i>not applicable</i>)</p> <p>j. Policies and programs outlined in Local Coastal Program where applicable.</p> <p>k. Consistency with applicable provisions of the Airport Land Use Compatibility Plan for McClellan-Palomar Airport.</p>	<p>basins on-site, which would reduce erosion potential and surface water runoff to below existing volumes.</p> <p>c. There are no designated scenic views or vistas in the project area. However, the site is adjacent to I-5, which is a major transportation corridor. The proposed restaurant building and landscaping has been designed with this in mind and includes various architectural building elements, including burnished concrete, precast concrete, dark-bronze aluminum, and a variety of stucco paint colors. Further, as stated above, extensive landscaping is proposed along Avenida Encinas, around the restaurant building perimeter, within the parking lot, and along the eastern project boundary adjacent to I-5, which aim to soften and screen the development from scenic views afforded to drivers along I-5 and Avenida Encinas.</p> <p>d. As detailed in Section 4.8, <i>Greenhouse Gas Emissions</i>, the project would comply with the city's Climate Action Plan and project-related GHG emissions would not exceed the screening threshold of 900 metric tons of carbon dioxide equivalent annually pursuant to the city's Climate Action Plan; refer to <u>Table 4.8-2, <i>Estimated Greenhouse Gas Emissions</i></u>.</p> <p>e. Although the site is not located near the city's parks, open space areas, or greenbelts, it would be easily accessible by pedestrians and bicyclists via existing sidewalks and bicycle lanes along Avenida Encinas and Palomar Airport Road. The project is also proposing pedestrian striping in the parking lot to ensure vehicles driving through the parking lot can clearly see a defined pedestrian walkway. Additionally, while the project would not include public or private usable open space, an outdoor dining area is proposed along with ornamental landscaping throughout the project site.</p> <p>f. Refer to response to Policy 2-P.45(e).</p> <p>g. Refer to response to Policy 2-P.58 regarding project compliance with the performance standards of the city's Growth Management Plan.</p> <p>h. Refer to response to Policy 2-P.45(e).</p>

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	<ul style="list-style-type: none"> i. Provision of affordable housing is not applicable to the proposed project. j. <u>Table 4.11-3, Project Consistency with Applicable LCP Mello II Policies</u>, concludes the project would be consistent with applicable LCP policies. k. As analyzed in <u>Section 4.9, Hazards and Hazardous Materials</u>, the project would be consistent with the <u>McClellan-Palomar Airport Land Use Compatibility Plan</u>.
<p><u>Goal 2-G.21</u>: Ensure that adequate public facilities and services are provided in a timely manner to preserve the quality of life of residents.</p> <p><u>Policy 2-P.58</u>. Require compliance with Growth Management Plan public facility performance standards, as specified in the citywide Facilities and Improvements Plan, to ensure that adequate public facilities are provided prior to or concurrent with development.</p>	<p><u>Consistent</u>. The city's Growth Management Plan identifies 11 public facility performance standards, including city administrative facilities, libraries, parks, drainage, circulation, fire, open space, sewer collection system, schools, water service/emergency water storage, and wastewater treatment.¹ Given that the project would not introduce new residential uses, it would have no impact on the performance standards for city administrative facilities, libraries, parks, fire, and schools since these standards are directly related to residential population growth. Additionally, the site is not located within an open space area and would not be required to preserve permanent open space.</p> <p>The project's impacts on drainage, circulation, sewer collection system, water service/emergency water storage, and wastewater treatment are detailed in <u>Sections 4.10, Hydrology and Water Quality, 4.17, Transportation, and 4.19, Utilities and Service Systems</u>. As analyzed in these sections, the project would result in less than significant impacts upon compliance with all regulatory requirements and mitigation measures.</p> <p>City staff reported to the City Council a road segment within Local Facilities Management Plan (LFMP) Zone 3 that does not meet current GMP performance standards. However, on January 12, 2021, the City Council unanimously adopted a vehicular level of service exemption under the General Plan Mobility Element Policy 3-P.9 for street facilities declared deficient under the citywide facilities and improvements plan Circulation Performance Standard. As such, adopted by resolution, street facilities are exempt from the Growth Management Plan vehicular Level of Service standard, pursuant to Mobility Element Policy 3-P.9, thereby refocusing planning efforts at these street facilities to transportation demand</p>

¹ City of Carlsbad, *Growth Management*, <http://www.carlsbadca.gov/services/depts/planning/growth.asp>, accessed July 26, 2019.

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	management strategies to reduce overall trip generation and adoption of CEQA findings. This includes vehicular LOS Exemptions for the following segments in the project vicinity: Eastbound Palomar Airport Road from Avenida Encinas to Paseo del Norte, Westbound Palomar Airport Road from Paseo del Norte to Avenida Encinas, Eastbound Cannon Road from Avenida Encinas to Paseo del Norte, and Westbound Cannon Road from Paseo del Norte to Avenida Encinas. As a result of this exemption, the project is required to participate in Transportation Demand Management (TDM) and Transportation System Management (TSM). With compliance with the city's TDM and TSM requirements, the project would be consistent in this regard.

Source: City of Carlsbad, *Carlsbad General Plan Land Use and Community Design Element*, September 2015.

Zoning Code

The project proposes to rezone the site from P-M to C-T-Q to allow the proposed commercial use; no changes are proposed to the site's Commercial/Visitor-Serving Overlay, which would remain in place. Carlsbad Municipal Code Section 21.29.010, *Intent and Purpose*, states that the intent and purpose of the C-T zone is to implement the travel/recreation commercial (TR) land use designation of the General Plan; provide for the development of tourist-oriented attractions and commercial uses that serve the travel and recreational needs of tourists, residents, as well as employees of business and industrial centers; and provide regulations and development standards to ensure such uses are compatible with and designed to protect surrounding properties, ensure safe traffic circulation, and promote economically viable tourist-oriented areas. Additionally, it is intended that the C-T zone be placed on properties near major transportation corridors or recreation areas as designated by the General Plan and any applicable specific plans. Further, the Qualified Development Overlay (Q) is intended to supplement the underlying zoning by providing additional regulations for development within designated areas per Carlsbad Municipal Code Chapter 21.06, *Q Qualified Development Overlay Zone*.

The project site is located within an existing commercial center (the Palomar Place SDP) that is currently zoned C-T-Q. Therefore, the proposed Zone Change would bring the project site (only non-C-T-Q zoned parcel within the Palomar Place SDP) into consistency with the other uses. The site is also located adjacent to Interstate 5 (I-5), which is the intended location for C-T zones within Carlsbad and would serve the travel and recreational needs of tourists and residents in the area as well as existing businesses and industrial centers located to the west of Avenida Encinas.

Table 4.11-2, *Project Consistency with C-T-Q Zone*, analyzes the project's consistency with specific C-T zone and Q overlay zone requirements pursuant to Carlsbad Municipal Code Chapter 21.29, *C-T Commercial Tourist Zone*, and 21.06, *Q Qualified Development Overlay Zone*, respectively. As shown, the project would be consistent with all applicable development standards. It is also acknowledged that the proposed project is located in a Commercial/Visitor-Serving Overlay zone, the proposed

project is considered “permitted use”, and the standards for Commercial/Visitor-Serving Overlay would not apply to the proposed project pursuant to Carlsbad Municipal Code Section 21.208.040, *Permitted Uses*.

Table 4.11-2
Project Consistency with C-T-Q Zone

Development Standard	Requirement	Proposed Project	Does Project Satisfy Requirement?
C-T Zone Development Standards			
Permitted Uses	Only uses listed in Carlsbad Municipal Code Section 21.29.030, Table A, <i>Permitted Uses</i> , shall be permitted.	The proposed project is a restaurant use, which is identified as a permitted use in Carlsbad Municipal Code Section 21.29.030, Table A, <i>Permitted Uses</i> .	Yes
Maximum Building Height	35 feet (three levels) with allowed height protrusions less than 45 feet	The proposed Chick-fil-A restaurant would be a one-story building up to 24 feet in height.	Yes
Placement of Buildings	If side/rear lot line abuts property zoned residential and no alley intervenes, no building shall be erected closer than 10 feet to such lot line. If such a lot abuts upon an alley, no building shall be erected closer than five feet to the rear lot line of such lot.	The project site does not abut property zoned residential. As such, this requirement does not apply.	Not Applicable
Parking	< 4,000 square feet: One space per 100 gross square feet; > 4,000 square feet: 40 spaces plus one space per 50 gross square feet in excess of 4,000 square feet	The proposed 3,945-gross square-foot building is required to provide 40 parking spaces. As shown on <u>Exhibit 2-3</u> , the project would provide 36 parking spaces on the subject Chick-fil-A parcel. Through the existing Non-Residential Planned Development Permit, parking is shared throughout the commercial center, which is developed with five restaurants and the subject office building proposed to be demolished. Including the proposed Chick-fil-A restaurant, a total of 468 parking spaces are required for the commercial center. Upon project implementation, 469 spaces would be provided. With the approval of the amendment to the Non-Residential Planned	Yes

Development Standard	Requirement	Proposed Project	Does Project Satisfy Requirement?
		Development Permit, the project would meet the city's parking requirement.	
Q Overlay Zone Requirements			
--	The proposed development or use is consistent with the General Plan and any applicable master plan or specific plan, complies with all applicable provisions of this chapter, and all other applicable provisions of this code.	As analyzed in Table 4.11-1, the project would be consistent with applicable General Plan policies upon approval of the proposed General Plan Amendment. The project would also be consistent with the Palomar Place SDP and LCP as analyzed under the 'Palomar Place SDP' and 'Local Coastal Program' headings below. Thus, the proposed development would be consistent in this regard.	Yes
--	The requested development or use is properly related to the site, surroundings and environmental settings, will not be detrimental to existing development or uses or to development or uses specifically permitted in the area in which the proposed development or use is to be located, and will not adversely impact the site, surroundings or traffic circulation.	Compared to existing conditions (i.e., an office building), the proposed development would be more consistent and similar to the existing restaurant uses within the Palomar Place SDP. As such, the project is properly related to the site and surrounding areas and would not be detrimental to existing development in the commercial center. Additionally, as analyzed in Section 4.17, <i>Transportation</i> , the project qualifies as a local-serving retail development less than 50,000 square feet and thus, is presumed to have a less than significant impact on transportation per the city's <i>Vehicle Miles Traveled (VMT) Analysis Guidelines</i> (dated June 16, 2020). Therefore, the project would not adversely impact traffic circulation in the project area.	Yes
--	The site for the intended development or use is adequate in size and shape to accommodate the use.	The project site is an approximately 38,768-square foot triangular-shaped parcel and the proposed development is a one-story, 3,945 square-foot	Yes

Development Standard	Requirement	Proposed Project	Does Project Satisfy Requirement?
		Chick-fil-A restaurant with an outdoor dining area; refer to <u>Exhibit 2-3, <i>Conceptual Site Plan</i></u> . The proposed development would also provide surface parking spaces and landscaping along the site and building perimeter. Overall, the existing site would be adequate in size and shape to accommodate the proposed use.	
--	All of the yards, setbacks, walls, fences, landscaping, and other features necessary to adjust the requested development or use to existing or permitted future development or use in the neighborhood will be provided and maintained.	As analyzed above within <u>Table 4.11-2</u> , the project would be consistent with all C-T zone development standards, including permitted uses, maximum building height, placement of buildings, and parking.	Yes
--	The street system serving the proposed development or use is adequate to properly handle all traffic generated by the proposed use.	As stated, the project qualifies as a local-serving retail development less than 50,000 square feet and thus, is presumed to have a less than significant impact on transportation per the city's <i>Vehicle Miles Traveled (VMT) Analysis Guidelines</i> (dated June 16, 2020). As such, it was determined that project-generated trips would be adequately accommodated by the existing street system.	Yes
--	The proposed development or use meets all other specific additional findings as required by this title (i.e., Carlsbad Municipal Code Chapter 21.06, <i>Q Qualified Development Overlay Zone</i>).	As summarized above, the project would meet all required findings pursuant to Carlsbad Municipal Code Section 21.06.020, <i>Permitted uses and findings of fact</i> .	Yes

Notes:

¹ Based on the C-T parking standard, the In-N-Out (2,908 square feet), Draft Republic (11,050 square feet), Miguel's Cocina (8,800 square feet), Toast Gastrobrunch (3,800 square feet), and McDonald's (4,204 square feet) would be required to provide 29, 181, 136, 38, and 44 parking spaces, respectively. Therefore, the entire center, including the proposed Chick-fil-A restaurant (3,945 square feet), would be required to provide 468 spaces.

Source: City of Carlsbad, *Carlsbad Municipal Code, codified through Ordinance CS-389 and February 2021 code supplement*, 2021.

Additionally, the project requires the approval of a Non-Residential Planned Development Permit. Pursuant to Carlsbad Municipal Code Chapter 21.47, *Nonresidential Planned Developments*, the intent and purpose of the non-residential planned development regulations are, among others, to ensure that non-residential projects develop in accordance with the General Plan and all applicable specific and master plans; provide for non-residential projects which are compatible with surrounding developments; and provide for a method to approve separate ownership of planned unit development lots. As the existing commercial center comprises several lots which are individually owned and parking and access are shared, a Non-Residential Planned Development Permit is required.

All non-residential planned developments are required to comply with the development standards of the underlying zone, which upon approval of the proposed Zone Change would be C-T-Q. As analyzed in [Table 4.11-2](#), the proposed project would be consistent with all C-T-Q development standards. Therefore, the proposed Non-Residential Planned Development Permit would meet the requirements under Carlsbad Municipal Code Chapter 21.47, *Nonresidential Planned Developments*.

Overall, the proposed project would be consistent with the Zoning Code upon approval of the requested Zone Change and Non-Residential Planned Development Permit.

Palomar Place SDP

The Palomar Place SDP 83-11, approved on May 30, 1984, details development standards for the commercial center, including the project site. The existing office building on-site was constructed circa 1975, prior to adoption of the Palomar Place SDP. However, the office building was acknowledged in the SDP as an existing use and was included in the parking analysis for the commercial center. Therefore, as a new development within the area, the proposed project is subject to compliance with the standards detailed in the Palomar Place SDP.

The Palomar Place SDP includes several engineering standards related to grading, haul routes, erosion/siltation, drainage facilities, and utility and transportation improvements. As detailed in [Section 4.10](#), short-term construction impacts would be minimal as construction is anticipated to occur in a single phase over six months beginning in summer 2022 and ending in winter 2023. Grading activities would require approximately 2,360 cubic yards of cut and 70 cubic yards of fill with 2,290 cubic yards of export. Since the proposed disturbed area (41,147 square feet or 0.945-acre) would be less than one acre in size, the proposed project would not be subject to the requirements of the Construction General Permit under the National Pollutant Discharge Elimination System (NPDES) program. Therefore, short-term construction activities would result in less than significant impacts in this regard. The project's Storm Water Quality Management Plan (SWQMP) also requires installation of two biofiltration basins on-site to collect runoff and treat stormwater prior to discharging into the municipal storm drain system, which would reduce overall runoff volumes compared to existing conditions; refer to [Appendix F, Hydrology/Water Quality Documentation](#). Additionally, as detailed in [Section 4.19](#), the proposed Chick-fil-A restaurant would be adequately accommodated by existing utility service providers, including water, wastewater, storm drain, and dry utilities. For transportation needs, the project proposes the installation of a traffic signal and dedication of a westbound left-turn lane at the south project driveway (Main Project Driveway) and Avenida Encinas intersection. This new signal and associated pedestrian crossing improvements would offset project-related impacts on the city's transportation network. Overall, the project would comply with the engineering standards detailed in the Palomar Place SDP.

Local Coastal Program

The project site is located within the Mello II Segment of the LCP. The LCP ensures that development within the city's Coastal Zone protects and enhances coastal resources and is consistent with the California Coastal Act. Similar to the General Plan Land Use Map, the LCP Land Use Map designates the project site as PI. Therefore, the project would require an LCP Amendment to re-designate the site VC. In addition, the LCPA would change the zoning from P-M to C-T-Q.

Table 4.11-3, *Project Consistency with Applicable LCP Mello II Policies*, analyzes the project's consistency with applicable Mello II LCP policies. As detailed, the project would be consistent with the applicable LCP Mello II policies.

Table 4.11-3
Project Consistency with Applicable LCP Mello II Policies

Applicable LCP Mello II Policies	Project Consistency Analysis
Policy 1-1: Allowable Land Uses (Mello II). Allowable uses are those that are consistent with both the General Plan and the Local Coastal Program.	<u>Consistent</u> . As stated above, the General Plan Land Use Map and LCP Land Use Map both designate the project site as PI. The project is proposing a General Plan Amendment and LCP Amendment to re-designate the site to VC. Upon approval of the legislative actions, the proposed Chick-fil-A restaurant would be an allowable use on the project site and be consistent with the General Plan and LCP in this regard.
Policy 3-4: Grading and Landscaping Requirements. Permitted new development shall comply with the following requirements (<i>only those applicable to the project are provided below</i>): <ul style="list-style-type: none"> a. All development must include mitigation measures for the control of urban runoff flow rates and velocities, urban pollutants, erosion and sedimentation in accordance with the requirements of the city's Grading Ordinance, Storm Water Ordinance, Standard Urban Storm Water Mitigation Plan (SUSMP), City of Carlsbad Drainage Master Plan, and the following additional requirements. The SUSMP, dated April 2003 and as amended, the City of Carlsbad Drainage Master Plan are hereby incorporated into the LCP by reference. Development must also comply with the requirements of the Jurisdictional Urban Runoff Management Program (JURMP) and the San Diego County Hydrology Manual to the extent that these requirements are not inconsistent with any policies of the LCP. b. All graded areas shall be landscaped prior to October 1st of each year with either temporary or permanent landscaping 	<u>Consistent</u> . Refer to the corresponding lettered analysis below. <ul style="list-style-type: none"> a. As detailed in <u>Section 4.10</u>, the proposed project would result in less than significant impacts related to hydrology and water quality. Since the proposed disturbed area (41,147 square feet or 0.945-acre) would be less than one acre in size, the proposed project would not be subject to the requirements of the Construction General Permit under the NPDES program. Short-term construction impacts would be minimal, as grading activities consist of 2,360 cubic yards of cut and 70 cubic yards of fill with 2,290 cubic yards of export. The project would also be required to comply with Carlsbad Municipal Code Chapter 15.16, <i>Grading and Erosion Control</i>, to obtain required grading permits for the project. Therefore, short-term construction activities would result in less than significant impacts to water quality in this regard. <p>Operational activities would be required to comply with Carlsbad Municipal Code Chapters 15.12, <i>Stormwater Management</i></p>

Applicable LCP Mello II Policies	Project Consistency Analysis
<p>materials, to reduce erosion potential. Such landscaping shall be maintained and replanted if not well-established by December 1st following the initial planting.</p> <p>c. Prior to making land use decisions, the city shall utilize methods available to estimate increases in pollutant loads and flows resulting from proposed future development. The city shall require developments to incorporate structural and non- structural best management practices (BMPs) to mitigate the projected increases in pollutant loads and minimize any increases in peak runoff rate.</p> <p>d. Water pollution prevention methods shall be implemented to the maximum extent practicable and supplemented by pollutant source controls and treatment. Small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system (MS4) shall be utilized.</p> <p>e. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.</p> <p>f. Development projects should be designed to comply with the following site design principles:</p> <ol style="list-style-type: none"> 1. Protect slopes and channels to decrease the potential for slopes and/or channels from eroding and impacting storm water runoff. 2. To the extent practicable, cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural undisturbed condition. 3. Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones. Land acquisition of such areas shall be encouraged. 4. Provide development-free buffer zones 	<p>and Discharge Control, and 18.48, <i>Stormwater Pollution Prevention</i>. These chapters include conditions and requirements established by the city related to the control of urban pollutants to stormwater runoff. Specifically, Section 18.48.040, <i>Requirement for permit issuance</i>, requires project applicants of priority development projects (e.g., the proposed project) to prepare a stormwater management plan in conformance with standard urban stormwater mitigation plan requirements and implement stormwater quality BMPs.</p> <p>Implementation of the project-specific Hydrology Study and SWQMP would ensure compliance with the city's Grading Ordinance, Storm Water Ordinance, SUSMP, and City of Carlsbad Drainage Master Plan, JURMP, and San Diego County Hydrology Manual, as applicable.</p> <p>b. The project would comply with the requirement to landscape all graded areas by October 1st of each year to reduce erosion potential. Landscaping would be replanted if not well established by December 1st following the initial planting.</p> <p>c. The project's proposed structural BMPs include two biofiltration basins, which would treat and filter stormwater runoff on-site prior to entering into the municipal storm drain system. The Hydrology Study prepared for the project identified that stormwater runoff during post-development conditions would be less than existing conditions under both 10- and 100-year storm events; refer to <u>Table 4.10-1, Pre- and Post-Development Hydrology</u>. In addition, the project would implement Low Impact Development BMPs in accordance with the project-specific SWQMP.</p> <p>d. Refer to response to Policy 3-4(c).</p> <p>e. Refer to response to Policy 3-4(c).</p> <p>f. The project would redevelop an existing office building within the Palomar Place SDP into a Chick-fil-A restaurant. The project area is mostly flat, urbanized, and built out. Thus, there are no slopes, channels, environmentally sensitive areas, riparian corridors, wetlands, buffer zones, natural water bodies, natural drainages, or erosive</p>

Applicable LCP Mello II Policies	Project Consistency Analysis
<p>for natural water bodies.</p> <ol style="list-style-type: none"> 5. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. 6. Where feasible implement site design/landscape features to slow runoff and maximize on-site infiltration of runoff. 7. Properly design outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids and other pollutants from entering the storm water conveyance system. 8. Incorporate roof or awning covers over trash storage areas to prevent off-site transport of trash and other pollutants from entering the storm water conveyance system. 9. Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways and bridges. 10. Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development. <ol style="list-style-type: none"> g. Priority projects identified in the SUSMP will incorporate structural BMPs and submit a Water Quality Technical Report as specified in the NPDES permit and in the SUSMP. h. Structural BMPs used to meet SUSMP requirements for priority projects shall be based on the California Stormwater Quality Association (CASQA) Stormwater Best Management Practice (BMP) Handbook, dated January 2003 or the current version of that publication, and designed to meet, infiltrate, filter or treat the runoff produced from each storm event up to and including the 85th percentile 24-hour storm event. i. Priority projects will include projects increasing impervious area by more than 2,500 square feet or by more than 10% of existing impervious area, that are in, adjacent to or drain directly to Environmentally Sensitive Areas (ESA), identified in the City of Carlsbad Standard Urban Storm Water 	<p>areas. Additionally, while project would nominally increase impervious surfaces by 2,759 square feet, it would also install two biofiltration basins on-site that would reduce runoff and maximize on-site infiltration. Grease traps are also proposed in the restaurant to intercept greases and solids before entering the stormwater conveyance system. The project's trash enclosure would be incorporated into the building design and built with a burnished concrete roof; refer to <u>Exhibit 2-4</u>.</p> <ol style="list-style-type: none"> g. As detailed in the project's SWQMP, the project is a Priority Development Project as defined by the SUSMP. As such, the SWQMP was prepared for the project; refer to <u>Appendix F</u>. h. Refer to response to Policy 3-4(c). i. Refer to response to Policy 3-4(g). j. Refer to response to Policy 3-4(c). The city would be responsible for inspecting the project's BMPs for the life of the project. k. Refer to response to Policy 3-4(f).

Applicable LCP Mello II Policies	Project Consistency Analysis
<p>Mitigation Plan (SUSMP) dated April 2003, using the definitions of “adjacent to” and “draining directly to” that are found in the SUSMP.</p> <p>j. The city shall include requirements in all coastal development permit approvals to inspect and maintain required BMPs for the life of the project.</p> <p>k. Development shall minimize land disturbance activities during construction (e.g., clearing, grading and cut-and-fill), especially in erosive areas (including steep slopes, unstable areas and erosive soils), to minimize impacts on water quality of excessive erosion and sedimentation. Development shall incorporate soil stabilization BMPs on disturbed areas as soon as feasible.</p>	
<p><u>Policy 4-5: Soil Erosion Control Practices.</u></p> <p>a. Soil erosion control practices shall be used against “onsite” soil erosion. These include keeping soil covered with temporary or permanent vegetation or with mulch materials, special grading procedures, diversion structures to divert surface runoff from exposed soils, and grade stabilization structures to control surface water. All development must include mitigation measures for the control of urban runoff flow rates and velocities, urban pollutants, erosion and sedimentation in accordance with the requirements of the city’s Grading Ordinance, Storm Water Ordinance, Standard Urban Storm Water Mitigation Plan (SUSMP), City of Carlsbad Drainage Master Plan, and the additional requirements contained herein. The SUSMP dated April 2003 and as amended, and the City of Carlsbad Drainage Master Plan are hereby incorporated into the LCP by reference. Development must also comply with the requirements of the Jurisdictional Urban Runoff Management Program (JURMP) and the San Diego County Hydrology Manual to the extent that these requirements are not inconsistent with any policies of the LCP.</p> <p><i>All remaining sub-policies are the same as Policy 3-4(c) through (j), and (l) above; refer to Policy 3-4.</i></p>	<p><u>Consistent.</u> Refer to response to Policy 3-4.</p>
<p><u>Policy 4-6: “Sediment Control” Practices.</u></p> <p>a) Apply “sediment control” practices as a</p>	<p><u>Consistent.</u> Refer to response to Policy 3-4.</p>

Applicable LCP Mello II Policies	Project Consistency Analysis
<p>perimeter protection to prevent offsite drainage. Preventing sediment from leaving the site should be accomplished by such methods as diversion ditches, sediment traps, vegetative filters, and sediment basins. Preventing erosion is of course the most efficient way to control sediment runoff. All development must include mitigation measures for the control of urban runoff flow rates and velocities, urban pollutants, erosion and sedimentation in accordance with the requirements of the city's Grading Ordinance, Storm Water Ordinance, Standard Urban Storm Water Mitigation Plan (SUSMP), City of Carlsbad Drainage Master Plan, and the following additional requirements. The SUSMP, dated April 2003 and as amended, and the City of Carlsbad Drainage Master Plan are hereby incorporated into the LCP by reference. Development must also comply with the requirements of the Jurisdictional Urban Runoff Management Program (JURMP) and the San Diego County Hydrology Manual to the extent that these requirements are not inconsistent with any policies of the LCP.</p> <p><i>All remaining sub-policies are the same as Policy 3-4(c) through (j), and (l) above; refer to Policy 3-4.</i></p>	
<p><u>Policy 6-8: Definition of Visitor-Serving Commercial Uses, and East End of Buena Vista Lagoon.</u> "Visitor-serving commercial uses" shall be defined to include hotels and motels, recreational facilities, restaurants and bars, amusement parks, public parks, horticultural gardens, farmers' markets, retail uses accessory to another use which is the primary use of the site, and other accessory uses customarily catering to hotel and motel guests. The May Co. properties located at the east end of Buena Vista Lagoon (See Exhibit 4.5) will be designated for commercial, not visitor-serving commercial uses.</p>	<p><u>Consistent.</u> The project does not propose to change the site's existing Commercial/Visitor-Serving Overlay. As defined under Policy 6-8, the proposed Chick-fil-A restaurant is an allowed use.</p>
<p><u>Policy 8-4: Archaeological and Paleontological Resources.</u> The environmental impact review process will determine where development will adversely affect archaeological and paleontological resources. A site-specific review should also determine the most appropriate methods for mitigating these effects. Most importantly, the City of Carlsbad should require the implementation of these measures.</p>	<p><u>Consistent.</u> As detailed in <u>Section 4.5, Cultural Resources</u>, and <u>Section 4.7, Geology and Soils</u>, the project would result in a less than significant impact related to archaeological and paleontological resources with mitigation incorporated. In the event that archaeological resources are encountered during project construction, Mitigation Measure CUL-1 would ensure that work in the immediate area of the find is halted until an archaeologist evaluates the find. Additionally, Mitigation Measure GEO-1 would require</p>

Applicable LCP Mello II Policies	Project Consistency Analysis
	construction activities to cease if subsurface paleontological resources are found to allow a qualified paleontologist to evaluate the find and prepare a mitigation program, if needed.
<p>Policy 8-5: Signage. On-premise signs should be designed as an integral part of new development. In addition:</p> <p>(A) Each business shall be entitled to one facade sign.</p> <p>(B) Each shopping complex shall have only one directory sign not to exceed 15 feet in height, including mounding.</p> <p>(C) Monument sign height including mounding shall not exceed 8 feet and shall apply where three (3) or fewer commercial establishments exist on a parcel.</p> <p>(D) Tall freestanding and roof signs shall not be allowed.</p> <p>(E) Off-premise signs and billboards shall not be allowed.</p> <p>(F) Current city regulations shall govern the number of square feet in each permitted sign.</p>	<p>Consistent. The proposed project would have “Chick-fil-A” signs on the east, south, and west building elevations, and a Chick-fil-A logo on the north elevation; refer to <u>Exhibit 2-4</u>. No directory, monument, roof, or off-premise signs or billboards are proposed at this time. Additionally, as detailed in <u>Table 4.11-2</u>, the project would comply with the maximum allowed sign area (one square foot per lineal foot of building frontage) pursuant to the Sign Ordinance. A separate sign permits would be required for the signage.</p>

Source: City of Carlsbad, *City of Carlsbad Local Coastal Program*, August 2017.

In addition to the LCP Amendment, the project would require a Coastal Development Permit (CDP). CDPs are the regulatory mechanism by which proposed developments in the Coastal Zone are brought into compliance with Chapter 3 of the California Coastal Act (CCA). Given that the city has a certified and adopted LCP, permitting authority for CDPs is under the purview of the City of Carlsbad as detailed in Carlsbad Municipal Code Chapter 21.201, *Coastal Development Permit Procedures*. As analyzed in Table 4.11-3, the proposed project would be consistent with all applicable LCP Mello II policies. Therefore, the proposed project would comply with the CCA and meet the requirements under Carlsbad Municipal Code Chapter 21.201, *Coastal Development Permit Procedures*.

Upon approval of the General Plan Amendment, Zone Change, Non-Residential Planned Development Permit, SDP Amendment, CDP, and LCP Amendment, the project would be consistent with the General Plan, Zoning Code, Palomar Place SDP, and LCP. Therefore, the project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

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

a. 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 General Plan EIR, no mineral resources of economic value to the region or residents of the State have been identified in the City. Carlsbad has not been delineated as a locally important mineral resource recovery site. The project site is currently developed with a two-story commercial office building and surface parking lot and has not historically been associated with mineral resources. Therefore, project implementation would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the State. No impact would result in this regard.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. Refer to Response 4.12(a). The project would not 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 would result in this regard.

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4.13 NOISE <i>Would the project result in:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The information presented in this analysis has been supplemented with the *Chick-fil-A – I-5 & Palomar Airport Road Acoustical Analysis Report* prepared for the proposed project by Eilar Associates, Inc., dated August 6, 2020; refer to [Appendix G, Acoustical Analysis Report](#).

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Sound is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3dBA to around 140dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (reduces) at a rate between 3dBA and 4.5dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5dBA per doubling of distance. Noise generated by stationary sources typically attenuates at an approximate rate between 6.0dBA and 7.5dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime

hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55dBA to 65dBA.

Two of the primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receiver and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receiver. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receiver, sound enhancements caused by reflections, and focusing caused by various meteorological conditions.

Regulatory Setting

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) offers guidelines for community noise exposure in the *Noise Effects Handbook – A Desk Reference to Health and Welfare Effects of Noise*. The guidelines consider occupational noise exposure as well as noise exposure in homes. The EPA recognizes an exterior noise level of 55dBA L_{dn} as a general goal to protect the public from hearing loss, activity interference, sleep disturbance, and annoyance. The EPA and other Federal agencies have adopted suggested land use compatibility guidelines that indicate that residential noise exposures of 55dBA L_{dn} to 65dBA L_{dn} are acceptable. However, the EPA notes that these levels are not regulatory goals, but are levels defined by a negotiated scientific consensus, without concern for economic and technological feasibility or the needs and desires of any particular community.

State of California

The State of California Office of Planning and Research *General Plan Noise Element Guidelines* include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The *General Plan Noise Element Guidelines* contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the Community Noise Equivalent Level (CNEL).

CALGreen Code

The State of California requires that commercial developments demonstrate compliance with the requirements of the California Green Building Standards Code (CALGreen). CALGreen states that, if noise level readings of 65dBA L_{eq} or greater are documented at the proposed project site, the project must either (a) incorporate wall and roof/ceiling assemblies with a composite Sound Transmission Class (STC) rating of at least 50 and exterior windows with an STC 40, or (b) provide an acoustical analysis documenting interior noise levels do not exceed 50 dBA in occupied areas during any hour of operation.

Carlsbad General Plan Noise Element

The General Plan Noise Element contains information regarding noise sensitive land uses and noise sources, and defines areas of noise impact for the purpose of developing policies to ensure that Carlsbad residents are protected from excessive noise intrusion.

The General Plan Noise Element contains the following goals and related to noise and land use compatibility.

Goal 5-G.2: Ensure that new development is compatible with the noise environment, by continuing to use potential noise exposure as a criterion in land use planning

Goal 5-G.3: Guide the location and design of transportation facilities, industrial uses and other potential noise generators to minimize the effects of noise on adjacent land uses.

The city adopted the following standards and guidelines for noise levels for specific land use categories. As shown in [Table 4.13-1, *Interior and Exterior Noise Standards*](#), the city requires that outdoor noise levels in commercial developments not exceed 65 CNEL and that interior noise levels remain at 50 CNEL or less during any hour of operation.

Table 4.13-1
Interior and Exterior Noise Standards

Land Use Categories	Outdoor Activity Areas (dBA CNEL)	Interior Spaces (dBA CNEL)
Residential	60	45
Motels, Hotels	65	45
Hospitals, Resident Care Facilities, Schools, Libraries, Museums, Churches, Day Care Facilities	65	45
Playgrounds, Parks, Recreation Uses	65	50
Commercial and Office Uses	65	50
Industrial Uses	70	65

Source: City of Carlsbad, *Carlsbad General Plan Noise Element*, 2015.

City of Carlsbad Noise Guidelines Manual

The purpose of the *City of Carlsbad Noise Guidelines Manual* (Noise Guidelines Manual), dated July 2013, is to provide guidelines and procedures to implement policies outlined in the General Plan Noise Element. As discussed above, the Noise Element establishes general policies and specific noise standards to achieve noise compatibility between land uses. The Noise Guidelines Manual contains the procedures necessary to ensure that the Noise Element policies and standards are consistently and effectively applied during city review of a proposed project. The Noise Guidelines Manual is intended to work in concert with the city's municipal code and the legislative requirements of various State and Federal statutes. The Noise Guidelines Manual has established that interior noise levels of commercial buildings must not exceed 55 dBA.

Carlsbad Municipal Code

The city does not impose noise limits for temporary construction activities at surrounding noise-sensitive property lines. However, construction hours are established in the Carlsbad Municipal Code. Carlsbad Municipal Code Title 8, *Public Peace, Morals and Safety*, provides noise guidelines and standards.

Chapter 8.48, Noise

8.48.10 Construction hours limitations

It shall be unlawful to operate equipment or perform any construction in the erection, demolition, alteration, or repair of any building or structure or the grading or excavation of land during the following hours:

- (A) After 6:00 p.m. on any day, and before 7:00 a.m., Monday through Friday, and before 8:00 a.m. on Saturday;*
- (B) All day on Sunday; and*
- (C) On any Federal holiday.*

Existing Noise Environment

Primary noise sources in the project vicinity include traffic noise along Interstate 5 (I-5), Avenida Encinas, and Palomar Airport Road, and railway noise from the railroad located to the west of the project site.

Roadway Traffic Noise

Pursuant to the TIA, existing and future traffic volumes are based on information from the San Diego Association of Governments (SANDAG) Transportation Data, Series 12 Transportation Forecast Information Center and California Department of Transportation (Caltrans) traffic counts.¹

Interstate 5 (I-5) is a nine-lane, two-way freeway running in a north-south direction to the east of the project site. The posted speed limit is 65 miles per hour (mph). According to 2016 traffic count data, I-5 carries a traffic volume of approximately 198,000 average daily trips (ADT). According to 2017 data, the I-5 southbound ramp near the project site carries approximately 11,600 ADT.

Avenida Encinas is a four-lane, two-way roadway that generally runs in a north-south direction along the western boundary of the project site. The posted speed limit is 40 mph. Traffic counts from 2008 identified traffic volumes of approximately 7,500 ADT.

Palomar Airport Road is a six-lane, two-way roadway that generally runs in an east-west direction to the south of the project site. The posted speed limit is 45 mph. Traffic counts from 2008 identified traffic volumes of approximately 28,800 ADT.²

Vehicle mix information along I-5 was provided by Caltrans. I-5 is expected to carry approximately 1.9 percent medium trucks and 2.9 percent heavy trucks. Vehicle mix information was not available for

¹ It should be noted that although Series 13 of the SANDAG Traffic Model is the most recent, Series 12 was utilized in the noise analysis given that Series 12 incorporates higher traffic projections in most cases and allows for a more conservative analysis of overall noise impacts to the site. All Series 12 values presented in the Acoustical Analysis Report exceed those projected in Series 13 and thus, represent a worst-case analysis of traffic-related noise impacts to the site.

² While more current projections are now available, the 2008 traffic counts taken from SANDAG Series 12 show a more conservative view of existing noise impacts to the site. Additionally, current traffic counts are only used to describe existing conditions in current traffic noise contours. As such, the 2008 counts project a worst-case scenario for current noise projections and updating such data would not alter the conclusions of the impact analysis presented herein.

Avenida Encinas or Palomar Airport Road; however, based on observations made on-site, the surrounding land uses, and professional experience, Avenida Encinas and Palomar Airport Road are assumed to carry approximately two percent medium trucks and one percent heavy trucks.

Without the existing office building or proposed restaurant building to provide shielding, the current traffic noise contours calculated at ground level show that traffic noise impacts to the project site are between 67 and 77 CNEL.

Railway Noise Sources

The noise environment at the project site is influenced by train traffic traveling on a rail line located to the west of the project site. The centerline of the tracks is approximately 630 feet from the western property line of the site. Based on the current schedules of Amtrak and Coaster, approximately 48 passenger trains pass the site each day. Based on a current peak volume of three passenger trains and one freight train passing the site per hour during daytime hours, and one passenger train and one freight train passing the site per hour during nighttime hours, the railroad noise level was calculated to be approximately 58 CNEL at the center of the project site, without considering any shielding provided by intervening structures. With shielding taken into account, the noise impact at the center of the project site is expected to drop to approximately 54 CNEL.

Noise Measurements

An on-site inspection and traffic noise measurement were conducted on February 20, 2019; refer to [Table 4.13-2, *Noise Measurement*](#). The noise measurement was taken west of the project site, approximately 34 feet from the Avenida Encinas center median. The primary source of noise during the measurement was traffic noise; refer to [Appendix G, *Acoustical Analysis Report*](#).

**Table 4.13-2
Noise Measurement**

On-Site Noise Measurement	
Date	Wednesday, February 20, 2019
Time	1:30 p.m. – 1:48 p.m.
Conditions	Cloudy skies, 13 miles per hour wind, low 50 degrees Fahrenheit, high humidity
Measured Noise Level	65.4dBA L _{eq}

Source: Refer to Appendix G, Acoustical Analysis Report.

Significance Criteria

The city requires that commercial developments demonstrate compliance with the requirements of the Noise Element to the General Plan and the Noise Guidelines Manual. The Noise Element requires that interior noise levels do not exceed 50 CNEL and exterior noise levels do not exceed 65 CNEL for commercial spaces. The Noise Guidelines Manual states that interior noise levels of commercial buildings must not exceed 55 dBA. As the Noise Element regulations are more stringent than those of the Noise Guidelines Manual, the Noise Element requirement for interior noise levels not exceeding 50 CNEL and exterior noise levels not exceeding 65 CNEL have been applied to this project.

- a. **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less Than Significant Impact.

Short-Term Construction Impacts

Construction activities are generally temporary and have a short duration, resulting in periodic increases in the ambient noise environment. Construction of the proposed project would occur over a six-month duration, and would include demolition, grading activities, and building construction. Ground-borne noise and other types of construction-related noise impacts typically occur during demolition and grading activities. These construction activities have the potential to generate the highest noise levels. Typical noise levels generated by construction equipment that could be used for the project are shown in Table 4.13-3, Maximum Noise Levels Generated by Typical Construction Equipment. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents (lasting less than one minute) such as dropping large pieces of equipment or the hydraulic movement of machinery lifts.

**Table 4.13-3
Maximum Noise Levels Generated by Typical Construction Equipment**

Type of Equipment	Acoustical Use Factor ¹	L _{max} at 50 Feet (dBA)	L _{max} at 280 Feet (dBA)
Concrete Saw	20	90	75
Crane	16	81	66
Concrete Mixer Truck	40	79	64
Backhoe	40	78	63
Dozer	40	82	67
Excavator	40	81	66
Forklift	40	78	63
Paver	50	77	62
Roller	20	80	65
Tractor	40	84	69
Water Truck	40	80	65
Grader	40	85	70
General Industrial Equipment	50	85	70

Notes:

1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during construction activities.

Source: Federal Highway Administration, *Roadway Construction Noise Model (FHWA-HEP-05-054)*, January 2006.

Construction noise impacts generally occur when construction activities are located immediately adjoining noise sensitive land uses, during noise sensitive times of the day, or when construction activity occurs at the same precise location over an extended period of time (e.g., pile driving in one location for eight to ten hours in a day, or over a duration of several successive days). The closest

sensitive receptors are residential uses approximately 1,500 feet to the northwest of the project site on the opposite side of the railroad tracks. As stated above, the city does not impose noise limits for temporary construction activity at surrounding noise-sensitive property lines although allowed hours of construction are limited. Carlsbad Municipal Code Title 8, *Public Peace, Morals and Safety*, prohibits construction activities after 6:00 p.m. and before 7:00 a.m. Monday through Friday and before 8:00 a.m. on Saturdays. No construction is allowed on Sundays and Federal holidays.

Despite the fact that there are no applicable noise limits, the following “good practice” measures would be implemented by the project applicant/construction contractor as a courtesy to adjacent uses:

1. Turn off equipment when not in use;
2. Limit the use of enunciators or public address systems, except for emergency notifications;
3. Maintain equipment in proper operating condition, and properly secure all loads to prevent rattling and banging;
4. Schedule work to avoid simultaneous construction activities to reduce high construction noise levels;
5. Use equipment with effective mufflers; and
6. Minimize the use of backup alarms.

Implementation of the good practice measures and adherence to the city’s construction hour limits under the Carlsbad Municipal Code would ensure project-related construction noise impacts are reduced to less than significant levels.

Long-Term Operational Impacts

Operational Exterior Noise

Primary noise sources generated by the project is anticipated to be the proposed heating, ventilation, and air conditioning (HVAC) equipment and truck deliveries. HVAC equipment and truck deliveries were evaluated for both daytime and nighttime scenarios. The daytime scenario conservatively assumes that all truck deliveries would arrive in a single hour and HVAC would operate continuously. The nighttime scenario assumes only HVAC operations at a duty cycle of 50 percent, to account for cooler nighttime hours.

Calculations show that mechanical noise impacts at the nearest structure to the south of the project site would be 53dBA and 50dBA for daytime and nighttime hours, respectively; refer to Appendix G. As noise impacts do not exceed the city’s noise standards, no additional project design features or

mitigation measures are deemed necessary to reduce noise impacts from on-site mechanical equipment. On-site operational noise impacts are therefore expected to be less than significant.

Off-Site Mobile Noise

The proposed project would result in additional traffic on adjacent roadways, thereby increasing vehicular noise in the project vicinity. Calculations were performed to determine the approximate change in noise exposure at surrounding receivers as a result of added vehicles on adjacent roadways. Since access to the project site would be provided solely via Avenida Encinas, the change in traffic volumes along this roadway has been assessed for a worst-case analysis.

The project-generated traffic noise is detailed in Table 4.13-4, Anticipated Increase in Project-Related Traffic Noise. The project's impacts have been evaluated to determine whether a direct impact would result. A significant direct impact occurs when project traffic combines with existing traffic and causes a doubling of sound energy, which is an increase of 3dB.

Table 4.13-4
Anticipated Increase in Project-Related Traffic Noise

Road Segment	Mid-Day Peak Traffic Volume		Noise Level Increase (dB)
	No Project	With Project	
Northbound Avenida Encinas	426	497	0.7
Southbound Avenida Encinas	341	409	0.8

Source: Refer to Appendix G, *Acoustical Analysis Report*.

As shown in Table 4.13-4, noise level increases along Avenida Encinas would be less than 3dB during the worst-case mid-day peak hour. For this reason, project-generated traffic noise levels are expected to be less than significant.

On-Site Interior Noise

As depicted in Table 4.13-1, the city requires that interior noise levels in commercial developments do not exceed 50 CNEL during any hour of operation. Similarly, as previously discussed, CALGreen requires that interior noise levels do not exceed 50 dBA in occupied areas during any hour of operation. Table 4.13-5, Worst-Case Interior Combined Noise Levels, depicts the maximum exterior façade noise levels as a result of existing traffic and rail operations, as well as interior noise levels at the project site. As shown in Table 4.13-5, the project's interior noise levels would not exceed 50 dBA CNEL with the proposed exterior wall assembly and standard commercial glazing; refer to Appendix G. Therefore, all interior occupied areas would comply with the city and CALGreen noise requirements.

Table 4.13-5
Worst-Case Interior Combined Noise Levels

Room	Maximum Exterior Façade Impact (CNEL)	Interior Noise Level (CNEL)
Dining/Serving Area	68	45
Kitchen	68	36
Office	74	39
Service Area	74	49

Source: Refer to Appendix G, *Acoustical Analysis Report*.

b. Generation of excessive ground borne vibration or ground borne noise levels?

Less Than Significant Impact. Project construction can generate varying degrees of ground-borne vibration, depending on the construction procedure and the equipment used. Operation of equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibrations from construction activities rarely reach levels that damage structures.

The paving stage of construction has the potential to generate the highest vibration levels of any phase of construction, as paving activities would take place closest to residential receivers and may consist of the use of a vibratory roller. According to the Federal Transit Administration *Transit Noise and Vibration Assessment Manual*, a vibratory roller generates a peak particle velocity (PPV) of approximately 0.210 inches per second at a distance of 25 feet from equipment. The evaluation of an impact's significance can be determined by reviewing both the likelihood of annoyance to individuals as well as the potential for damage to existing structures. According to the Caltrans *Transportation and Construction Vibration Guidance Manual*, the threshold for damage to modern residential structures is a PPV of 0.5 inches per second. Annoyance is assessed based on levels of perception, with a PPV of 0.01 inches per second being considered "barely perceptible," 0.04 inches per second as "distinctly perceptible," 0.1 inches per second as "strongly perceptible," and 0.4 inches per second as "severe."

The closest building that may be impacted by vibration during construction (anticipated roller activities) is In-N-Out, located approximately 50 feet from the southern site boundary. At this distance, the PPV would be approximately 0.074 inches per second. This level of vibration falls well below the building damage PPV criteria of 0.5 inches per second. The impact falls between the "distinctly perceptible" and "strongly perceptible" PPV criteria for annoyance; however, vibration would be reduced to "distinctly perceptible" levels by the time the roller-generated vibration is located at a distance of 75 feet from receivers, and "barely perceptible" at 195 feet from receivers. As construction vibration is not anticipated to cause damage to off-site buildings and would only approach the threshold of "strongly perceptible" vibration for a short period of time when work is performed near the southern boundary of the property, temporary vibrations generated during project construction of the project would not be excessive and are therefore less than significant.

- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such 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. No private airstrips are located in the site vicinity and the closest airport to the project site is the McClellan-Palomar Airport approximately two miles to the east. According to the San Diego County Airport Land Use Commission's *McClellan-Palomar Airport Land Use Compatibility Plan*, the project site is not located within the McClellan-Palomar Airport noise compatibility contours.³ Therefore, the project would not expose people working on-site to excessive noise levels associated with aircraft. No impacts would occur in this regard.

³ San Diego County Airport Land Use Commission, *McClellan-Palomar Airport Land Use Compatibility Plan*, amended March 4, 2010.

4.14 POPULATION AND HOUSING <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Less Than Significant Impact. A project could induce population growth in an area either directly, through the development of new residences or businesses, or indirectly, through the extension of roads or other infrastructure. As described in Section 2.0, Project Description, the project involves the construction of a new Chick-fil-A restaurant currently developed with a two-story office building. Given that no residential land use is proposed, implementation of the proposed project is not anticipated to result in a substantial increase in population compared to existing conditions.

The commercial (office) building is currently operational and has three tenants and approximately 25 employees. Upon buildout of the project, the proposed Chick-fil-A restaurant would employ approximately 60 to 80 full- and/or part-time employees with anywhere from 10 to 15 employees on shift at any one time. Therefore, the project would result in a net increase of up to 55 employees at the project site. Although an uncertainty exists regarding the number of new employees, who may choose to relocate to the project area, a conservative analysis of impacts associated with indirect population growth can be provided. For analysis purposes, it is assumed that 100 percent of the project's net full-time employees would relocate to the project area (i.e., City of Carlsbad). Based on a "worst-case" scenario of 55 net full-time employees relocating to Carlsbad and the city's average household size of 2.62¹, project implementation would result in a potential population increase of approximately 145 persons in Carlsbad. This potential population growth generated by the project would increase Carlsbad's 2019 population of 115,241² persons to 115,386 persons, constituting an increase of 0.13 percent.

Given the nominal population increase, implementation of the proposed project would not induce substantial unplanned population growth within Carlsbad, either directly or indirectly, resulting in less than significant impacts.

¹ State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2019, with 2010 Benchmark*, May 1, 2019.
² Ibid.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project site is currently developed with a two-story office building. No housing exists on-site. Therefore, project implementation would not displace any existing people or housing. No impact would result in this regard.

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

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

i. Fire protection?

Less Than Significant Impact. The City of Carlsbad Fire Department provides 24-hour fire, rescue, and emergency medical services to the city, including the project site. The Fire Department also includes a Fire Prevention Division and citywide Emergency Preparedness, including the Community Emergency Response Team and Hazard Mitigation Programs.¹ Six fire stations serve the City of Carlsbad. The closest fire station to the project site is Fire Station 4, which is located approximately 1.75 miles southeast of the project site at 6885 Batiquitos Drive. Fire Station 4 is currently staffed with a captain, engineer, and a firefighter/paramedic and includes one fire engine and a heavy rescue unit with a trench rescue trailer.²

The project would result in the construction of a new Chick-fil-A restaurant on a site that is currently developed with a two-story commercial (office) building. As discussed in Section 4.14, Population and Housing, implementation of the proposed project is not anticipated to result in a substantial increase in population compared to existing conditions. As a result,

¹ City of Carlsbad, Fire Department, <https://www.carlsbadca.gov/services/depts/fire/default.asp>, accessed July 30, 2019.

² City of Carlsbad, *City Facilities, Locations and Directions*, <https://ccmaps.carlsbadca.gov/facilities/index.html>, accessed July 30, 2019.

project implementation would not require the construction of new or physically altered fire facilities and is not anticipated to result in an increase in service calls. Nonetheless, the project would be subject to Carlsbad Municipal Code Title 17, *Fire Protection*, which adopts by reference the *2016 Edition of the California Fire Code* (Fire Code), which includes site access requirements and fire safety precautions. As currently designed, the proposed project would include features such as fire-resistant construction materials, fire alarm/sprinkler systems, hydrants, and adequate fire access for emergency vehicles. The Fire Prevention Division would provide plan checks and inspections to verify the project is designed pursuant to the Fire Code.³ In addition, the project's demands on fire protection services would be offset through collection of the city General Fund revenues to ensure adequate facilities and staffing. Upon compliance with Carlsbad Municipal Code Title 17, Fire Prevention Division review, and collection of city General Fund revenues, impacts concerning fire protection services would be less than significant.

ii. Police protection?

Less Than Significant Impact. The Carlsbad Police Department provides law enforcement services to the city, including the project site. The Carlsbad Police Department headquarters is located at the Carlsbad Public Safety and Service Center, which is located approximately 3.53 miles east of the project site at 2560 Orion Way. According to the General Plan EIR, the patrol division is the core of the Police Department's law enforcement services, responding to more than 90,000 calls for service annually.

Implementation of the proposed project is not anticipated to result in a substantial increase in population compared to existing conditions. As a result, project implementation would not require the construction of new or physically altered police facilities and is not anticipated to result in an increase in service calls. Further, the project's demands on police protection services would be offset through collection of the city General Fund revenues to ensure adequate facilities and staffing. Collection of General Fund revenue would ensure impacts concerning police protection services would be less than significant.

iii. Schools?

Less Than Significant Impact. The City of Carlsbad is served by the Carlsbad Unified School District, the Encinitas Union School District, the San Dieguito Union High School District, and the San Marcos Unified School District.⁴ However, the proposed project would involve the construction of a new Chick-fil-A restaurant on a site that is currently developed with a two-story commercial (office) building, and would not result in an increase in population on-site, or indirectly result in a substantial increase in the number of students within the project area; refer to Section 4.14. Nonetheless, pursuant to Government Code Section 65996, the project's demands on school services would be fully offset through collection of school fees imposed through the Education Code. Less than significant impacts would result in this regard.

³ City of Carlsbad, *Fire Prevention*, <https://www.carlsbadca.gov/services/depts/fire/prevention/default.asp>, accessed July 30, 2019.

⁴ City of Carlsbad, *Schools*, <https://www.carlsbadca.gov/residents/schools/default.asp>, accessed July 30, 2019.

iv. Parks?

Less Than Significant Impact. The nearest public park to the project site is the Canon Park, located approximately 0.73-mile northwest of the project site at 4950 Carlsbad Boulevard.⁵ The project would involve the construction of a new Chick-fil-A restaurant on a site that is currently developed with a two-story commercial (office) building, which would not substantially increase the population in the project area. The proposed project is not anticipated to result indirectly in a substantial increase in demands for use of park land. Thus, impacts in this regard would be less than significant.

v. Other public facilities?

Less Than Significant Impact. Other public services that could potentially be impacted by the proposed project include public libraries. The project site is served by the Carlsbad Library System, which operates three facilities: the Carlsbad city Library (also known as Dove Library), Georgina Cole Library, and Carlsbad city Library Learning Center. Implementation of the proposed project would not result in a significant increase in the use of the Carlsbad Library System. Thus, impacts in this regard would be less than significant.

⁵ City of Carlsbad, *City Facilities, Locations and Directions*, <https://ccmaps.carlsbadca.gov/facilities/index.html>, accessed July 30, 2019.

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

a. 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. Refer to Response 4.15(a)(iv).

b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities. No impacts would occur in this regard.

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4.17 TRANSPORTATION	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<i>Would the project:</i>				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines Sections 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This section is based upon the *Vehicle Miles Traveled Analysis* (VMT Analysis) prepared by Linscott, Law and Greenspan Engineers (LLG), dated October 27, 2020; refer to [Appendix H, *Vehicle Miles Traveled Analysis*](#).

EXISTING CONDITIONS

Existing Street Network

The following is a description of the major roadways in the vicinity of the project.

- **Avenida Encinas**. Avenida Encinas is classified as a Neighborhood Connector Street in the Mobility Element. Within the study area, Avenida Encinas is currently constructed as a two-lane divided roadway with a combination of raised and painted center median with left-turn pockets provided at full access driveways, the result of a recent “road-diet” project initiated by the city. The posted speed limit is 40 miles per hour (mph).
- **Palomar Airport Road**. Palomar Airport Road is classified as an Arterial Street in the Mobility Element and is currently constructed as a two-lane undivided roadway from Carlsbad Boulevard to Avenida Encinas. The posted speed limit is 35 mph. Palomar Airport Road widens as it continues east through the Interstate 5 (I-5) interchange and transitions to a six-lane divided roadway east of I-5. East of Paseo Del Norte, the speed limit is 45 mph and Class II bicycle lanes are provided. Curbside parking is not permitted on any portion of Palomar Airport Road.
- **Cannon Road**. Cannon Road is classified as an Arterial Street in the Mobility Element. Within the study area, Cannon Road is currently constructed as a four-lane roadway with a posted speed limit of 35 mph. Curbside parking is not permitted.

Existing Transit Facilities

There are no transit services within 0.25-mile walking distance of the project site. Bus stops for North County Transit District (NCTD) Routes 444 and 445 are located within 0.5-mile of the project site, and bus stops for NCTD Route 101 are slightly more than 0.5-mile from the project.

Route 444 provides limited weekday-only service and connects to the Poinsettia COASTER Station via Faraday Avenue and Rutherford Road. The nearest stop to the project site is on Avenida Encinas south of Palomar Airport Road, approximately 0.4-mile from the site.

Route 445 provides limited weekday-only service and connects to the Poinsettia COASTER Station to Palomar College via Avenida Encinas, Palomar Airport Road, and Las Posas Road. The nearest stop to the project site is on Avenida Encinas south of Palomar Airport Road, approximately 0.4-mile from the site.

Route 101 provides service between Oceanside and University of California, San Diego, University Towne Center, and the VA Medical Center via Highway 101. Service is provided seven days a week between approximately 5:00 a.m. and 11:00 p.m. and generally provides approximately 30-minute headways, with hourly headways in the later evening hours. The nearest stop to the project site is located at Carlsbad Boulevard and Solamar Drive slightly more than 0.5-mile from the site.

Existing Bicycle Facilities

The following is a description of the bicycle facilities that occur on the three major roadways in the vicinity of the project.

- Avenida Encinas. Buffered bicycle lanes are provided in both directions of travel along Avenida Encinas.
- Palomar Airport Road. A bicycle route is marked by painted sharrows on the road west of Avenida Encinas. Outside of the study area east of cross-street Paseo Del Norte, Class II bicycle lanes are provided along Palomar Airport Road east of the I-5 southbound off-ramp.
- Cannon Road. Class II bicycle lanes are provided in both directions of Cannon Road in the project vicinity.

Overall, all three study area roadways are marked with Class II bicycle lanes in the city's *Carlsbad Bikeway Master Plan*, dated December 2007.

Existing Pedestrian Facilities

The following is a description of the pedestrian facilities that occur within the project vicinity.

- Avenida Encinas. Avenida Encinas is classified as a Neighborhood Connector Street in the Mobility Element. Sidewalks are provided along the southbound direction (west side) of Avenida Encinas from Cannon Road to Palomar Airport Road. Existing sidewalks are provided along the northbound direction (east side) of Avenida Encinas for approximately 1,500 feet south of Cannon Road, and then again from the project site south to Palomar Airport Road.
- Palomar Airport Road. Sidewalks are provided in both directions of Palomar Airport Road in the project vicinity.
- Cannon Road. Sidewalks are provided in both directions of the roadway in the project vicinity.

a. *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less Than Significant Impact.

Pursuant to SB 743 and CEQA Guidelines Section 15064.3 subdivision (b), Vehicle Miles Traveled (VMT) is the program for measuring and addressing circulation system facilities under CEQA. Analysis of Level of Service (LOS) is no longer the metric for determining transportation environmental impacts. Consistency with other city plans and policies, including but not limited to Growth Management related to circulation and General Plan Mobility Element policies will be analyzed as part of the project's analysis and recommendations in the project staff report. A less than significant VMT impact would ensure that the proposed project does not create a significant environmental impact related to the circulation system. Transit, bicycle and pedestrian facilities all exist, and are proposed to remain, adjacent to the project site. As discussed in Impact 4.17(b), the project is a local serving retail use, which tends to attract trips from adjacent areas that would have otherwise been made to more distant retail locations. As such, impacts in this regard would be less than significant.

b. *Conflict or be inconsistent with CEQA Guidelines Sections 15064.3, subdivision (b)?*

Less Than Significant Impact.

In September 2013, the Governor's Office of Planning and Research (OPR) signed Senate Bill (SB) 743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. These changes include the elimination of auto delay, LOS, and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The guidance identifies VMT as the most appropriate CEQA transportation metric, along with the elimination of auto delay and LOS for CEQA purposes. The justification for this paradigm shift is that auto delay/LOS impacts lead to improvements that increase roadway capacity and therefore induce more traffic and greenhouse gas emissions.

In December 2018, after over five years of stakeholder-driven development, the California Natural Resource Agency certified and adopted the CEQA statute. Per the CEQA statute, a lead agency may

elect to be governed by the VMT guidelines immediately. However, beginning July 1, 2020, the VMT guidelines shall apply Statewide.

The city recently adopted thresholds of significance and screening criteria for vehicle miles traveled (VMT) evaluation on June 16, 2020. The thresholds of significance and screening criteria were contained in the city's *Vehicle Miles Traveled (VMT) Analysis Guidelines* (VMT Guidelines), dated June 2, 2020, which were utilized in the VMT Analysis. The methodology in the VMT Guidelines are consistent with OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory), dated December 2018, and the Institute of Transportation Engineers' (ITE) *San Diego Regional Guidelines*, dated May 2019.

VMT Analysis Thresholds

The VMT thresholds of significance are defined in Table 4.17-1, VMT Analysis Thresholds of Significance in accordance with the city's VMT Guidelines.

Table 4.17-1
VMT Analysis Thresholds of Significance

Land Use/Project Type	Thresholds of Significance
Residential Project	A significant transportation impact occurs if the project VMT per capita exceeds a level 15 percent below the citywide average city VMT per capita.
Office Project	A significant transportation impact occurs if the project VMT per employee exceeds a level 15 percent below regional average VMT per employee.
Regional Retail Project	A significant transportation impact occurs if the project results in a net increase in VMT.
Industrial Employment	A significant transportation impact occurs if the project VMT per employee exceeds the regional average VMT per employee.
Transportation Projects	Significant transportation impact occurs if the project results in a net increase in VMT.

Source: Linscott, Law and Greenspan, Engineers, *Vehicle Miles Traveled Analysis*, October 27, 2020; refer to Appendix H.

VMT Analysis

VMT is defined as the amount and distance of automobile travel attributable to a project per CEQA Guidelines Section 15064.3. VMT is a measure of the use and efficiency of the transportation network as well land uses in a region. VMTs are calculated based on individual vehicle trips generated and their associated trip lengths. VMT accounts for two-way (roundtrip) travel and is estimated for a typical weekday for the purposes of measuring transportation impacts.

As stated, the city recently adopted thresholds of significance and screening criteria for VMT evaluation. The city's VMT Guidelines, consistent with OPR's Technical Advisory and ITE's *San Diego Regional Guidelines*, are utilized in this analysis.

The project was reviewed against the city's screening criteria to determine if VMT analysis is necessary. The VMT Guidelines identify the following six cases where a development project would be screened out of VMT analysis based on a presumption that its VMT effects would be less than significant:

1. Small Projects: Projects that generate less than 110 average daily trips (ADT);
2. Projects Located Near Transit: Projects located within one-half mile of the Carlsbad Village or Carlsbad Poinsettia Coaster Stations, or within one-half mile of the Plaza Camino Real Transit Station;
3. Local-Serving Retail and Similar Land Uses: Retail development less than 50,000 square feet, or larger than 50,000 square feet with a market study showing it serves primarily local uses;
4. Local Serving Public Facilities: Government, parks, and public schools uses, etc.;
5. Affordable Housing Projects: Residential projects that are 100 percent affordable and located within infill areas;
6. Redevelopment Projects That Result in a Net Reduction in VMT: Projects that replace an existing development with a more efficient land use; and

The 3,427 square foot-project qualifies as a local-serving retail development less than 50,000 square feet. Per OPR's Technical Advisory, and as reiterated in the city's VMT guidelines, "local-serving retail uses are presumed to have a less than significant impact on VMT since they tend to attract trips from adjacent areas that would have otherwise been made to more distant retail locations." As such, impacts in this regard are less than significant.

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

Less Than Significant Impact.

Site Access

The project site is currently served by two unsignalized driveways north and south of the site, referred to as the North Project Driveway and the Main Project Driveway, respectively. The nearest existing protected pedestrian crossing is located over 1,000 feet away from the proposed traffic signal (refer to Section 2.4, Project Characteristics), on the south side of the Palomar Airport Road and Avenida Encinas intersection, and would require multiple crossings of Palomar Airport Road, as pedestrian crossing on the north side of the intersection is prohibited. This location has been identified by both city staff and the community at-large as a desirable location for an enhanced pedestrian crossing. The project would be conditioned to require the installation of a new signal at the Main Project Driveway and a dedicated westbound left-turn lane exiting the project site. The proposed traffic signal would provide a protected pedestrian crossing connecting the existing office and business park uses on the west side of Avenida Encinas with the restaurants and eating establishments, including the proposed project, on the east side. "Keep Clear" pavement legends would be installed adjacent to the first internal curb-cut at the Main Project Driveway. As such, the implementation of the project condition

to construct a new traffic signal and pedestrian crossings at the Main Project Driveway, potential hazards impacts due to a geometric design feature would be at less than significant levels.

On-Site Circulation

Access to and from the Main Project Driveway to the project's primary internal drive-aisle and parking area would continue to be served by two existing internal median breaks, approximately 50 feet and 100 feet east of Avenida Encinas. In addition to the installation of a traffic signal, "Keep Clear" pavement legends be installed adjacent to the first internal curb-cut. The pavement legends would maintain access from Avenida Encinas to the primary drive-aisle along the proposed building's west side, which would prevent westbound (outbound) queueing vehicles at the Main Project Driveway from blocking inbound vehicles' ability to enter the site and turn left (north) into the primary internal drive aisle. Similar pavement legend markings are already provided elsewhere in the commercial center to the south and east to maintain internal access from being blocked by the In-N-Out drive-thru queue.

Overall, project site access and on-site circulation would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts in this regard would be less than significant.

d. Result in inadequate emergency access?

Less Than Significant Impact With Mitigation Incorporated. As discussed in Response 4.17(c), the project site is currently served by two unsignalized driveways north and south of the site. The project would be conditioned to install a traffic signal and provide a dedicated westbound left-turn lane at the Avenida Encinas and Main Project Driveway intersection, which would provide improved ingress and egress access to the project site. As a result, temporary partial lane closure would be required during construction. During periods when partial road closure is required, the Applicant would be required to implement a traffic management plan (TMP) to maintain emergency access during the construction process (Mitigation Measure TRA-1). The TMP would include potential measures such as construction signage, limitations on timing for lane closures to avoid peak hours, temporary striping plans, and the need for a construction flagperson to direct traffic during heavy equipment use, among others. The TMP would ensure emergency access is maintained during short-term construction activities. As a result, with implementation of Mitigation Measure TRA-1, impacts would be reduced to less than significant levels in this regard.

Mitigation Measures:

TRA-1 Prior to the initiation of construction, the project Applicant shall prepare a Traffic Management Plan (TMP) for approval by the City of Carlsbad Traffic Engineer. The TMP shall include measures such as construction signage, limitations on timing for lane closures to avoid peak hours, temporary striping plans, and the need for a construction flagperson to direct traffic during heavy equipment use. The TMP shall specify that one direction of travel in each direction must always be maintained for Avenida Encinas throughout project construction. The TMP shall be incorporated into project specifications for verification prior to final plan approval.

4.18 TRIBAL CULTURAL RESOURCES <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to “begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project.” Section 21074 of AB 52 also defines a new category of resources under CEQA called “tribal cultural resources.” Tribal cultural resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to tribal cultural resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this environmental document.

It is acknowledged that the city initiated the request for tribal consultation process for the purposes of AB 52 for the proposed project on February 11, 2020; the tribes had 30 days to respond to the city’s request

for consultation. Those tribes that have requested to be listed on the city's notification list for the purposes of AB 52 were notified in writing via certified mail. In addition, tribal consultation letters under Senate Bill 18 (SB 18) were sent out by the City of Carlsbad on August 11, 2019. As part of this process, the city provided notification to each of these listed tribes the opportunity to consult with the city regarding the proposed project. Consultation request letters for the project were received from the Rincon Band of Luiseño Indians, dated August 14, 2019, the Viejas Band of Kumeyaay Indians, dated August 15, 2019, and the San Luis Rey Band of Mission Indians, dated March 5, 2020. On August 19, 2019, the Agua Caliente Band of Cahuilla Indians indicated that the project is not located within the tribe's Traditional Use area and declined consultation for the purposes of AB 52. On September 18, 2020, the Rincon Band of Luiseño Indians confirmed receipt of the draft mitigation measure proposed to be included in this Initial Study and indicated they had no additional comments at this time. The city consulted with the San Luis Rey Band of Mission Indians and a verbal agreement was reached on the proposed mitigation measure (Mitigation Measure TCR-1) on January 7, 2021. As such, the city's SB 18 and AB 52 consultations have been concluded. Refer to Response 4.18(b) regarding consideration of information provided as part of the consultation process and an analysis of the potential for tribal cultural resources.

a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

No Impact. Based on the consultation conducted by the city and responses from the above-referenced Native American tribes, the city has determined there are no known tribal cultural resources on the project site that are listed in or eligible for listing in the California Register of Historical Resources. There is no local register of historical resources. Also, refer to Response 4.5(a).

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation Incorporated. As a result of the SB 18 and AB 52 consultations, the San Luis Rey Band of Mission Indians and Rincon Band of Luiseño Indians indicated that the project site is located within the vicinity of known tribal cultural resources. However, no specific known tribal cultural resources were identified at the project site. As such, the project site is considered sensitive for unknown tribal cultural resources. To avoid impacting or destroying unknown tribal cultural resources that may be inadvertently unearthed during the project's ground disturbing activities, Mitigation Measure TCR-1 would ensure that a qualified archaeologist (Mitigation Measure CUL-1) and Tribal monitor/consultant who is approved by the San Luis Rey Band of Mission Indians or other Traditionally and Culturally Affiliated Luiseño tribe are present during site disturbing activities. If evidence of potential subsurface tribal cultural materials is found during any phase of site disturbance/construction and the qualified

archaeologist/Native American Monitor determines that the find is prehistoric or includes Native American materials, Mitigation Measure TCR-1 would ensure affiliated Native American groups are invited to contribute to the assessment and recovery of the found resource. With implementation of Mitigation Measure TCR-1, impacts would be reduced to less than significant levels.

Mitigation Measures:

- TCR-1 Prior to the commencement of any ground-disturbing activities, including but not limited to exploratory geotechnical investigations/borings for contractor bidding purposes, the project developer shall enter into a Pre-Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with the San Luis Rey Band of Mission Indians or other Traditionally and Culturally Affiliated Luiseño tribe ("TCA Tribe"). This agreement will contain provisions to address the proper treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement shall outline the roles and powers of the Luiseño Native American monitors and the archaeologist (identified per Mitigation Measure CUL-1), and may include the following provisions. A copy of said archaeological contract and Pre-Excavation Agreement shall be provided to the City of Carlsbad prior to the issuance of a grading permit.
- a. A Luiseño Native American monitor, associated with a TCA Tribe, shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not be limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.
 - b. Any and all uncovered artifacts of Luiseño Native American cultural importance shall be treated with dignity and respect in accordance with the TCA Tribe's cultural and spiritual traditions and returned to the San Luis Rey Band of Mission Indians for reburial on-site within an appropriate location protected by open space or easement, etc., where the cultural items will not be disturbed in the future, or shall be returned to the Most Likely Descendant, whichever is most applicable, and shall not be curated, unless ordered to do so by a federal agency or a court of competent jurisdiction, as provided in the City of Carlsbad Tribal, Cultural and Paleontological Resources Guidelines (TCPRG) and in acknowledgment of the City of Carlsbad's special long-standing relationship with the San Luis Rey Band.
 - c. The Luiseño Native American monitor shall be present at the project's preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as to consult with the archaeologist concerning the proposed archaeologist techniques and/or strategies for the project.
 - d. Luiseño Native American monitors and archaeological monitors shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural

resources are discovered during construction, all earth-moving activity within and around the immediate discovery area must be diverted until the Luiseño Native American monitor and the archaeologist can assess the nature and significance of the find.

- e. If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground-disturbing activities for this project, the San Luis Rey Band of Mission Indians (in accordance with TCPRG Section 8.2.2.4) and any TCA Tribes that consulted with the city under AB 52 for this project shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal cultural resources. If, however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan, or other culturally-appropriate mitigation measure, is authorized by the City of Carlsbad as the lead agency, the San Luis Rey Band of Mission Indians (in accordance with TCPRG Section 8.2.2.4) and the TCA Tribes that consulted with the city under AB 52 for this project shall be consulted regarding the drafting and finalization of any such recovery plan.
- f. When tribal cultural resources are discovered during the project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. If the archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor shall follow the procedures in TCR-1b.
- g. If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5(b) states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the "Most Likely Descendant" about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours, and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.
- h. In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. Commercial sources of fill material are already permitted as appropriate and will be culturally sterile. If fill material is to be utilized and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño

Native American monitor that such fill material does not contain tribal cultural resources.

- i. No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written permission of the consulting tribes.
- j. Prior to the approval of final inspection, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Carlsbad for approval. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for general public distribution; however, a copy of the final monitoring report shall be provided to each consulting tribe upon request to the Planning Division.

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4.19 UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
<i>Would the project:</i>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which services or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with Federal, State and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Utilities correspondence conducted for the proposed project that supplements this analysis is provided in [Appendix I, *Utilities Correspondence*](#).

a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental impacts?

Less Than Significant Impact.

Water

The project site is located within the service area of Carlsbad Municipal Water District (CMWD) and would receive water services from CMWD for domestic and irrigation purposes. Existing on-site laterals would be removed and new water service connections would be made from the project site to an existing 10-inch water main aligned within Avenida Encinas right-of-way. The proposed project's irrigation system would be designed to accommodate future recycled water services from CMWD. The project would demolish the existing on-site lateral connections and construct new water connections, the construction of which would not cause significant environmental effects. No other

new or expanded water infrastructure would be necessary; refer to [Appendix I](#).¹ Payment of CMWD development fees and connection fees would be required. Less than significant impacts would occur in this regard.

Wastewater Treatment

CMWD would provide the project's sewer services. The project would demolish the existing on-site lateral connections and construct new sewer system connections from the project site to an existing trunk sewer within Avenida Encinas right-of-way. As a result, the project would construct new wastewater connections, the construction of which would not cause significant environmental effects. No other new or expanded wastewater infrastructure would be necessary; refer to [Appendix I](#).² Payment of CMWD development fees and connection fees would be required. Less than significant impacts would occur in this regard.

Stormwater Drainage

The project would demolish the existing on-site stormwater drainage system and construct a new stormwater collection system on-site. On-site drainage would be collected and directed to two proposed on-site biofiltration basins (Basin No. 1 and Basin No. 2); refer to [Exhibit 2-6, Conceptual Drainage Plan](#). The bio-filtration basins would be connected to the existing storm drain in Avenida Encinas (similar to the existing condition). No other new stormwater drainage facilities or expansion of existing facilities would be required. Less than significant impacts would occur in this regard.

Dry Utilities

Electricity and natural gas services at the project site are currently provided by San Diego Gas and Electric and telecommunication services are provided by AT&T. The project would demolish the existing on-site dry utility connections and construct new dry utility connections, the construction of which would not cause significant environmental effects. The project's potential environmental effects for construction are analyzed throughout this Initial Study. Construction of the project's dry utilities would be subject to compliance with all applicable local, State, and Federal laws, ordinances, and regulations, as well as the specific mitigation measures throughout this Initial Study. Compliance with the relevant laws, ordinances, and regulations, as well as the specified mitigation measures, would ensure the project's construction-related environmental impacts are reduced to less than significant levels.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. As stated in Response 4.19(a), CMWD provided a "Will Serve" letter for water use at the project site; refer to [Appendix I](#). Thus, CMWD has sufficient water supplies available to serve the project. Impacts in this regard would be less than significant.

¹ Written Communication: Smith, Terry, Engineering Manager/District Engineer, Carlsbad Municipal Water District, May 7, 2019.
² Ibid.

- c. Result in a determination by the wastewater treatment provider which services or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Less Than Significant Impact. As indicated in Response 4.19(a), project implementation would not require the relocation or construction of new or expanded wastewater treatment facilities. Additionally, CMWD provided a "Will Serve" letter indicating that sufficient wastewater treatment capacity is available; refer to Appendix I. As a result, the project's wastewater demand, in addition to CMWD's existing commitments, would not exceed capacity. A less than significant impact would occur in this regard.

- d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

Less Than Significant Impact. Coast Waste Management provides solid waste collection for the city, including the project site, and disposes over 99 percent of the city's solid waste at the four landfills identified in Table 4.19-1, Landfills Serving the City.³

**Table 4.19-1
Landfills Serving the City**

Name/Location	Daily Permitted Capacity (tons per day [tpd])	Maximum Permitted Capacity	Remaining Capacity	Percent Remaining Capacity
El Sobrante Landfill, Corona	16,054 tpd	209,910,000 cy	143,977,170 cy	68.6%
Otay Landfill, Chula Vista	6,700 tpd	61,154,000 cy	21,194,008 cy	34.7%
Sycamore Landfill, San Diego	5,000 tpd	147,908,000 cy	113,972,637 cy	77.1%
West Miramar Sanitary Landfill, San Diego	8,000 tpd	87,760,000 cy	11,080,871 cy	12.6%

cy = cubic yards

Sources:

CalRecycle, *SWIS Facility/Site Activity Details: El Sobrante Landfill (33-AA-0217)*,
<https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402>, accessed August 17, 2020.
CalRecycle, *SWIS Facility/Site Activity Details: Otay Landfill (37-AA-0010)*,
<https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1790?siteID=2863>, accessed August 17, 2020.
CalRecycle, *SWIS Facility/Site Activity Details: Sycamore Landfill (37-AA-0023)*,
<https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1798?siteID=2871>, accessed August 17, 2020.
CalRecycle, *SWIS Facility/Site Activity Details: West Miramar Sanitary Landfill (37-AA-0020)*,
<https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1795?siteID=2868>, accessed August 17, 2020.

Construction

The proposed project would demolish an existing two-story commercial (office) building to construct a new Chick-fil-A restaurant. Demolition materials are not anticipated to affect the capacity of local

³ CalRecycle, *Jurisdiction Disposal by Facility, With Reported Alternative Daily Cover (ADC) and Alternative Intermediate Cover (AIC), Disposal during 2018 for Carlsbad*,
<https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>, accessed August 17, 2020.

or regional landfills. Further, all construction activities would be subject to conformance with relevant Federal, State, and local requirements related to solid waste disposal. Specifically, the project would be required to demonstrate compliance with the California Integrated Waste Management Act of 1989 (AB 939), which requires all California cities to “reduce, recycle, and re-use solid waste generated in the State to the maximum extent feasible.” The California Integrated Waste Management Act of 1989 requires that at least 50 percent of waste produced is recycled, reduced, or composted. The project would also be required to demonstrate compliance with the 2016 (or most recent) Green Building Code, which includes design and construction measures that act to reduce construction-related waste through material conservation measures and other construction-related efficiency measures. Compliance with these programs would ensure the project’s construction-related solid waste impacts would be less than significant.

Operation

Based on an office solid waste generation rate of 6 pounds per 1,000 square feet per day, the existing 10,977-square foot commercial (office) building generates approximately 65.8 pounds per day (ppd) of solid waste.⁴ In comparison, based on the project’s greenhouse gas modeling, project operations are expected to generate approximately 10.21 tons of waste per year, or approximately 55.9 ppd; refer to Appendix D, *Greenhouse Gas Analysis*. Therefore, the project would result in a net reduction of 9.9 ppd of solid waste compared to existing conditions. Additionally, Coast Waste Management provided a “Will Serve” letter for the proposed project which acknowledges that Coast Waste Management has sufficient capacity available to serve the project; refer to Appendix I. As the project would result in a reduction of solid waste generation compared to existing conditions, impacts in this regard would be less than significant.

e. Comply with Federal, State and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Refer to Response 4.19(d) above. The proposed project would comply with all Federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and the 2016 (or most recent) Green Building Code. Less than significant impacts would occur in this regard.

⁴ CalRecycle, *Estimated Solid Waste Generation Rates*, <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>, accessed August 17, 2020.

4.20 WILDFIRE <i>If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. According to the California Department of Forestry and Fire Protection (CAL FIRE), *San Diego County Very High Fire Hazard Severity Zones in SRA Map*, the project site is not located in or near a State responsibility area nor is the project site designated as a very high fire severity zone.¹ As indicated in Response 4.9(g), the project site and surrounding land uses are developed with urban land uses, and do not present a wildland fire hazard. Therefore, no impact would occur in this regard.

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. Refer to Response 4.20(a)

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. Refer to Response 4.20(a).

¹ California Department of Forestry and Fire Protection, *San Diego County Fire Hazard Severity Zones in SRA*, November 7, 2007, https://frap.fire.ca.gov/media/6223/fhszs_map37.pdf, accessed July 22, 2019.

- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

No Impact. Refer to Response 4.20(a).

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

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

Less Than Significant Impact With Mitigation Incorporated. As concluded in Section 4.4, *Biological Resources*, the project site is heavily disturbed and is located within an urbanized area of the city outside of designated preserve areas. Based on the site’s condition, no sensitive plant or animal species would be present. Thus, the project would have no impacts on sensitive plant or animal species. As indicated in Section 4.5, *Cultural Resources*, and Section 4.18, *Tribal Cultural Resources*, project implementation is not anticipated to impact cultural or tribal cultural resources based on the site’s disturbed condition. However, in the unlikely event that buried archaeological and/or tribal cultural resources are encountered during ground disturbance activities, Mitigation Measures CUL-1 and TCR-1 would require appropriate monitoring of project construction efforts. Should potential resources be uncovered, construction efforts would halt until an archaeologist/tribal monitor examines the site, identifies the significance of the find, and recommends a course of action. In the unlikely event that paleontological resources are encountered during project construction, Mitigation Measures GEO-1 and GEO-2 would require preparation of a Paleontological Mitigation and Monitoring Plan. In the event that potential resources are uncovered, all project construction activities would be required to halt until a paleontologist identifies the paleontological significance of the find and recommends a course of action. Therefore, the proposed project would not potentially

degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

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

Less Than Significant Impact With Mitigation Incorporated. A significant impact may occur if a proposed project, in conjunction with related projects, would result in impacts that are less than significant when viewed separately, but would be significant when viewed together. As concluded in Sections 4.1 through 4.20, the proposed project would not result in any significant impacts in any environmental categories with implementation of project mitigation measures. Implementation of mitigation measures at the project-level would reduce the potential for the incremental effects of the proposed project to be less than considerable when viewed in connection with the effects of past projects, current projects, or probable future projects.

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

Less Than Significant Impact With Mitigation Incorporated. Previous sections of this Initial Study reviewed the proposed project’s potential impacts related to aesthetics, air quality, noise, hazards and hazardous materials, traffic, and other issues. As concluded in these previous sections, the proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly, following conformance with the existing regulatory framework and mitigation measures. Impacts would be reduced to less than significant levels in this regard.

4.22 REFERENCES

The following references were utilized during preparation of this Initial Study.

California Air Resources Board, 2018 Updates to the California State Implementation Plan, October 25, 2018.

California Department of Conservation, *California Important Farmland Finder*, <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed July 22, 2019.

_____. CGS Information Warehouse: Regulatory Maps, <https://maps.conservation.ca.gov/cgs/informationwarehouse/>, accessed August 8, 2019.

_____. Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, August 2000.

California Department of Fish and Wildlife, *California Regional Conservation Plans*, October 2017, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>, accessed July 19, 2019.

California Department of Forestry and Fire Protection, *San Diego County Fire Hazard Severity Zones in SRA*, November 7, 2007, https://frap.fire.ca.gov/media/6223/fhszs_map37.pdf, accessed July 22, 2019.

_____. *Very High Fire Hazard Severity Zones in LRA As Recommended by CAL FIRE, Carlsbad*, June 11, 2009, <https://osfm.fire.ca.gov/media/5956/carlsbad.pdf>, accessed July 29, 2019.

California Environmental Protection Agency, *California Greenhouse Gas Emission Inventory - 2018 Edition*, <http://www.arb.ca.gov/cc/inventory/data/data.htm>, accessed August 6, 2019.

CalRecycle, *Estimated Solid Waste Generation Rates*, <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>, accessed August 17, 2020.

_____. *SWIS Facility/Site Activity Details: El Sobrante Landfill (33-AA-0217)*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402>, accessed August 17, 2020.

_____. *SWIS Facility/Site Activity Details: Otay Landfill (37-AA-0010)*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1790?siteID=2863>, accessed August 17, 2020.

_____. *SWIS Facility/Site Activity Details: Sycamore Landfill (37-AA-0023)*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1798?siteID=2871>, accessed August 17, 2020.

_____. *SWIS Facility/Site Activity Details: West Miramar Sanitary Landfill (37-AA-0020)*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1795?siteID=2868>, accessed August 17, 2020.

_____. *Jurisdiction Disposal by Facility, With Reported Alternative Daily Cover (ADC) and Alternative Intermediate Cover (AIC), Disposal during 2018 for Carlsbad*, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>, accessed August 17, 2020.

City of Carlsbad, *Carlsbad Municipal Code, codified through Ordinance CS-389 and the February 2021 code supplement*, 2021.

_____. *Carlsbad General Plan*, September 2015.

_____. *City Facilities, Locations and Directions*, <https://ccmaps.carlsbadca.gov/facilities/index.html>, accessed July 30, 2019

_____. *Climate Action Plan*, adopted September 2015, amended May 2020.

_____. *City of Carlsbad Local Coastal Program*, August 2017.

_____. *Fire Department*, <https://www.carlsbadca.gov/services/depts/fire/default.asp>, accessed July 30, 2019.

_____. *Fire Prevention*, <https://www.carlsbadca.gov/services/depts/fire/prevention/default.asp>, accessed July 30, 2019

_____. *Growth Management*, <http://www.carlsbadca.gov/services/depts/planning/growth.asp>, accessed July 26, 2019.

_____. *Habitat Management Plan for Natural Communities in the City of Carlsbad*, November 2004, <http://www.carlsbadca.gov/civicax/filebank/blobdload.aspx?BlobID=27193>, accessed July 19, 2019.

_____. *Local Coastal Program Land Use Map*, February 2017.

_____. *City of Carlsbad Noise Guidelines Manual*, July 2013.

_____. *Schools*, <https://www.carlsbadca.gov/residents/schools/default.asp>, accessed July 30, 2019.

Dyett & Bhatia, *Carlsbad General Plan & Climate Action Plan Final Environmental Impact Report*, June 2015.

Eilar Associates, Inc. *Acoustical & Environmental Consulting, Acoustical Analysis Report*, August 6, 2020.

_____. *Acoustical & Environmental Consulting, Air Quality Assessment*, May 14, 2020.

Federal Emergency Management Agency, *Flood Insurance Rate Map No. 06073C0764G, Panel 0764G*, Map Revised May 16, 2012.

Federal Highway Administration, *Roadway Construction Noise Model (FHWA-HEP-05-054)*, January 2006.

Giles Engineering Associates, Inc., *Geotechnical Engineering Exploration and Analysis*, March 14, 2019.

_____. *Phase I Environmental Site Assessment, Proposed Chick-fil-A Restaurant No. 4306*, dated September 24, 2018.

Joseph C. Truxaw and Associates, Inc., *Preliminary Hydrology and Hydraulic Analysis for Chick-fil-A Restaurant #4306*, September 16, 2019.

_____. *Preliminary Priority Development Project (PDP) Storm Water Quality Management Plan (SWQMP) for Chick-fil-A, #4306*, December 11, 2019.

Linscott, Law and Greenspan Engineers, *Vehicle Miles Traveled Analysis*, October 27, 2020.

Rincon Consultants, Inc., *Cultural Resources Assessment for the Chick-fil-A and Palomar Airport Rd FSU Project, City of Carlsbad, California*, August 22, 2019.

San Diego Air Pollution Control District, *Attainment Status*, www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html, accessed July 30, 2019.

_____. *2016 Revision of Regional Air Quality Strategy for San Diego County*, December 2016.

San Diego County Airport Land Use Commission and San Diego County Regional Airport Authority, *McClellan-Palomar Airport Land Use Compatibility Plan; Exhibit III-1, Combability Policy Map: Noise and Exhibit III-2, Combability Policy Map: Safety*, amended December 1, 2011.

_____. *McClellan-Palomar Airport Land Use Compatibility Plan*, amended March 4, 2010.

Scientific Resources Associated, *Greenhouse Gas Analysis for the Chick-fil-A Carlsbad Project*, August 7, 2020.

State of California, *Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2019, with 2010 Benchmark*, May 1, 2019.

U.S. Environmental Protection Agency, *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed September 3, 2020.

United States Environmental Protection Agency Website, *Greenhouse Gas Equivalencies Calculator*, <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>, accessed July 30, 2019.

Written Communication: Riggio, Matthew, Route Manager, Coast Waste Management, June 17, 2019.

Written Communication: Smith, Terry, Engineering Manager/District Engineer, Carlsbad Municipal Water District, May 7, 2019.

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