Riverside Sheriffs' Association Benefit Trust Project

Initial Study / Mitigated Negative Declaration

Environmental Assessment Case No. EA26-0001
Preliminary Development Plan Case No. PDP26-0002
Tentative Parcel Map Case No. TPM26-0001

Lead Agency:
City of Rancho Mirage
69-825 Highway 111
Rancho Mirage, California 92270

August 2026

ENVIRONMENTAL INITIAL STUDY

Project Title:	Riverside Sheriffs' Association Benefit Trust Project
City Project No:	Environmental Assessment Case No. EA26-0001 Preliminary Development Plan Case No. PDP26-0002 Tentative Parcel Map Case No. TPM26-0001
Lead Agency:	City of Rancho Mirage 69-825 Highway 111 Rancho Mirage, California 92270 Phone: (760) 328-2266 extension 253 Contact: Ben Torres, Planning Manager
Applicant:	Prest Vuksic Greenwood Architects 44530 San Pablo Avenue, Suite 200 Palm Desert, California 92260 Phone: (760) 779-5393 Contact: Nicole Williams, Architect
Project Location:	Southeast intersection of Dinah Shore Drive and Key Largo Avenue
Accessor Parcel Number:	685-090-010
General Plan Designation:	Community Commercial
Specific Plan Area	Monterey Specific Plan - General Commercial
Zoning Designation:	Community Commercial

TABLE OF CONTENTS

CHAPTER 1: PROJECT DESCRIPTION 7
Project Description 7
Project Location 7
Access and Parking 7
Landscaping 8
Utilities 8
Environmental Setting 8
Surrounding Land Uses 8
Project Phasing and Construction 9
Other Public Agencies Whose Approval Is Required 10
CHAPTER 2: ENVIRONMENTAL ANALYSIS AND DETERMINATION 14
1 - Aesthetics 17
1.1 Setting 18
1.2 Discussion of Impacts: 18
1.3 Mitigation Measures: 19
2 - Agriculture and Forestry Resources 20
2.1 Setting 21
2.2 Discussion of Impacts: 21
2.3 Mitigation Measures: 21
3 - Air Quality 22
3.1 Setting 23
3.2 Discussion of Impacts 26
3. 3 Mitigation Measures: None required. 38
4 - Biological Resources 39
4.1 Setting 40
4.2 Discussion of Impacts: 40
4.3 Mitigation Measures: 42
5 - Cultural Resources 45
5.1 Setting 45
5.2 Discussion of Impacts: 46
5.3 Mitigation Measure: 47
6 - Energy 48
6.1 Setting 48

6.2 Discussion of Impacts**:** 51
6.3 Mitigation Measure: 55
7 - Geology and Soils 56
7.1 Setting 57
7.2 Discussion of Impacts: 57
7.3 Mitigation Measures: 60
8 – Greenhouse Gas Emissions 61
8.1 Setting 61
8.2 Discussion of Impacts: 69
8.3 Mitigation Measures: 76
9 - Hazards and Hazardous Materials 77
9.1 Setting 78
9.2 Discussion of Impacts**:** 78
9.3 Mitigation Measures: 80
10 - Hydrology and Water Quality 81
10.1 Setting 82
10.2 Discussion of Impacts: 82
10.3 Mitigation Measures: 85
11 - Land Use and Planning 86
11.1 Setting 86
11.2 Discussion of Impacts: 87
11.3 Mitigation Measures: 87
12 - Mineral Resources 88
12.1 Setting 88
12.2 Discussion of Impacts: 88
12.3 Mitigation Measures: 88
13 - Noise 89
13.3 Mitigation Measures: 102
14 - Population and Housing 103
14.1 Setting 103
14.2 Discussion of Impacts: 103
14.3 Mitigation Measures: 104
15 - Public Services 105
15.1 Setting 105

15.2 Discussion of Impacts: 106
15.3 Mitigation Measures: 107
16 - Recreation 108
16.1 Setting 108
16.2 Discussion of Impacts: 108
16.3 Mitigation Measures**:** 108
17 - Transportation 109
17.1 Setting 109
17.2 Discussion of Impacts: 110
17.3 Mitigation Measures: 113
18 - Tribal Cultural Resources 114
18.1 Setting 114
18.2 Discussion of Impacts: 115
18.3 Mitigation Measures: 116
19 - Utilities and Service Systems 118
19.1 Setting 119
19.2 Discussion of Impacts: 119
19.3 Mitigation Measures: 122
20 - Wildfire 123
20.1 Setting 123
20.2 Discussion of Impacts: 124
20.3 Mitigation Measures: 125
21 - Mandatory Findings of Significance 126
21.1 Discussion of Impacts: 126
CHAPTER 3: REFERENCES 133
CHAPTER 4: REPORT PREPARERS 134
CHAPTER 5: APPENDICES 135

TABLES

Table 1 Project Development Summary....7
Table 2 South Coast Air Quality Management District Emissions Thresholds....26
Table 3 Project-Generated Construction Emissions....30
Table 4 Project-Generated Operational Emissions....32
Table 5 Localized Emissions Significance....36
Table 6 Project and Countywide Energy Consumption....51
Table 7 Project Related Greenhouse Gas Emissions....69
Table 8 2022 Scoping Plan Consistency Analysis....72
Table 9 Connect SoCal 2024 Project Consistency Analysis....74
Table 10 Human Reaction and Damage to Buildings from Continuous Vibration Levels....91
Table 11 Land Use Compatibility for Community Noise Environments....92
Table 12 Rancho Mirage Exterior Noise Level Limits....94
Table 13 Rancho Mirage Exterior Noise Level Limits: dBA Adjustments....94
Table 14 Ambient Noise Level Measurements....96
Table 15 Construction Noise Levels at the Nearest Receptors....97
Table 16 Typical Maximum Noise Levels Generated by Parking Lots....100
Table 17 Typical Vibration Levels for Construction Equipment....101
Table 18 Mitigation Monitoring and Reporting Program....128

EXHIBITS

Exhibit 1 Regional Location Map
Exhibit 2 Project Vicinity Map
Exhibit 3 Conceptual Site Plan

APPENDICES

Appendix A Air Quality Modeling Sheets
Appendix B Biological Resources Assessment
Appendix C Cultural Resources Assessment
Appendix D Geotechnical Investigation
Appendix E Noise Data
Appendix F Transportation Impact Analysis
Appendix G Shared Parking Study
Appendix H AB 52 Consultation Materials

CHAPTER 1: PROJECT DESCRIPTION

Project Description

The Riverside Sheriffs' Association Benefit Trust Project (project) would develop office facilities and commercial uses totaling approximately 67,592 square feet. The project includes the development of eight (8) buildings, surface parking, onsite circulation, three (3) underground water quality basins, and landscaping.

The northern portion of the site would contain three (3) one-story commercial buildings (Buildings 1 through 3) and associated parking. The southern portion of the site would contain five (5) one-story buildings (Buildings 4 through 8)and include a central mixed-use plaza, multi-purpose field, and associated parking.

Refer to Table 1, *Project Development Summary*, which summarizes the area associated with each proposed use. Refer to Exhibit 1, *Regional Location Map*, Exhibit 2, *Project Vicinity Map*, and Exhibit 3*, Schematic Site Plan.*

Table 1 Project Development Summary

Project Component	Square Feet / Unit Count (approximate)
Buildings	
Building 1 – Commercial	6,581 SF
Building 2 – Commercial	5,509 SF
Building 3 – Commercial	6,581 SF
Building 4 – Leasable Office	9,874 SF
Building 5 – Riverside Sheriff Association Office	14,130 SF
Building 6 – Leasable Office / Medical Office	11,357 SF
Building 7 – Fraternal Order of Police Lodge	5,891 SF
Building 8 – Health and Fitness Center	7,667 SF
Total Square Feet	**67,592 SF**

Project Location

The site is approximately 7.92-acres and located along Dinah Shore Drive at the southeastern intersection of Key Largo Avenue (Assessor Parcel Number (APN) 685-090-010).

Access and Parking

Driveway access to the site would be provided at Key Largo Avenue. Another project driveway is proposed on the east side of the site that would connect with the existing parking lot of the Monterey Market Place shopping center. This shared access provides partial access to Dinah Shore Drive (left-in / right-in / right-out only) via the existing driveway approximately 570 feet west of Miriam Way. Parking would accommodate up to approximately 319 parking spaces and one loading space.

Landscaping

A conceptual landscape plan was developed for the project in accordance with the requirements of the Rancho Mirage Municipal Code Chapter 17.24, *Landscaping Standards*. Water-efficient landscaping would be installed throughout the site. Planting materials would include a variety of trees and shrubs, including large accent succulents, specimen shrubs, screening shrubs, massing shrubs, and groundcovers.

Utilities

The following utilities and services would serve the site:

- Domestic Water Service: Coachella Valley Water District (CVWD)
- Wastewater Service: CVWD
- Solid Waste Service: Burrtec Waste and Recycling Services
- Electricity Service: Imperial Irrigation District (IID)
- Natural Gas: Southern California Gas Company (SoCalGas)
- Telecommunication: Frontier Fiber, Spectrum, Verizon
- Cable: Spectrum

Environmental Setting

The site is undeveloped and vacant. The site is surrounded by commercial development to the east, residential to the west, recreational to the south, and disturbed natural habitat to the north. Elevations on-site range from approximately 267 feet in the southeast corner to 293 feet in the southwest corner of the site. The site is within the boundary of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) but is not within or adjacent to a Conservation Area.

Surrounding Land Uses

The project site falls within the boundaries of the Monterey Specific Plan and is located in the General Commercial Plan Area. The project seeks to establish an integrated shopping retail and business complex under a single master plan. The larger anchor tenant would contain the Riverside Sheriff's Association Benefit's Trust Facility, and smaller specialty retail and service establishments would be located along Dinah Shore Drive.

The Riverside Sheriff's Association Benefit's Trust Facility is seeking to establish the following principal uses: professional services use and medical offices, both of which are principally permitted use in the General Commercial Plan Area of the Monterey Specific Plan. Associated accessory uses include a meeting hall for occasional private events and a private health/fitness clinic serving the police union members. The meeting hall would allow for occasional union member events and is equipped with a bar and cooking facilities to allow for limited beverage and food service. The health/fitness clinic is open to members to carry out training and physical therapy.

Accessory uses that are customarily accessory are allowed in any nonresidential zone as part of an approved principal use (RMMC Chapter 17.90). The meeting hall is essential to and customarily found with the professional office use customarily used for large group presentations,

trainings, briefings, workshops, and networking events. The meeting hall is incidental to the professional office use occupying 2,323 square feet of a total 26,619 square feet of professional office space. The meeting hall is not visible from the public right-of-way. The health/fitness clinic is essential to and customarily found with the professional offices use because it is a part of preventive medical care and reduces health insurance costs. In the case of police officers, the health/fitness clinic is also a space to carry out physical training required for their line of work. The health/fitness clinic is incidental to both the medical offices and professional office uses occupying 7,662 square feet of a total 26,619 square feet of professional office space. The clinic is not visible from the public right-of-way.

The smaller specialty retail and service establishments are located along the northern portion of the project site in three buildings. The buildings are 6,581.4 square feet, 5,509.2 square feet, and 6,581.4 square feet. The retail uses will be consistent with those permitted by the Monterey Specific Plan and will be determined through a building permit at the time of business establishment.

Surrounding land uses include commercial, recreational, residential, and vacant undeveloped space. Specifically, land uses surrounding the site include:

North: Dinah Shore Drive and undeveloped land bound the site to the north. Dinah Shore Drive functions as the City's boundary. Vacant undeveloped land to the north is under the jurisdiction of the City of Palm Desert.

East: A shopping center is located adjacent to the eastern site boundary. This area has a General Plan land use and zoning designation of Community Commercial (C-C), and located in the Monterey Specific Plan

South: The Rancho Mirage Dog Park and undeveloped open space are located adjacent to the southern site boundary. This area has a General Plan land use designation of Open Space – Public Park (OS/PP), a Specific Plan designation of Community Park, and is zoned Open Space - Public Park (OS/PP). Two affordable housing projects are planned east of the dog park, and located in the Monterey Specific Plan.

West: Key Largo Avenue, existing single-family residences, and undeveloped land are located adjacent to the western site boundary. This undeveloped land has a General Plan land use and zoning designation of Office (O). The single-family residential area has a General Plan land use and zoning designation of Medium Density Residential (4 du/ac) (R-M).

Project Phasing and Construction

The project would be constructed in multiple phases. Phase 1 would include the following: all site infrastructure; water retention areas; landscaping; the plaza; and Buildings 4 through 8 with their associated hardscape improvements. Future phases would include Buildings 1 through 3, which would be developed on a land-lease basis as tenants are secured. Conceptual designs for these future buildings have been prepared to ensure architectural and material consistency throughout the project.

Other Public Agencies Whose Approval Is Required

None.

Exhibit 1 Regional Location Map

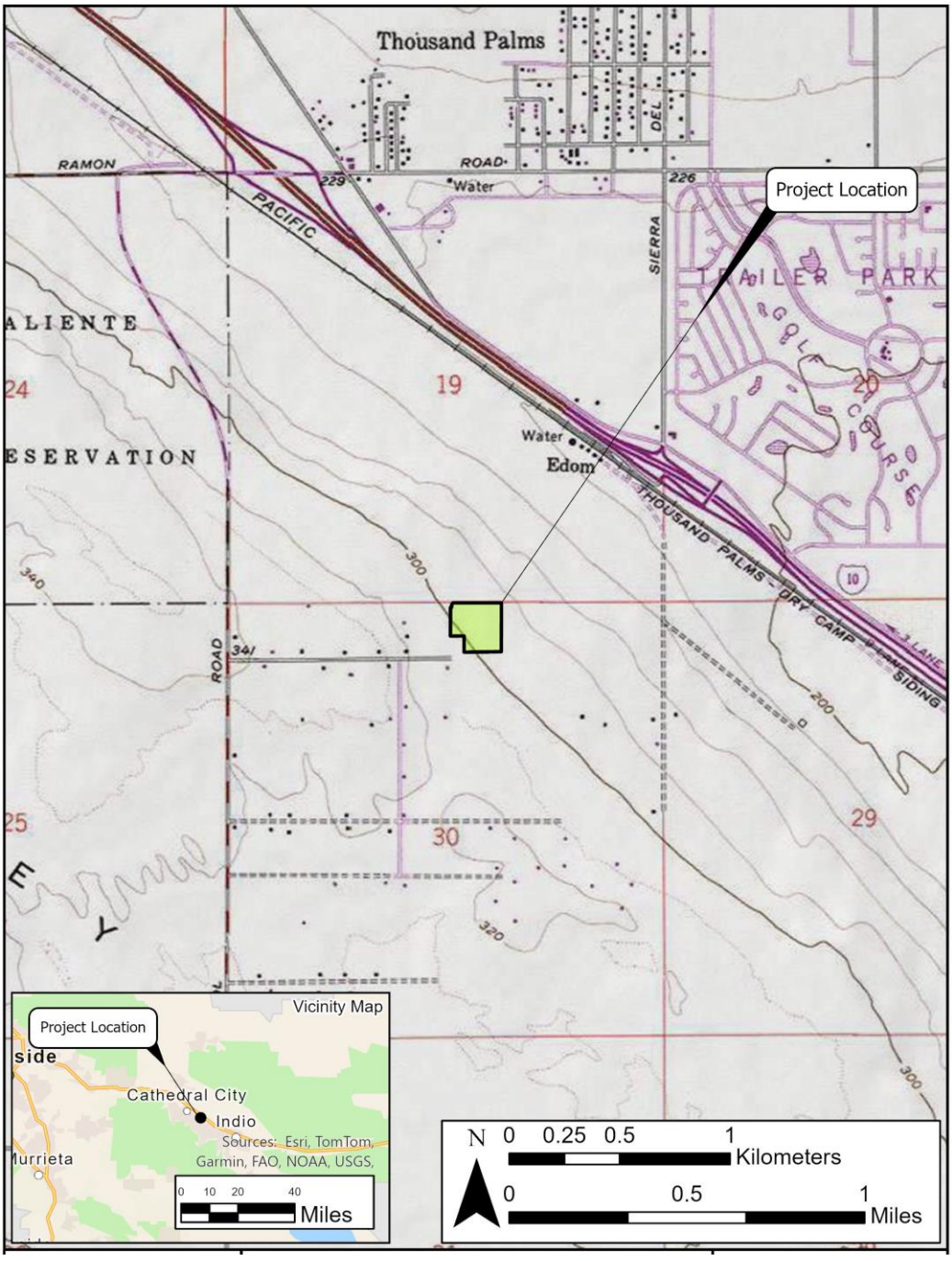
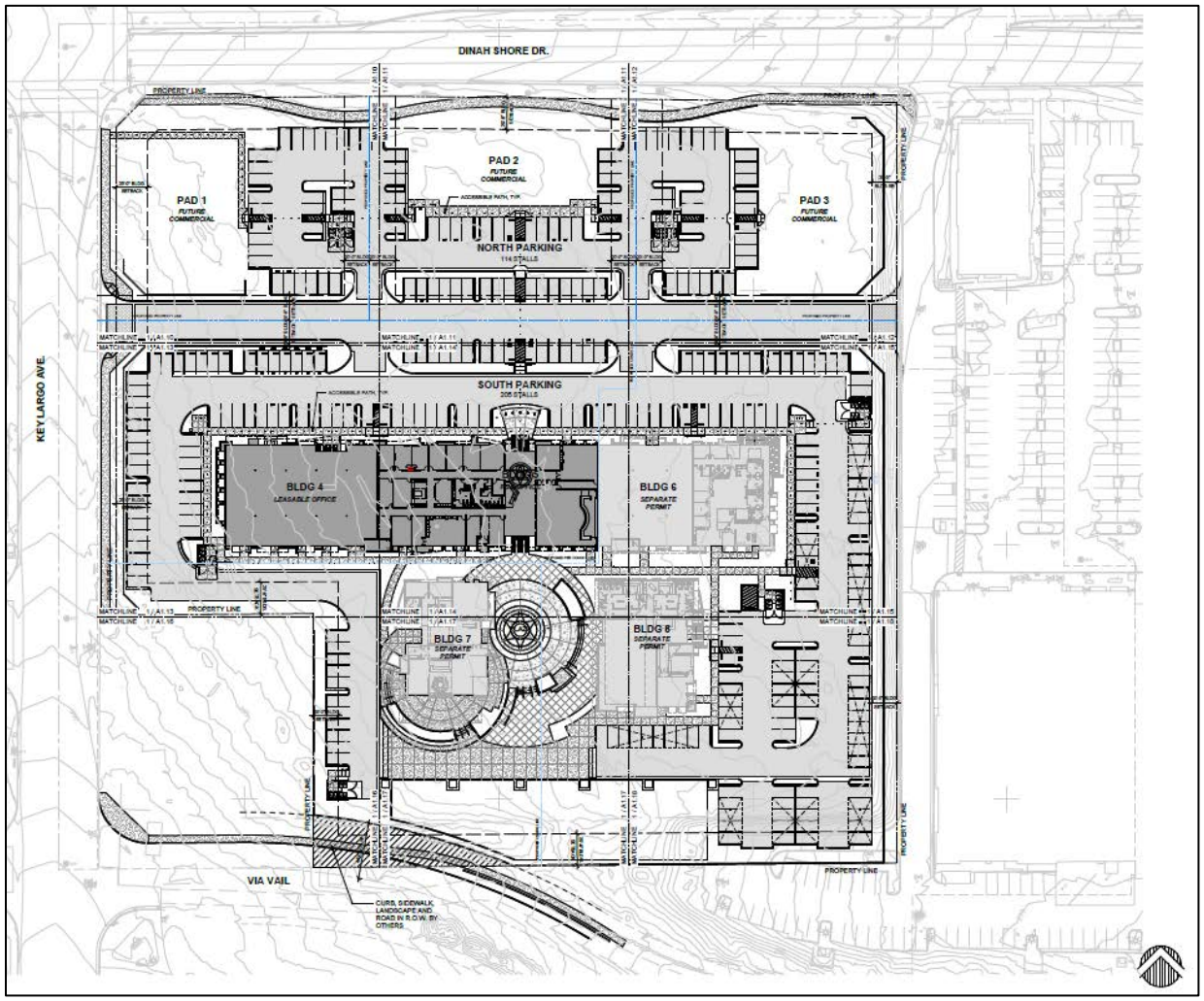


Exhibit 2 Project Vicinity Map



Exhibit 3 Site Plan



CHAPTER 2: ENVIRONMENTAL ANALYSIS AND DETERMINATION

Environmental Factors Potentially Affected:

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

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

Evaluation of Environmental Impacts:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify: a) the significance criteria or threshold, if any, used to evaluate each question; and b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Determination: (To be completed by the 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 revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Ben Torres, Planning Manager
City of Rancho Mirage

9-15-2026
Date

Environmental Checklist and Discussion:

The following checklist evaluates the proposed project's potential adverse impacts. For those environmental topics for which a potential adverse impact may exist, a discussion of the existing site environment related to the topic is presented followed by an analysis of the project's potential adverse impacts. When the project does not have any potential for adverse impacts for an environmental topic, the reasons why there are no potential adverse impacts are described.

1 - Aesthetics

AESTHETICS -- Would the project**:**	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Sources:

City of Rancho Mirage, General Plan 2017 Update, *City of Rancho Mirage*, adopted November 16, 2017.
City of Rancho Mirage, *Interactive Zoning Map (GIS Web App), 2025*, https://ranchomirage.maps.arcgis.com/apps/webappviewer/index.html?id=6b0092873a7b4634b355dec1443c79b4, accessed November 5, 2025.
City of Rancho Mirage, *Land Use and Zoning Map*, August 3, 2013.
City of Rancho Mirage, *Monterey Specific Plan*, 1995.

1.1 Setting

The City of Rancho Mirage encompasses 25.6 square miles with an additional 1.5 square miles of Sphere of Influence area within unincorporated Riverside County. The predominant land uses throughout Ranch Mirage include a mix of residential uses, desert resort and recreational uses including hotels, restaurants, golf courses and open space preserve areas, commercial and retail centers, and regional medical facilities. The City prioritizes the preservation of its unique desert environment through policies supporting preservation and infill development.

1.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:
The project site is vacant albeit surrounded by existing development, including a strip mall retail development to the east, a dog park to the south, and a single-family residential development to the west. Beyond the project site the Santa Rosa and San Jacinto Mountain foothills can be viewed to the south and west, and the San Bernardino Mountains to the north. Project construction and landscaping are not expected to result in a substantial adverse impact on this viewshed given that the project proposes single story buildings with a maximum overall height of thirty-five feet. Project impacts to scenic vistas would be less than significant.

b) NO IMPACT:
The existing terrain and natural landscaping are valuable scenic resources that enhance the scenic experience for residents, travelers and others in the area. Substantial damage to scenic resources such as trees, rock outcroppings, and historic buildings within a state scenic highway would qualify as a significant impact. The proposed project does not have trees, rock outcroppings, historic buildings, and is not located along an eligible State designated scenic highway. Therefore, there is no project impact to scenic resources

c) NO IMPACT:
The site is located in an existing urbanized area and is majority surrounded by existing development despite the site itself being vacant.

According to the City's height standards, buildings should be no higher than 35 feet from average finished grade to the top of parapet, and no more than two-stories in height. The proposed building heights reach approximately up to 27 feet and all buildings are one-story in height. The building materials for the shopping retail and business complex would incorporate neutral browns and beiges, a dark brown wood-look plastic wall accent material, dark bronze metal window and door frames, and beige block planters. Building facades are composed with a balanced mixtures of vertical and horizontal elements that emphasize the building's massing and entryways. Projections and recessions are accented by cladding material changes, and grounded by horizontal block planters. The building design and decorative elements would deviate somewhat from the surrounding existing design of neighboring commercial buildings, but the color palette, the design element, and accompanying landscape design align with the aesthetic of the surrounding desert brush and sand dunes that occur on the project site and across Dinah Shore Drive. Furthermore, the single story buildings would not obstruct the distant view of the Santa Rosa and San Jacinto Mountain foothills behind the buildings. The project will not degrade the existing visual character or quality of public views. Impacts to the existing visual character and quality of public view will be less than significant.

d) LESS THAN SIGNIFICANT IMPACT:

The project site is currently vacant, and the project would introduce new sources of lighting. Pursuant to the Rancho Mirage Municipal Code §17.18.050 and § 17.26.120, exterior lighting, including security lighting, must be energy efficient and either recessed or shielded such that light, glare and reflection are directed downward and away from neighboring properties. All light fixtures should appropriately serve the immediate purpose and not emit light, glare, or reflection beyond the project's boundaries. Exterior lighting for the proposed project is subject to approval by the City prior to construction. The nighttime operation of the shopping retail and business complex would include site lighting and light emanating from the interior. The site would be provided with fully shielded light fixtures ensuring no light trespass and mitigating any excessive glare or reflection. Impacts from lighting emitting from the interior will be limited to building frontages at the perimeter of the site. The impact is further reduced given the limited nighttime hours of the membership organization facility and professional office space whose standard hours are 6:30AM to 5:00PM Monday through Friday. Adherence to the City's lighting ordinance codes would ensure that potential impacts resulting from lighting or glare would be less than significant.

1.3 Mitigation Measures:

None required.

2 - Agriculture and Forestry Resources

AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Sources:

California Department of Conservation, *California Important Farmland Finder*, https://maps.conservation.ca.gov/dlrp/ciff/, accessed October 21, 2025.

California Department of Conservation, *Williamson Act Enrollment Finder*, https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/, accessed October 21, 2025.

2.1 Setting

The City's General Plan does not identify agricultural lands within the City boundary. Further, the City is located within an arid desert region and does have lands designated as forest or forest production.

2.2 Discussion of Impacts:

a) NO IMPACT:
The project site is designated as "Other Land" by the California Department of Conservation. This designation is reserved for lands that do not fit into any of the other mapping categories and can include the following: low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Accordingly, implementation of the proposed project would not 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 would occur.

b) NO IMPACT:
The project site is located in the Monterey Specific Plan area, which does not support agricultural uses. The Williamson Act, also known as the California Land Conservation Act of 1965, allows local governments and private landowners to form contracts that restrict specific parcels of land to agricultural or related open space use. While the County of Riverside participates in the Williamson Act, the project site is not located on or adjacent to any existing zoning for agricultural use or a Williamson Act contract according to the Department of Conservation's California Williamson Act Enrollment Finder. Therefore, no impact would occur.

c) NO IMPACT:
The City's General Plan does not include Forest Land or Timberland designations, nor does the City have zones for these uses. According to the City's General Plan, the City does not contain any agricultural resources. The City occurs on the Coachella Valley floor, and no forest of timber lands occur in the desert climate. As such, the site does not contain any forest land or timberland, nor is it zoned for timberland production. Therefore, the project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and no impact would occur.

d-e) NO IMPACT:
The site does not contain forest land, as defined above. Furthermore, the project site is not zoned for forest land. No impact would occur. The project site is not designated as Prime Farmland or forest land, and thus the project would not result in the conversion of Farmland to non-agricultural use, or forest land to non-forest use. No impacts would occur relative to the conversion of farmland or forest land.

2.3 Mitigation Measures:

None required.

3 - Air Quality

AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Sources:

California Air Pollution Control Officers Association, CalEEMod Version 2022.1.

California Air Resources Board, *Palm Springs – Fire Station, Daily 1 Hr Avg Carbon Monoxide Data, 2025*, https://www.arb.ca.gov/aqmis2/display.php?year=2025&param=CO&units=007&county_name=33-Riverside&basin=--AIR+BASIN--&latitude=--PART+OF+STATE--&std15=&o3switch=new&hours=all&ptype=aqd&mon=&day=&report=ASRPT&statistic=DAVG&order=&btnsubmit=Update+Display, accessed February 23, 2026.

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, https://ww3.arb.ca.gov/toxics/asbestos/ofr_2000-019.pdf, accessed February 22, 2026.

Michael Baker International, Riversi*de Sheriffs' Association Project - Transportation Study Scoping Agreement*, February 12, 2026.

South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Threshold,* April 2019.

South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno,* April 3, 2015.

San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, April 13, 2015.

Urban Crossroads, *Core Rancho Mirage Noise and Vibration Analysis in the City of Rancho Mirage*, January 2025.

3.1 Setting

Regional Topography

The City is located within the Salton Sea Air Basin (Basin), the Riverside County portion of the Basin is bounded by the San Jacinto Mountains in the west and spans eastward to the Palo Verde Valley. The Coachella Valley Planning Area is a federal nonattainment area that is part of a sub-region of Riverside County in the Basin that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and dispersion of air pollutants throughout the Basin.

Climate

The climate is typical of a desert regime, with large daily and seasonal fluctuations in temperature and relatively high annual average temperatures. High temperatures frequently exceed 100 degrees Fahrenheit (°F) for the summer months. During the winter, temperatures can drop to near freezing (and below freezing at higher elevations).

The weather of the area is governed by large-scale warming and sinking of air in the semi-permanent subtropical high-pressure center over the Pacific Ocean. The high-pressure ridge blocks most mid-latitude storms, except in the winter when the high-pressure ridge is weakest and farthest south. The coastal mountains prevent the intrusion of the cool, damp air found in California's coastal regions. Throughout the year, average daily relative humidity is low, as are average rainfall values (only three inches per year). Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south.

The flat terrain and strong temperature differentials created by intense heating and cooling patterns produce moderate winds and deep thermal circulation systems. As a result, the general dispersion of local air pollution is greater than in the coastal basins where polluted inversion layers may remain for long periods of time.

Criteria Pollutants

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 CO.

Ozone (O_3). O_3 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 (the "good" O_3 layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays. "Bad" O_3 is a photochemical pollutant, and needs volatile organic compounds (VOCs), nitrogen oxides (NO_X), and sunlight to form; therefore, VOCs and NO_X are O_3 precursors. To reduce O_3 concentrations, it is necessary to control the emissions of these O_3 precursors. Significant O_3 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 O_3 concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O_3 in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O_3 (in the troposphere) can adversely affect the human respiratory system and other tissues. O_3 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 O_3. Short-term exposure (lasting for a few hours) to O_3 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.

Nitrogen Dioxide (NO_2). NO_X are a family of highly reactive gases that are a primary precursor to the formation of ground-level O_3 and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_X) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO_2 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 NO_2 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 NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the California Air Resources Board (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). Exposure to PM_{10} would result in particles being deposited on the lung surface, causing tissue damage, lung inflammation, and impacting respiratory and cardiovascular health.

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 February 2024, the EPA lowered the federal primary $PM_{2.5}$ annual standard to 9.0 microgram per cubic meter (ug/m^3) from

the 12.0 ug/m^3 standard set in 2012. The secondary annual standard remains at 15.0 ug/m^3. States and Tribal Authorities will submit initial recommendations of areas that do not attain this standard (i.e., nonattainment areas) to EPA by February 2025, and EPA will finalize area designations by February 2026.

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.

Due to the size of $PM_{2.5}$, these particles are more likely to be inhaled and deposited in the deeper parts of the lungs. Short-term exposure (up to 24 hours) would result in chronic bronchitis, asthma attacks, respiratory symptoms, and premature mortality.

Sulfur Dioxide (SO_2). Sulfur dioxide (SO_2) 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. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics.

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 O_3 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 O_3, which is a criteria pollutant. The terms VOC and ROG (see below) are used interchangeably. Exposure to VOC vapors would result in eyes, nose, and throat irritation, nausea, headaches, and damage to the liver, kidney, and central nervous system.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O_3 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. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC are used interchangeably. Exposure to ROGs would result in the same adverse health effects as VOCs.

Regulatory Setting

South Coast Air Quality Management District

Under the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD) is an expert commenting agency on air quality within its jurisdiction or impacting its jurisdiction. Under the Federal Clean Air Act (FCAA), the SCAQMD has adopted Federal attainment plans for O_3 and PM_{10}. The SCAQMD reviews projects to ensure that they would not: (1) cause or contribute to any new violation of any air quality standard; (2) increase

the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any Federal attainment plan.

The *CEQA Air Quality Handbook* also provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. If the SCAQMD thresholds are exceeded, a potentially significant impact could result. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project proposes development in excess of the established thresholds, as outlined in Table 2, *South Coast Air Quality Management District Emissions Thresholds*, a significant air quality impact may occur, and additional analysis is warranted to fully assess the significance of impacts.

Table 2 South Coast Air Quality Management District Emissions Thresholds

Phase	Pollutant (lbs/day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction	75	100	550	150	150	55
Operational	55	55	550	150	150	55
ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter up to 10 microns; $PM_{2.5}$ = particulate matter up to 2.5 microns; lbs = pounds						
Source: South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds,* March 2023.						

Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated July 2008) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_X, PM_{10}, or $PM_{2.5}$. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project over five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors.

3.2 Discussion of Impacts

a) LESS THAN SIGNIFICANT IMPACT:

On December 2, 2022, the SCAQMD Governing Board adopted the 2022 Air Quality Management Plan (2022 AQMP). The 2022 AQMP incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, updated emission inventory methodologies for various source categories. Additionally, the 2022 AQMP utilized information and data from Southern California Association of Governments (SCAG) and its *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS). In April 2024, SCAG adopted Connect SoCal 2024, an update to the 2020-2045 RTP/SCS. However, SCAQMD has not released an updated AQMP. As such, this consistency analysis is based on the

2022 AQMP and the RTP/SCS that were adopted at the time, the 2020-2045 RTP/SCS. According to the SCAQMD's *CEQA Air Quality Handbook*, projects must be analysed for consistency with two main criteria, as discussed below.

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

1) Would the project result in an increase in the frequency or severity of existing air quality violations?

Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of a project's pollutant emissions relative to localized pollutant concentrations associated with the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) is used as the basis for evaluating project consistency. As discussed under Responses 3.2 (b) and 3.2 (c), the project's short-term construction emissions, long-term operational emissions, and localized emissions would not exceed SCAQMD thresholds. As such, the project would not cause or contribute to localized air quality violations or delay the attainment of air quality standards or interim emissions reductions specified in the 2022 AQMP.

2) Would the project cause or contribute to new air quality violations?

As discussed in Response 3.2 (b) and 3.2 (c), construction and operation of the proposed project would result in emissions that would not exceed the SCAQMD thresholds. Therefore, the proposed project would not have the potential to cause or contribute to a violation of the ambient air quality standards.

3) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

As discussed in Response 3.2 (c), the proposed project would result in less than significant impacts regarding localized emissions during project construction and operations. As such, the proposed project would not delay the timely attainment of air quality standards or 2022 AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether the project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP. Determining whether a project exceeds the assumptions reflected in the 2022 AQMP involves the evaluation of the following criteria.

1) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

A project is consistent with the 2022 AQMP if it is consistent with the population, housing, and employment assumptions that were used in the development of the 2022 AQMP. In the case of the 2022 AQMP, three sources of data form the basis for the projections of air pollutant emissions: the City's General Plan, SCAG's regional growth forecast, and the SCAG 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS also provides socioeconomic forecast projections of regional population growth.

As discussed in Section 11, *Land Use and Planning*, the General Plan defines the project site's designated Community Commercial (C-C) land use designation as one that provides for regional- or community-scale shopping centers and malls that may be anchored by several department stores or other large-scale facilities. The project proposes a community-scale shopping center anchored by a membership organization facility and therefore, the professional office and retail are consistent with the City's General Plan land use designation of C-C.

The project site falls within the boundaries of the Monterey Specific Plan and is located in the General Commercial Plan Area. The Monterey Specific Plan provides additional guidance on the community-scale shopping center, defining the Dinah Shore Drive corridor area as an integrated shopping retail and business complex under a single master plan. The project would provide commercial retail fronting onto Dinah Shore Drive with the professional office use to the southern portion of the site, with parking and landscape areas behind the street-facing retail and interspersed across the wider retail and business complex. As such, the project is consistent with the Monterey Specific Plan.

The proposed project will provide retail space, professional office space, and a membership organization facility in proximity to I-10. As discussed in Section 14, *Population and Housing*, the retail component of the project is conservatively estimated to support up to 62 full-time jobs (based on 1 job/ 300 square feet); the professional office component of the project is conservatively estimated to support up to 177 full-time jobs (based on 1 job/ 150 square feet); and the membership organization facility is estimated to support up to 22 full-time jobs (based on 1 job/ 1,000 square feet). The majority users of the membership organization facility are existing City employees, albeit a limited number of new jobs are anticipated to support the operation and maintenance of the facility. As a vacant site, the project site is currently bringing no jobs to the City. Given the moderate number of jobs supported by the proposed uses, the project is not expected to create substantial unplanned employment or associated population growth in the City; refer to Response 14.2 (a) within Section 14. Growth forecasts generated by SCAG for the regional plan, Connect SoCal, predict a steady increase in population through 2045. Due to the commercial nature of the project, the proposed project would not create a substantial increase in the population within the City.

Therefore, the project is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity and would be considered consistent with the General Plan. Further, the population, employment, and housing, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City of Rancho Mirage. As the SCAQMD has incorporated these same projections into the 2022

AQMP, it can be concluded that the proposed project would be consistent with the projections.

2) Would the project implement all feasible air quality mitigation measures?

The proposed project would not require mitigation and would result in less than significant air quality impacts; refer to Responses 3.2 (b) and 3.2 (c). In addition, the project would comply with all applicable SCAQMD rules and regulations, including Rule 403 that requires control of excessive fugitive dust emissions by regular watering and other dust prevention measures, and Rule 1113 that regulates the ROG content of paint. As such, the proposed project meets this AQMP consistency criterion.

3) Would the project be consistent with the land use planning strategies set forth in the AQMP?

Land use planning strategies set forth in the 2022 AQMP are primarily based on the 2020-2045 RTP/SCS. The nearest bus stops are located within 0.25 miles along Dinah Shore Drive to the east of the project site. The proposed project would also provide of total of 34 bicycle parking spaces, which would encourage the use of cycling as an alternative mode of transportation and reduce single passenger driving trips. Further, the project would provide approximately 49 electric vehicle (EV) capable charging parking stalls (8 of which would be EV capable with Direct Current Fast Charge (DCFC)) and 26 fuel efficient vehicle stalls. Therefore, the project would be consistent with the actions and strategies of the 2020-2045 RTP/SCS to reduce VMT and related mobile source emissions.

In conclusion, the determination of 2022 AQMP consistency is primarily concerned with the long-term influence of a project on air quality in the Basin. The proposed project would not result in a long-term impact on the region's ability to meet State and federal air quality. Also, the proposed project would be consistent with the goals and policies of the 2022 AQMP for control of fugitive dust. As discussed above, the proposed project's long-term influence would also be consistent with the SCAQMD and SCAG's goals and policies and is, therefore, considered consistent with the 2022 AQMP.

b) LESS THAN SIGNIFICANT IMPACT:

Short-Term Construction Emissions

Project construction would primarily generate temporary criteria pollutants from construction equipment operating on-site, as well as construction worker trips, vendor trips, and material delivery trips to and from the project site. Project-generated construction emissions were modeled with the CARB-approved California Emissions Estimator Model, version 2022.1 (CalEEMod), which applies typical construction phasing, equipment usage, and vehicle activity assumptions for land development projects. See Appendix A, *Air Quality Modeling Sheets* for more information regarding the construction assumptions used in this analysis.

The project would be constructed in two phases. Phase 1 would include the following: all site infrastructure; water retention areas; landscaping; the plaza; and Buildings 4 through 8 with their associated hardscape improvements. Future phases would include Buildings 1 through 3, which would be developed on a land-lease basis as tenants are secured.

However, for the purposes of this analysis, construction activities were modeled to occur in a single-phase to be conservative. The project involves construction activities associated with grading, building construction, paving, and architectural coating applications. The project was modeled to be constructed over approximately 19 months and require approximately 380 cubic yards of soil import. Table 3, *Project-Generated Construction Emissions*, presents the anticipated daily short-term construction emissions. Refer to Appendix A, *Air Quality Modeling Sheets* for detailed CalEEMod outputs and results.

Table 3 Project-Generated Construction Emissions

Emissions Source	Pollutant (pounds/day)[1,2]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 1 Construction Emissions (2026)	1.72	15.13	18.79	0.03	2.71	1.54
Year 2 Construction Emissions (2027)	6.38	16.89	24.85	0.04	1.24	0.73
Year 3 Construction Emissions (2028)	6.33	10.21	15.43	0.03	0.79	0.41
Maximum Daily Emissions	**6.38**	**16.05**	**23.96**	**0.04**	**2.71**	**1.54**
SCAQMD Significance Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
1. Emissions were calculated using CalEEMod version 2022.1. Higher emissions between winter and summer are presented as a conservative analysis. The numbers may be slightly off due to rounding.
2. Modeling assumptions include compliance with SCAQMD Rule 403 and Rule 403.1 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; limit speeds on unpaved roads to 15 miles per hour; and sweeping of paved roads when track-out occurs. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.

Source: Refer to Appendix A, *Air Quality Modeling Sheets* for assumptions used in this analysis.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading and construction is expected to be short-term and would cease upon project completion. It should be noted that most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM_{10} generated as a part of fugitive dust emissions. PM_{10} poses a serious health hazard alone or in combination with other pollutants. $PM_{2.5}$ is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and sulfur oxides (SO_X) combining with ammonia. $PM_{2.5}$ components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Construction activities would comply with SCAQMD Rule 402, which prohibits fugitive dust from creating a nuisance off-site, Rule 403 and Rule 403.1, which requires that excessive fugitive dust emissions be controlled by regular watering or other dust prevention measures. Adherence to SCAQMD Rule 403 and Rule 403.1 would greatly reduce PM_{10} and $PM_{2.5}$ concentrations. It should be noted that these estimated reductions were applied in CalEEMod. As depicted in Table 2, total PM_{10} and $PM_{2.5}$ emissions would not exceed the SCAQMD thresholds during construction. Thus, construction-related air quality impacts would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., NO_x and CO) from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As depicted in Table 3, construction equipment and worker vehicle exhaust emissions would be below the established SCAQMD thresholds. Therefore, air quality impacts from equipment and vehicle exhaust emissions would be less than significant.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coating creates ROG emissions, which are O_3 precursors. As required, all architectural coatings for the proposed project structures would comply with SCAQMD Rule 1113. Rule 1113 provides specifications on painting practices as well as regulates the ROG content of paint. ROG emissions associated with the proposed project would be less than significant; refer to Table 3.

Total Daily Construction Emissions

As indicated in Table 3, criteria pollutant emissions during construction of the proposed project would not exceed the SCAQMD significance thresholds. Thus, total construction related air emissions would be less than significant.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are human health hazards 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 increase the risk of asbestos-related diseases and cancer (i.e., scarring of lungs [asbestosis], pleural disease, lung cancer, and mesothelioma). These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to 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* serpentinite and ultramafic rocks are not known to occur within the project area. As such, the project is not subject to naturally occurring asbestos and impacts would be less than significant.

Long-Term Operational Emissions

Long-term air quality impacts typically consist of mobile source emissions generated from project-related traffic (i.e., motor vehicle use by employees, deliveries travelling to and from the site), and emissions from area and energy sources. Emissions associated with each of these sources were modeled with CalEEMod version 2022.1 and are discussed below. Operational emissions generated by the proposed project are detailed in Table 4, *Project-Generated Operational Emissions*.

Table 4 Project-Generated Operational Emissions

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Summer Emissions						
Mobile Source	11.58	16.20	178.53	0.48	41.60	10.76
Energy Source	0.03	0.48	0.41	<0.01	0.04	0.04
Area Source	2.15	0.03	2.99	<0.01	<0.01	<0.01
Total Summer Emissions[2]	**13.76**	**16.71**	**181.93**	**0.48**	**41.63**	**10.80**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Winter Emissions						
Mobile Source	9.66	17.70	144.84	0.42	41.60	10.76
Energy Source	0.03	0.48	0.41	<0.01	0.04	0.04
Area Source	1.66	--	--	--	--	--
Total Winter Emissions[3]	**11.35**	**18.18**	**115.25**	**0.42**	**41.64**	**10.80**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
1. Emissions were calculated using CalEEMod version 2022.1, as recommended by the SCAQMD.
2. The numbers may be slightly off due to rounding.

Source: Refer to Appendix A, *Air Quality Modeling Sheets* for assumptions used in this analysis.

Mobile Source Emissions

Mobile sources are 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, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport SO_X, PM_{10}, and $PM_{2.5}$). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions were estimated using CalEEMod. According to the *Riverside Sheriffs' Association Project - Transportation Study Scoping Agreement* (TIA Scoping Agreement) prepared by Michael Baker International and dated February 12, 2026, the proposed project would generate approximately 2,815 average daily trips after accounting for the internal trip reduction. As shown in Table 4, mobile source emissions for both summer and winter would not exceed established SCAQMD thresholds. Therefore, impacts in this regard would be less than significant.

Energy Source Emissions

Project-generated energy source emissions would be associated with natural gas consumption from on-site combustion for space heating, water heating, and some appliances. Although the project would consume electricity, electricity would be produced off-site at regional power generation facilities and therefore would not generate on-site criteria pollutants. Project electricity consumption would only generate off-site greenhouse gas emissions. Energy source emissions would not exceed established SCAQMD thresholds; refer to Table 4. Impacts in this regard would be less than significant.

Area Source Emissions

Project area source emissions would be generated from consumer products, architectural coating applications, and landscaping. As shown in Table 4, area source emissions during both summer and winter would not exceed established SCAQMD thresholds. Impacts would be less than significant in this regard.

Total Operational Emissions

As shown in Table 4, the total operational emissions would not exceed the SCAQMD significance thresholds. Therefore, impacts in this regard would be less than significant.

Air Quality Health Impacts

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 individual [e.g., age, gender]). In particular, O_3 precursors, VOCs and NO_X, affect air quality on a regional scale. Health effects related to O_3 are therefore the product of emissions generated by numerous sources throughout a region. Existing models 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.

As noted in the Brief of Amicus Curiae by the SCAQMD for the *Sierra Club vs. County of Fresno*, the SCAQMD acknowledged 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. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD) for the *Sierra Club vs. County of Fresno*, SJVAPCD acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that health effects quantification from O_3, as an example, is correlated with the increases in ambient level of O_3 in the air (concentration) that an individual person breathes. The SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient O_3 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 O_3 levels at highest monitored sites by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-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. As the project would not exceed SCAQMD thresholds for construction and operational air

emissions, the project would have a less than significant impact for air quality health impacts.

c) 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. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as those 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.

Sensitive receptors near the project site include single family residential uses located approximately 100 feet to the west of the project site when measured from the project site property line to the residential receptor property line. To identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds (LSTs) for construction and operations impacts. The CO hotspot analysis following the LST analysis.

Localized Significance Thresholds

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized air quality impacts. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_X, $PM_{2.5}$, and/or PM_{10}. The SCAQMD's LST methodology specifies that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." As such, only the CalEEMod outputs categorized as "onsite" emissions were evaluated against the applicable LSTs. The SCAQMD recommends that any project over five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. The project site is located within Source Receptor Area (SRA) 30, *Coachella Valley*.

Construction LST

The SCAQMD guidance on applying CalEEMod to LSTs specifies the number of acres a particular piece of equipment would likely disturb per day.[1] SCAQMD provides LSTs for one-, two-, and five-acre site disturbance areas; SCAQMD does not provide LSTs for projects over five acres. The project would actively disturb approximately one acre per day during the grading phase of construction. Therefore, the LSTs for one-acre were utilized for the construction LST analysis. Sensitive receptors near the project site include single family residential uses located approximately 100 feet (approximately 30 meters) to the west of the project site when measured from property line to the residential receptor

[1] The number of acres represent the total acres traversed by grading equipment. To properly grade a piece of land, multiple passes with equipment may be required. The disturbance acreage is based on the equipment list and days of the grading phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday.

property line. These sensitive land uses may be potentially affected by air pollutant emissions generated during on-site construction activities. LSTs are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. As the nearest sensitive uses are located approximately 30 meters from the project site, the LST values for 25 meters were conservatively used.

Table 5, *Localized Emissions Significance* shows the localized construction-related emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ compared to the LSTs for SRA 30. It is noted that the localized emissions presented in Table 5 are less than those in Table 3 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust), and do not include off-site emissions (i.e., from hauling activities). As shown in Table 5, localized construction emissions would not exceed the LSTs for SRA 30. Therefore, localized significance impacts from construction would be less than significant.

Table 5 Localized Emissions Significance

Source[1,2,3]	Pollutant (pounds/day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Year 1 (2026)	14.97	17.44	2.49	1.48
Year 2 (2027)	16.34	22.89	0.63	0.58
Year 3 (2028)	9.73	14.05	0.32	0.29
Maximum Daily Emissions	**16.34**	**22.89**	**2.49**	**1.48**
Localized Significance Threshold[4]	*132.0*	*878.0*	*4.0*	*3.0*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Notes:
1. The grading phase emissions in Year 1 are presented as the worst-case scenario for NO_X, CO, PM_{10}, and $PM_{2.5}$.
2. The building construction phase emissions in Year 2 and Year 3 are presented as the worst-case scenario for NO_X, CO, PM_{10}, and $PM_{2.5}$.
3. The reduction/credits for construction emissions are based on "compliance with established SCAQMD requirements (Rule 402 and 403). Compliance with SCAQMD Rules are reflected in CalEEMod to include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. The emissions results in this table represent the "mitigated" emissions shown in Appendix A.
4. The Localized Significance Threshold was determined using Appendix C of the SCAQMD's *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (approximately one acre; therefore, the one-acre threshold was used) for Source Receptor Area 30, *Coachella Valley*.

Source: Refer to Appendix A, *Air Quality Modeling Sheets*, for assumptions used in this analysis.

Operational LST

According to SCAQMD LST methodology, LSTs would apply to operational activities if the project includes stationary sources or attracts mobile sources that may spend extended

periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed project does not include such uses. Thus, due to the lack of such emissions, no long-term LST analysis is needed. Operational LST 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/maintenance area for the federal CO standards and an attainment area under State standards. There has been a decline in CO emissions even though 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. 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. As previously discussed, the site is in SRA 30. Communities within SRAs are expected to have similar climatology and ambient air pollutant concentrations. The monitoring station closest to the project site is the Palm Springs – Fire Station which is located approximately 6.75 miles northwest of the project site. The CO measurements collected by this monitoring station are representative of the background CO concentration due to its proximity to the project. The maximum CO concentration at Palm Springs Fire Station was measured at 0.903 ppm. 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 not be experienced in the project's vicinity and a less than significant impact would occur in this regard.

Air Quality Health Impacts

As evaluated above, the project's air emissions would not exceed the SCAQMD's LSTs, and CO hotpots would not occur as a result of the proposed project. Therefore, the project would not exceed the most stringent applicable federal or State ambient air quality standards for emissions of CO, NO_X, PM_{10}, or $PM_{2.5}$. It should be noted that the ambient air quality standards are developed and represent levels at which the most susceptible persons (e.g., children and the elderly) are protected. In other words, the ambient air quality standards are purposefully set in a stringent manner to protect children, elderly, and those with existing respiratory problems. Thus, air quality health impacts would be less than significant in this regard.

d) LESS THAN SIGNIFICANT IMPACT:

Construction Odors

During project construction, diesel exhaust from heavy-duty equipment and VOCs released during architectural coatings and paving activities may generate localized odors. These odors would be temporary, limited to the active construction duration, and would dissipate rapidly. Additionally, project construction would be subject to SCAQMD Rules 402 and 1113. SCAQMD Rule 402 states that no person shall emit contaminants that "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." SCAQMD Rule 1113 limits VOC content in architectural coatings, which would also reduce odors. Furthermore, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which restrict idling of off-road and on-road diesel equipment to no more than five minutes. Reducing the idling duration would minimize diesel exhaust emissions, thereby further reducing odors. Therefore, project constructions would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

Operational Odors

According to the SCAQMD *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 uses identified by the SCAQMD as being associated with odors. As such, project operations would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

3. 3 Mitigation Measures: None required.

4 - Biological Resources

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

Sources:
Michael Baker International, *Biological Resources Assessment for the Riverside Sheriffs' Association Benefit Trust Project in Rancho Mirage, Riverside County, California.* April 3, 2026

4.1 Setting

The following discussion of settings and impacts is based on the Biological Resources Assessment (Michael Baker International, April 2026); refer to Appendix B, *Biological Resources Assessment* of this Initial Study.

The project site is located within a partially developed portion of the Coachella Valley. The site is surrounded by commercial development to the east, residential to the west, recreational to the south, and disturbed natural habitat to the north. Elevations on-site range from approximately 267 feet in the southeast corner to 293 feet in the southwest corner of the project site.

During the biological field survey conducted in January 2026, the undeveloped site consisted of disturbed creosote bush scrub very similar to the surrounding natural communities, and consisted of a mix of native and non-native species. However, as of late March/early April 2026, the site was cleared of vegetation.

4.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION:
The Biological Resources Assessment included a site survey as well as review of specific habitat preferences, known distributions, and elevation ranges and concluded that one special-status plant species, the Coachella Valley milk-vetch, was determined to have a high potential to occur within the project site. In addition, two special-status wildlife species, the burrowing owl and loggerhead shrike were determined to have a moderate potential to occur within the project site. In order to avoid a substantial adverse effect to these species, mitigation measures BIO-1, BIO-2, and BIO-3 related to conducting a pre-construction plant survey, burrowing owl survey, and nesting bird survey would be required. Implementation of these measures would reduce this impact to a less than significant level.

b) NO IMPACT:
The Biological Resources Assessment included a query of the California Natural Diversity Database (CNDDB; CNDDB 2026) and California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2026) to obtain a list of special-status plant and wildlife species occurrence records within the U.S. Geological Survey (USGS) Cathedral City, Seven Palms Valley, Desert Hot Springs, East Deception Canyon, Palm Springs, Myoma, La Quinta, Rancho Mirage, and Palm View Peak, California 7.5-minute quadrangle maps. The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online database was also reviewed to identify federally listed special-status species and other resources, such as Critical Habitat, known or expected to occur in the project region (USFWS 2026a). Due to the results listed in the IPaC report, the USFWS Critical Habitat for Threatened & Endangered Species mapping tool (USFWS 2026c) was accessed to determine the location of designated Critical Habitat in relation to the site.

Three natural communities considered sensitive by the CDFW were reported in the CNDDB from the nine USGS 7.5-minute quadrangle map region surrounding and including the Cathedral City, California map. These are:

- Desert Fan Palm Oasis Woodland
- Mesquite Bosque
- Southern Riparian Forest

The project site supports disturbed creosote bush scrub. There are no riparian habitats or other sensitive natural communities present within the project site boundaries. Therefore, the project would have no impact on riparian habitats or other sensitive natural communities.

c) NO IMPACT:

Based on a review of aerial photographs, USGS 7.5-minute quadrangle maps, USFWS National Wetland Inventory maps, and observations made during the field survey, there are no aquatic features present within the project site. A formal aquatic resources delineation is not recommended. As a result, the project site does not contain state or federally protected wetlands or other regulated aquatic features. Therefore, there would be no impact to state or federally protected wetlands or other aquatic features.

d) LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION:

The project site is an area of undeveloped land surrounded mostly by existing development and disturbance. The undeveloped land to the north may support wildlife movement, but the project site is mostly surrounded by developed land. There would be no impact to native wildlife movement or wildlife corridors.

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the CFGC.[2] To maintain compliance with the MBTA and CFGC, clearance surveys are typically required during the breeding season (generally February 1 to August 31 but as early as January 1 for raptors) prior to any ground disturbance or vegetation removal activities to avoid direct and indirect impacts to active bird nests and/or nesting birds. Consequently, if an active bird nest is destroyed or if project activities result in indirect impacts to nesting birds (e.g., nest abandonment, loss of reproductive effort), it is considered take and is potentially punishable by fines and/or imprisonment. The vegetation within and adjacent to the site provides suitable nesting opportunities for a variety of bird species. However, no nests were observed during the survey.

The project site has the potential to support nesting songbirds and raptors within the disturbed creosote bush scrub. Nesting activity typically occurs from February to August. Disturbing or destroying active nests is a violation of the MBTA. In addition, nests and eggs are protected under CFGC Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact. Mitigation Measure BIO-3 provided below would reduce this impact to a less than significant level.

[2] Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the CFGC or any regulation made pursuant thereto; Section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey); and Section 3513 makes it unlawful to take or possess any migratory non-game bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA, as amended (16 U.S.C. § 703 et seq).

e) NO IMPACT:
The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Further, the project would not conflict with an adopted habitat conservation plan, natural community conservation plan, or any other approved local, regional, or state habitat conservation plan. Therefore, there would be no impact.

f) LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION:
The project site is within the boundary of the CVMSHCP; however, the site is not located within nor adjacent to a Conservation Area. Further, the City is a signatory to the CVMSHCP and therefore disturbance of at least a portion of the site is subject to the payment of a Local Development Mitigation Fee (LDMF), which would mitigate potential project impacts to CVMSHCP covered species; refer to mitigation measure BIO-4.

Adherence to mitigation measures BIO-1 through BIO-4 described below would ensure that the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Impacts would be less than significant with mitigation incorporated.

4.3 Mitigation Measures:

BIO-1: Special-Status Plant Surveys. Prior to project implementation and during the appropriate blooming periods for special-status plant species with the potential to occur within the project site, a qualified botanist shall conduct rare plant surveys, with a focus on Coachella Valley milk-vetch, to determine presence or absence of any special-status plant species on-site. The surveys shall be inclusive of, at a minimum, areas proposed for disturbance and shall follow the U.S. Fish and Wildlife Service's (USFWS) *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (2000) and/or California Department of Fish and Wildlife's (CDFW) *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plan Populations and Sensitive Natural Communities* (2018). A report summarizing the methods and results of rare plant surveys shall be submitted to the City of Rancho Mirage. If individual or populations of special-status plant species are found within the areas proposed for disturbance, measures to avoid and minimize impacts shall be recommended.

If state- and/or federally-listed plant species are present and avoidance is infeasible, consultation with the CDFW and/or USFWS would be required and an Incidental Take Permit(s) (ITP) from the CDFW and/or USFWS shall be obtained prior to the commencement of Project activities. Mitigation measures identified in the ITP shall be implemented to comply with requirements of the take authorization. If non-listed special-status species are present and unavoidable, consultation with the CDFW shall occur regarding the need for preparation and implementation of a Habitat Mitigation and Monitoring Plan.

BIO-2: Burrowing Owl Survey. Prior to construction, two preconstruction burrowing owl clearance surveys shall be conducted, with the first survey occurring 14–30 days prior to any vegetation removal or ground-disturbing activities occurring and the second survey occurring 24 hours prior to disturbance. A report summarizing methods and results of burrowing owl surveys shall be submitted to the City of Rancho Mirage. If an occupied burrow is found outside, but within 500 feet, of the development footprint, the qualified biologist shall establish a "no-disturbance" buffer around the burrow location(s). The burrow(s) will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Project activities will be permitted within the buffer until the young are no longer dependent on the burrow.

If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on-site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the Wildlife Agencies.

BIO-3: Nesting Bird Survey. Within 30 days of ground-disturbing activities associated with project implementation that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the Project region, or as determined by a qualified biologist), the Project Applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present on the Project site. The surveys shall continue on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground-disturbing activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground-disturbing activities. A report summarizing methods and results of nesting bird surveys shall be submitted to the City of Rancho Mirage.

If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with the CDFW, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. A report summarizing methods and results of rare plant surveys shall be submitted to the City.

BIO-4: CVMSHCP Local Development Mitigation Fee. As a signatory to the Coachella Valley Multiple Species Habitat Conservation Plan, the City of Rancho Mirage shall require payment of the local development mitigation fee prior to issuance of building permits for the proposed use on the project site at the rates applicable at the time of payment of the

fee as set forth in the most recent fee schedule. The Project Applicant shall be required to provide documentation to the City of Rancho Mirage confirming payment of the local development mitigation fee.

5 - Cultural Resources

CULTURAL RESOURCES – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Sources:
BCR Consulting LLC, *Cultural Resources Assessment Rancho Mirage Sheriff Facility Project Rancho Mirage, Riverside County, California,* January 23, 2026.

5.1 Setting

The following discussion of settings and impacts is based on the Cultural Resources Assessment (BCR Consulting LLC, March 2026); refer to Appendix C, *Cultural Resources Assessment* of this Initial Study.

As part of the *Cultural Resources Assessment*, an archaeological pedestrian field survey was conducted on December 17, 2025. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across 100 percent of the proposed project site. Surface visibility was 98 percent. Soil exposures, including natural and artificial clearings were carefully inspected for evidence of cultural resources. No cultural resources (including prehistoric or historic-period archaeological sites or historic-period buildings) were identified during the field survey.

The following discussion of the project area and potential impacts is based on Appendix C. Preparation of the *Cultural Resources Assessment* entailed a records search and a field survey. The records search included a review of the following: the South Coastal Information Center (SCIC); the National Register of Historic Places (National Register); the California Register of Historical Resources (California Register); and documents and inventories from the California Office of Historic Preservation including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

Data from the SCIC revealed that 33 cultural resource studies have taken place resulting in 15 cultural resources identified within one mile of the project site. Two of the previous studies have

assessed portions of the project site resulting in no cultural resources previously identified within its boundaries.

5.2 Discussion of Impacts:

a) NO IMPACT:
The *Cultural Resources Assessment* concluded that there are no historical resources on the project site. Accordingly, the project would not cause a substantial adverse change to any historical resources. No impact would occur in this regard.

b) LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATION:
No historic or prehistoric cultural or archaeological resources were identified on the project site during the field survey and during the cultural/archaeological records search. Although no prehistoric archaeological resources were identified on the surface during the field survey, many others with significant buried components have been recorded in the project vicinity and ground-disturbing activities have the potential to reveal buried deposits not observed on the surface.

As a result of Assembly Bill 52 (AB 52) consultation and in order to reduce or avoid potential archeological impacts, mitigation measures CR-1 (Qualified Archeological Monitor), CR-2 (Cultural Resource Monitor), and CR-3 (Artifact Disposition) would be implemented. These measures involve having a qualified archaeological monitor and cultural resource monitor present during earthmoving activities during the construction phase and include artifact disposition activities in the event a finding is made during construction.

The cultural resource monitor would work under the direct supervision of a cultural resources professional who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. Prior to ground disturbance work, the qualified archaeological monitor shall present construction personnel with a Worker Environmental Awareness Program (WEAP) Training. With implementation of mitigation measures CR-1, CR-2, and CR-3 the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. Impacts would be less than significant with the incorporation of mitigation.

c) NO IMPACT:
No human remains or cemeteries were identified as occurring on the project site. In the event human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. As required by state law, the County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or their authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. With adherence to State Health and Safety Code Section 7050.5 impacts relative to human remains would be less than significant.

5.3 Mitigation Measure:

CR-1: Qualified Archeological Monitor. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall retain a qualified archaeological monitor to be on-site during earthmoving activities and present a cultural resource sensitivity training for construction personnel (i.e., Worker Environmental Awareness Program [WEAP]). The qualified archaeologist would prepare an archaeological monitoring and discovery plan that will apply to the entire project area and includes, at a minimum, a discussion of key personnel and their specific roles and responsibilities, archaeological monitoring methods, a discussion of archaeological resource classes that may be encountered during construction, and protocols for identifying, evaluating, treating, and temporary curation of archaeological resources that may be encountered. Should any cultural resources be discovered during implementation of the monitoring plan, the monitor(s) shall be authorized to temporarily halt all construction-related activities within a 100-foot radius of the discovery while the resource is evaluated for significance in consultation with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO) If the resource is determined significant, the qualified archaeologist should make recommendations to the City on measures that should be implemented to treat cultural resources in accordance with the protocols developed in the mitigation and discovery plan. No further grading shall occur in the discovery area until the City is notified by the qualified archaeologist that treatment has been completed.

CR-2: Cultural Resource Monitor. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall enter into monitoring agreement(s) with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO), for the appropriate amount of Native American Monitor(s). The Project Applicant/Owner/Developer shall expect for the monitoring agreement process to take 3-4 weeks. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall provide evidence to the City of Rancho Mirage Planning Department that a Native American Monitoring Agreement has been executed with ACBCI THPO.

CR-3: Artifact Disposition. In the event cultural resources are identified during ground disturbing activities, the landowner(s) shall relinquish ownership of all cultural resources. Avoidance is the first option of preservation. If avoidance is not feasible, a reburial location shall be selected in consultation with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO). This shall include measures and provisions to protect the reburial area from any future impacts. Reburial shall not occur until all cataloguing, analysis and special studies have been completed on the cultural resources. The reburial location shall remain confidential. If reburial on-site is not feasible, ACBCI THPO shall curate all cultural resources of pre- contact origin. The disposition of historic resources shall be discussed among ACBCI THPO, the project Archaeologist, and the City of Rancho Mirage.

6 - Energy

ENERGY – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Sources:

California Air Pollution Control Officers Association, *CalEEMod Version 2022.1*.
California Energy Commission, *2023 Integrated Energy Policy Report, page 130*, February 14, 2024.
California Energy Commission, *Electricity Consumption*, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0, accessed March 2, 2026.
California Energy Commission, *Final 2022 Integrated Energy Policy Report Update, Figure 18*, May 10, 2023.
California Energy Commission, *Natural Gas Consumption*, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1, accessed March 2, 2026.
City of Rancho Mirage, *2013 Sustainability Action Plan: Leadership in Energy Efficiency*, March 2013.
City of Rancho Mirage, *Rancho Mirage Energy Action Plan*, 2013.
Michael Baker International, *Riverside Sheriffs' Association Project - Transportation Study Scoping Agreement*, February 12, 2026.

6.1 Setting

Electricity

The project site is serviced by Imperial Irrigation District (IID). IID is a local service provider for the eastern portion of the Coachella Valley including portions of Rancho Mirage and all Imperial County, covering approximately 6,471 square miles and more than 165,000 people. Specifically, IID provides services for everything north of Gerald Ford Drive and east of Bob Hope Drive in the City. IID manages and operates its electricity system in Riverside and Imperial county to provide its customers energy from a variety of sources including renewables.

Natural Gas

The project site is serviced by Southern California Gas (SoCalGas). SoCalGas operates transmission lines crossing the Coachella Valley, along Interstate-10 to the north and a system of high pressure distribution lines to its service areas in Rancho Mirage.

Regulations and Plans

California Building Energy Efficiency Standards

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) is commonly referred to as "Energy Code" or "Title 24". In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The lates Title 24 (2025 Title 24) standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more. The 2025 Title 24 went into effect January 1, 2026, which means buildings whose permit applications are applied for on or after January 1, 2026 must comply with the 2025 Title 24 standards.

California Green Building Standards

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11) is commonly referred to as CALGreen. CALGreen is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed the green building standards to meet the goals of California's landmark initiative Assembly Bill (AB) 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHGs) to 1990 levels by 2020. CALGreen was developed to (1) reduce GHGs from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials. The lates CALGreen (2025 CALGreen) standards went into effect January 1, 2026, which means buildings whose permit applications are applied for on or after January 1, 2026 must comply with the 2025 CALGreen standards.

Senate Bill 100

Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. The bill requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), State board or the California Air Resources Board's (CARB), and all other State agencies to incorporate the policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and CARB to utilize programs authorized under existing statutes to achieve that policy and, as part of

a public process, issue a joint report to the Legislature by January 1, 2021, and every four years thereafter, that includes specified information relating to the implementation of SB 100.

Rancho Mirage Sustainability Plan

The City of Rancho Mirage's *2013 Sustainability Action Plan: Leadership in Energy Efficiency* (Rancho Mirage Sustainability Plan), adopted in March 2013, serves as the City's overarching energy action framework, outlining strategies to improve energy efficiency, reduce greenhouse-gas emissions, and guide sustainable development through detailed targets, emissions inventories, and phased implementation measures.

Rancho Mirage Energy Action Plan

The *Rancho Mirage Energy Action Plan* (ePlan) acts as a roadmap to reduce municipal energy consumption, lower operating costs, and increase energy awareness in alignment with California state policies. It focuses on retrofitting City facilities, upgrading the municipal fleet, and implementing community-wide energy efficiency measures to reduce greenhouse gas (GHG) emissions. The goals in ePlan fall into three categories: City Facilities, City Fleet, and Community-Wide Policies.

Thresholds of Significance

Appendix F of the CEQA Guidelines is an advisory document that assists environmental document preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis in Response 3.6(a) relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- **Criterion 1**: The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- **Criterion 2**: The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- **Criterion 3**: The effects of the project on peak and base period demands for electricity and other forms of energy.
- **Criterion 4**: The degree to which the project complies with existing energy standards.
- **Criterion 5**: The effects of the project on energy resources.
- **Criterion 6**: The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the project's energy usage is presented and addresses **Criterion 1**. The discussion on construction-related energy use focuses on **Criteria 2, 4,** and **5**. The discussion on operational energy use is divided into transportation energy demand and building energy demand. The transportation energy demand analysis discusses **Criteria 2, 4,** and **6**, and the building energy demand analysis discusses **Criteria 2, 3, 4,** and **5.**

6.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:

This impact analysis focuses on the sources of energy that are relevant to the proposed project: electricity and natural gas, transportation fuel from construction and operational vehicle trips, and fuel consumed by construction equipment. The California Emissions Estimator Model (CalEEMod) version 2022.1 was utilized to calculate the project's construction and operational energy consumption. The project's estimated electricity consumption is based primarily on CalEEMod's default settings for Riverside County, and consumption factors provided by (IID) and SoCalGas, the electricity and natural gas providers for the project site. The amount of operational fuel consumption was estimated using the CARB Emissions Factor 2021 (EMFAC2021) computer program which provides projections for typical daily fuel usage in the County, and the project's annual vehicle miles traveled (VMT) outputs from CalEEMod. The estimated construction fuel consumption is based on the project's construction equipment list, construction timing and phasing, and duration of use of construction equipment. The project's estimated energy consumption is summarized in Table 6, *Project and Countywide Energy Consumption*. Refer to Appendix A, *Air Quality Modeling Sheets*, for CalEEMod output and energy calculations.

Table 6 Project and Countywide Energy Consumption

Energy Consumption Type	Project Annual Energy Consumption [1]	Riverside County Annual Energy Consumption [2]	Percentage Increase Countywide
Construction			
Construction Off-Road Fuel Consumption	34,369 gallons	30,111,952 gallons	0.1141%
Construction On-Road Fuel Consumption	24,380 gallons	862,393,259 gallons	0.0028%
Operation			
Electricity Consumption [3]	2,725 MWh	17,418,390 MWh	0.0156%
Natural Gas Consumption [4]	18,047 therms	426,694,815 therms	0.0042%
Operational On-Road Fuel Consumption	1,203,074 gallons	819,974,853 gallons	0.1467%

Energy Consumption Type	Project Annual Energy Consumption [1]	Riverside County Annual Energy Consumption [2]	Percentage Increase Countywide
Notes: 1. Project electricity consumptions as modeled in California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. Project fuel consumption calculated based on CalEEMod results. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021. 2. The project's increase in electricity consumption is compared to the total consumption in Riverside County in 2024 (latest year where data is available). Construction on-road and off-road fuel consumption was compared with the projected Riverside Countywide off-road and on-road fuel consumption in 2026 (first year of construction). The project increases in operational automotive fuel consumption is compared with the projected Countywide on-road fuel consumption in 2028 (first year of operation). 3. Electricity consumption data source: California Energy Commission, *Electricity Consumption*, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0, accessed March 2, 2026. 4. Natural Gas consumption data source: California Energy Commission, *Natural Gas Consumption*, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1, accessed March 2, 2026.			
Source: Refer to Appendix A, *Air Quality Modeling Sheets*.			

Construction-Related Energy Consumption

During construction, the project 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.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during demolition, grading, building construction, paving, and architectural coatings. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that heavy-duty diesel equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**Criterion 4**).

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. As indicated in Table 6, the proposed project's construction off-road fuel consumption would be

approximately 34,369 gallons, which would account for 0.1141 percent of the County's annual off-road construction fuel consumption, and on-road fuel consumption from construction would be approximately 24,380 gallons, which would account for approximately 0.0028 percent of the County's annual on-road fuel consumption. As such, project construction would have a minimal effect on the local and regional energy supplies and would not require additional capacity (**Criterion 2**).

Construction fuel use is temporary and would cease upon completion of construction activities. Construction activities would be planned and sequenced to maximize the efficiency of construction. Therefore, there are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State (**Criterion 5**). Additionally, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13, Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the EPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, the project would comply with applicable regulatory requirements including CALGreen. The latest CALGreen requires that all "New Construction" (pursuant to the Green Building Code) are required to divert 65 percent of the construction materials generated during construction. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects, and a less than significant impact would occur in this regard during project construction.

Operational Energy Consumptions

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States.

Project-generated vehicle emissions have been estimated using CalEEMod based on the project's average daily trips (2,815 trips) per the *Riverside Sheriffs' Association Project - Transportation Study Scoping Agreement* (TIA Scoping Agreement), prepared by Michael Baker International and dated February 12, 2026. As indicated in Table 6, the project's operational automotive transportation at buildout is estimated to consume approximately 1,203,074 gallons of fuel per year. As such, project-related mobile sources would account for approximately 0.1467 percent of the County's forecasted annual consumption of fuel starting in 2028 (first year of operation). The proposed project would account for a nominal percentage of the forecasted annual operational automotive fuel consumption for the County and, thus, would have a nominal effect on the local and regional energy supplies. (**Criterion 1 and Criterion 2**).

The key drivers of transportation-related fuel consumption rely on many personal choices on when and where to drive for various purposes. The project proposes a mix of commercial, office, medical, health and fitness uses in a developed area of the City. Transit service (bus) is provided along Dinah Shore Drive near the project site. Nonetheless, in accordance with Title 24 and CALGreen, the project would include bicycle facilities (34 bike parking spaces), which would promote an alternative mode of transportation and reduce fuel consumption (**Criterion 4** and **Criterion 6**). The proposed project would also provide electric vehicle charging stations/parking and vanpool parking spaces. Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. A less than significant impact would occur.

Stationary Energy Demand

The CEC developed 2024 to 2040 forecasts for energy consumption and peak demand in support of the 2024 Integrated Energy Policy Report (2024 IEPR) for each of the major electricity and natural gas planning areas and the State based on the economic and demographic growth projections. CEC forecasted baseline electricity consumption grows at a rate of about 1.7 percent annually through 2040. The natural gas consumption grows at a rate of about 0.2 percent annually through 2035.

As shown in Table 6, the project's operational electricity and natural gas consumption would represent approximately a 0.0156 percent and 0.0042 percent increase, respectively, over the current Countywide usage, which would be significantly below CEC's forecasts and the current Countywide usage. Therefore, the project would be consistent with the CEC's energy consumption forecasts and would not require additional energy capacity or supplies (**Criterion 1** and **Criterion 2**). In accordance with Title 24 and CALGreen, the project would include sustainability features such as solar-ready roofs, all energy efficient appliances, low-flow fixtures, water-efficiency irrigation, draught tolerant landscape, among others. The project would also consume energy during the same time periods as other surrounding uses. As a result, the project would not result in unique or more intensive peak or base period electricity demand (**Criterion 3**).

Conclusion

As shown in Table 6, the project's operational energy from transportation and stationary sources would be significantly below CEC's forecasts and the current Countywide usage. The project would also adhere to all federal, State, and local requirements for energy efficiency. Additionally, the project would not result in a substantial increase in demand for electricity transmission or natural gas services, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure. Therefore, the proposed project would not cause wasteful, inefficient, and unnecessary consumption of energy during operation, or preempt future energy development or future energy conservation. A less than significant impact would occur in this regard.

b) LESS THAN SIGNIFICANT IMPACT:
As discussed above, operational energy consumption of the proposed project would be a nominal fraction of County's projected energy consumption and substantially below CEC's

forecasts in the 2024 IEPR (i.e., Statewide annual average growth rates of energy demand would be 1.7 percent for electricity); refer to Table 6. The proposed project supports energy efficiency and sustainability objectives by promoting multi-modal transportation through the provision of electric vehicle charging stations and bike parking spaces, and maintaining low operational energy demand through solar-ready roofs, all energy efficient appliances, low-flow fixtures, water-efficiency irrigation, and draught tolerant landscape. Therefore, the project would be consistent with the CEC's 2024 IEPR.

Further, as shown in Table 6, the project would not result in substantial energy demand that have the potential to conflict with energy reduction goals as established for the City in the Rancho Mirage Sustainability Plan and ePlan. The Rancho Mirage Sustainability Plan identifies 82 GHG reduction measures that the City uses to reduce GHG emissions and achieve the GHG reduction targets of AB 32, which ultimately reduce energy consumption. These actions include a combination of programs, policies, resolutions, and incentives, as well as outreach and education activities. As such, all of these measures focus on the City's action and would not be directly applicable to a development project. Further, as previously mentioned, the goals in ePlan fall into three categories: City Facilities, City Fleet, and Community-Wide Policies. As such, no goals are directly applicable at a project-level. Nonetheless, the proposed project would be consistent with the City's main objectives in these local plans that aim to promote multimodal transportation and reduce energy consumption. For instance, the project would encourage the use of bicycle and clean air vehicle by including bike racks and designating electric vehicle and vanpool parking spaces with electric vehicle chargers installed; and reduce energy consumption by installing energy efficient appliances and committing to waste diversion goals. As such, the project would be consistent with the Rancho Mirage Sustainability Plan and ePlan, and less than significant impacts would occur in this regard.

6.3 Mitigation Measure:

None required.

7 - Geology and Soils

GEOLOGY AND SOILS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Sources:

California Department of Conservation, *Earthquake Zones of Required Investigation* , https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/, October 30, 2025.

Michael Baker International, *Preliminary Water Quality Management Plan*, January 2026.

Sladden Engineering, *Geotechnical Investigation Proposed Commercial Development APN 685-090-010 SEC Dinah Shore Drive & Key Largo Avenue City Of Rancho Mirage, California*, January 20, 2026.

7.1 Setting

Geologic Setting

The City is located in an area subject to considerable seismic and geological hazards including the following: strong ground shaking; seismic -induced settlement; seismic -induced landslides; collapsible and expansive soils; ground subsidence; and wind-blown sand hazards. There are two active faults near the northern portion of the City: the Banning fault and the Garnet Hill fault. These faults are located north of I-10 and are outside of the City's limits. Liquefaction is generally related to strong seismic shaking events where the groundwater occurs at shallow depth (generally within 50 feet of the ground surface). The northern portion of the City, where the project site is located, has been identified as having moderate potential for liquefaction. Under some conditions, strong ground shaking may result in the densification or compaction of soils resulting in local or regional settlement of the ground surface. The project site is located in an area identified as having a high susceptibility to seismically induced settlement. Due to faults in the area, there is a high potential for seismically induced rock falls and landslides to occur in the City. The project site is located in an area identified as having a low landslide susceptibility. Portions of the City, including the project site, are identified as being highly susceptible to wind erosion due to the aridity and strong wind conditions present in the region.

Paleontological Resources

The geologic units underlying this project are mapped as loose fine sand from the Holocene epoch (Dibblee and Minch 2008). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius.

7.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:
As mentioned above, the project site is a seismically active region. However, the project site is not located on an active fault or within an Alquist-Priolo Earthquake Fault Zone. According to the California Department of Conservation, the closest active fault to the project site is the Banning fault, which is part of the San Andreas Fault Zone. The Banning fault is located approximately 3.2 miles northeast of the project site. Due to distance, the potential for fault rupture on-site is considered very low. A less than significant impact would occur in this regard.

b) LESS THAN SIGNIFICANT IMPACT:
The project site is located in a region of generally high seismicity (Southern California). As such, the project site is expected to experience strong ground motions from earthquakes on faults. As previously mentioned, the Banning fault, part of the large San Andreas Fault Zone, is the closest active fault, and it is located approximately 3.2 miles to the northeast. However, active or potentially active faults are not known to exist on or in the immediate vicinity of the site. The would be required to be in conformance with existing seismic design requirements of the California Building Code (CBC). Conformance with the seismic design recommendations identified in the CBC would ensure impacts related to ground shaking are less than significant.

c) LESS THAN SIGNIFICANT IMPACT:
Liquefaction is generally related to strong seismic shaking events where the groundwater occurs at shallow depth (generally within 50 feet of the ground surface). The City's General Plan Safety Element has identified the northern portion of the City, where the project site is located, as having moderate potential for liquefaction. As detailed in Appendix D, *Geotechnical Investigation*, groundwater was not encountered at the maximum explored depth of 51 feet. Groundwater is expected at a depth of 150 feet or more. Accordingly, liquefaction related to strong seismic ground shaking is not expected at the project site. Further, the project is designed to conformance with the seismic provisions of the CBC, including those pertaining to liquefaction. Conformance with seismic standards in the CBC would ensure impacts related to liquefaction are less than significant.

d) LESS THAN SIGNIFICANT IMPACT:
The City's General Plan Safety Element has identified a low potential for landslide risk in the vicinity of the project site. Accordingly, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. A less than significant impact would occur in this regard.

e) 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, which could expose soils to short-term erosion by wind and water. Soil disturbance would temporarily occur during earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction, and grading. Disturbed soils would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project site. According to the City's General Plan Safety Element, the portion of the City the project site is located within has been identified as highly susceptible to wind erosion due to the aridity and strong wind conditions present in the region.

The project is subject to compliance with the requirements in the project-specific Preliminary Water Quality Management Plan to reduce potential for soil erosion. The project would also employ Best Management Practices (BMPs) during construction to control runoff from discharging from the site during project construction; refer to Section 4.10, *Hydrology and Water Quality*. Impacts would be less than significant in this regard.

f) LESS THAN SIGNIFICANT IMPACT:
Refer to Responses 7(a)(iii), 7(a)(iv), and 7(d) for a discussion regarding liquefaction, landslides, and collapse (from 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. According to the Geotechnical Investigation, the project site is not subject to seismic-related ground failure (i.e., liquefaction). As a result, the lateral spread is anticipated to be negligible. No impact would occur in this regard.

Subsidence

According to the U.S. Geological Survey, land subsidence occurs when large amounts of groundwater have been withdrawn from certain types of rocks, such as fine-grained sediments. The rock compacts because the water is partly responsible for holding the ground up. When the water is withdrawn, the rocks fall in on themselves. Events, other than the removal of groundwater, that can cause land subsidence include aquifer-system compaction, drainage of organic soils, underground mining, hydrocompaction, natural compaction, sinkholes, and thawing permafrost. According to the Geotechnical Investigation, no fissures or other surficial evidence of subsidence were observed at the subject site. Impacts relative to subsidence would be less than significant.

g) 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. Expansive soils are present in the City, as identified in the City's General Plan Safety Element. Prior to grading, a test for example soils must be performed in conformance with Municipal Code Section 15.64.050, *Expansive soils*. If expansive soils are found, the soils may be required to be removed. Further, the project would be designed in conformance with the CBC, which contains standards relative to expansive soils. Compliance with the City's Municipal Code and relevant sections of the CBC would ensure impacts relative to expansive soils are less than significant.

h) NO IMPACT:
The project does not propose the use of septic tanks or alternative wastewater disposal systems. No impact would occur in this regard.

i) NO IMPACT:
A paleontological review was conducted as part of the Cultural Resources Assessment prepared for the project site; refer to Appendix C. As detailed in Appendix C, while the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive. Therefore, potentially sensitive paleontological resources are not expected to occur on site and there will be no impact to such resources.

7.3 Mitigation Measures:

None required.

8 – Greenhouse Gas Emissions

GREENHOUSE EMISSIONS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Sources:

California Air Pollution Control Officers Association, *CalEEMod Version 2022.1*.
California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, December 2022.
California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2023, Trends of Emissions and Other Indicators*, September 20, 2024, https://ww2.arb.ca.gov/sites/default/files/2025-11/nc-2000_2023_ghg_inventory_trends.pdf, accessed March 2, 2026.
Michael Baker International, Riverside Sheriffs' *Association Project - Transportation Study Scoping Agreement*, February 12, 2026.
Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory*, https://scripps.ucsd.edu/programs/keelingcurve/, accessed March 2, 2026.
Southern California Association of Governments, *Connect SoCal: A Plan for Navigating to a Brighter Future (2024-2050 Regional Transportation Plan/Sustainable Communities Strategy)*, April 4, 2024.

8.1 Setting

Global Climate Change

California is a substantial contributor of global GHGs, emitting approximately 360.4 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2023. A carbon dioxide equivalent is defined as the number of metric tons of CO_2 emissions with the same global warming potential as one metric ton of another GHG. Methane (CH_4) 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 of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO_2, CH_4, and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found

that CO_2 concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO_2 concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of March 2026, the highest monthly average concentration of CO_2 in the atmosphere was recorded at 429.48 ppm.

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 ppm CO_2 equivalent (CO_2e) concentration is required to keep global mean warming below 2 degrees Celsius (^oC), which in turn is assumed to be necessary to avoid dangerous climate change.

Regulations and Plans

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency's (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence, the EPA found that six GHGs (CO_2, CH_4, N_2O, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Clean Air Act and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

On February 12, 2026, the EPA finalized its rescission of the 2009 Greenhouse Gas Endangerment Finding, which served as a prerequisite for regulating emissions from new motor vehicles and new motor vehicle engines. Absent this finding, the EPA lacks statutory authority under Section 202(a) of the Clean Air Act to prescribe standards for GHG emissions. Thus, the EPA also finalized the repeal of all subsequent GHG emission standards from its regulations for light-, medium-, and heavy-duty on-highway vehicles and engines.

As a result of these changes, engine and vehicle manufacturers no longer have any future obligations for the measurement, control, and reporting of GHG emissions for any highway engine and vehicle, including model years manufactured prior to this final rule. This finding is only related to GHG emissions and does not affect air pollutant regulations.

Executive Order S-3-05

Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order directed the California Environmental Protection Agency (Cal/EPA) Secretary to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary is required to submit biannual reports to the Governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with Executive Order S-3-05, the Cal/EPA Secretary created the California Climate Action Team, made up of members from various State agencies and commissions. The Climate Action Team released its first report in March 2006, which proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-13-08

Executive Order S-13-08 seeks to enhance the State's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of State's first climate adaptation strategy. This will result in consistent guidance from experts on how to address climate change impacts in California.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500-38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to Assembly Bill (AB) 1493 (Pavley Bill) should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then the California Air Resources Board (CARB) should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Assembly Bill 1279 (California Climate Crisis Act)

AB 1279 (the California Climate Crisis Act) declares the policy of the State both to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. AB 1279 requires that Statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels by 2045. AB 1279 also requires

the CARB to work with relevant State agencies to ensure that updates to the Scoping Plan identify and recommend measures to achieve these policy goals.

Senate Bill 905

Passed by the California Legislature in September 2022, SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate CCUS and carbon dioxide removal (CDR) projects and technology. While CARB has already approved a CCS Protocol for use in the Low Carbon Fuel Standard, it will need to be updated to reflect any requirements established by the new Carbon Capture, Removal, Utilization, and Storage Program at CARB.

Other requirements in SB 905 include monitoring and reporting requirements for CO_2 storage operators, the establishment of a working group on CO_2 storage, and state reporting requirements of any leakage or seismic activity.

Senate Bill 375

Senate Bill (SB) 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities' strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, is required to provide each affected region with GHG reduction targets emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets are to be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may not be eligible for funding.

Senate Bill 32

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

California Air Resources Board Climate Change Scoping Plan

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce CO_2e emissions by 174 million metric tons (MMT), or approximately 30 percent, from the State's projected 2020 emissions levels of 596 $MMTCO_2e$ under a business as usual (BAU) scenario. This is a reduction of 42 $MMTCO_2e$, or almost ten percent, from 2002 to 2004 average emissions, and requires the reductions in the face of population and economic growth through 2020.

The Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from the past baseline year using growth factors specific to each

of the different economic sectors (e.g., transportation, electrical power, industrial, commercial, and residential). CARB used three-year average emissions, by sector, from 2002 to 2004 to forecast emissions to 2020. The measures described in the Scoping Plan are intended to reduce projected 2020 BAU emissions to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal."

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update was finalized in November 2017 and approved on December 14, 2017, and reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new Statewide emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

On December 15, 2022, CARB released the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), which identifies the strategies achieving carbon neutrality by 2045 or earlier. The 2022 Scoping Plan contains GHG reductions, technology, and clean energy mandated by statutes. The 2022 Scoping Plan was developed to achieve carbon neutrality by 2045 through a substantial reduction in fossil fuel dependence, while at the same time increasing deployment of efficient non-combustion technologies and distribution of clean energy. The plan would also reduce emissions of short-lived climate pollutants (SLCPs) and would include mechanical CO_2 capture and sequestration actions, as well as emissions and sequestration from natural and working lands and nature-based strategies. Under 2022 Scoping Plan, by 2045, California aims to cut GHG emissions by 85 percent below 1990 levels, reduce smog-forming air pollution by 71 percent, reduce the demand for liquid petroleum by 94 percent compared to current usage, improve health and welfare, and create millions of new jobs. This plan also builds upon current and previous environmental justice efforts to integrate environmental justice directly into the plan, to ensure that all communities can reap the benefits of this transformational plan. Specifically, this plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands (NWL) to the State's GHG emissions, as well as their role in achieving carbon neutrality.

- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

California Building Energy Efficiency Standards

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) is commonly referred to as "Energy Code" or "Title 24". In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The lates Title 24 (2025 Title 24) standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more. The 2025 Title 24 went into effect January 1, 2026, which means buildings whose permit applications are applied for on or after January 1, 2026 must comply with the 2025 Title 24 standards.

California Green Building Standards

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11) is commonly referred to as CALGreen. CALGreen is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed the green building standards to meet the goals of California's landmark initiative Assembly Bill (AB) 32, which established a comprehensive program of cost-effective reductions of greenhouse gases (GHGs) to 1990 levels by 2020. CALGreen was developed to (1) reduce GHGs from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials. The lates CALGreen (2025 CALGreen) standards went into effect January 1, 2026, which means buildings whose permit applications are applied for on or after January 1, 2026 must comply with the 2025 CALGreen standards.

2024-2050 Regional Transportation Plan/ Sustainable Communities Strategy

On April 2024, the Regional Council of the Southern California Association of Governments (SCAG) formally adopted the Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal 2024). The Connect SoCal 2024 outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. The Connect SoCal 2024 sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce GHG emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the CARB. In addition, the Connect SoCal 2024 is supported by a combination of transportation and land use strategies that

outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements. These are articulated in a set of Regional Strategic Investments, Regional Planning Policies, and Implementation Strategies. The Regional Planning Policies are a resource for County Transportation Commissions (CTCs) and local jurisdictions, who can refer to specific policies to demonstrate alignment with the Connect SoCal 2024 when seeking resources from state or federal programs. The Implementation Strategies articulate priorities for SCAG efforts in fulfilling or going beyond the Regional Planning Policies.[3]

On May 7, 2025, CARB officially accepted SCAG's determination that Connect SoCal 2024 meets the state's GHG reduction targets. The plan demonstrates strategies to achieve per capita GHG reductions of 8 percent by 2020 and 19 percent by 2035 compared to 2005 levels, through goals such as:

- Build and maintain an integrated multimodal transportation network.
- Develop, connect, and sustain communities that are livable and thriving.
- Create a healthy region for the people of today and tomorrow.
- Support a sustainable, efficient, and productive regional economic environment that provides opportunities for all.

CARB's acceptance confirms that Connect SoCal 2024 is consistent with SB 375 requirements and aligns with California's climate goals.

Rancho Mirage Sustainability Plan

The City of Rancho Mirage's *2013 Sustainability Action Plan: Leadership in Energy Efficiency* (Rancho Mirage Sustainability Plan), adopted in March 2013, serves as the City's overarching energy action framework, outlining strategies to improve energy efficiency, reduce greenhouse-gas emissions, and guide sustainable development through detailed targets, emissions inventories, and phased implementation measures. A portfolio of 82 GHG emissions reduction measures covering seven spheres of daily activity is presented on the plan; these measures are designed to reach the California Global Warming Solutions Act of 2006 (AB 32) goal of Statewide GHG emissions be reduced to 1990 levels by 2020.

As the AB 32 GHG reduction target has been superseded by the 2022 Scoping Plan's objective, consistent with AB 1279, to achieve statewide carbon neutrality by 2045, the measures and goals within the Rancho Mirage Sustainability Plan are outdated. Because the project's GHG consistency analysis relies on the current statewide framework established in the 2022 Scoping Plan, a consistency evaluation with the Rancho Mirage Sustainability Plan is not provided.

Thresholds of Significance

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. This section recommends certain factors to be

[3] Southern California Association of Governments, Connect SoCal: A Plan for Navigating to a Brighter Future (2024-2050 Regional Transportation Plan/Sustainable Communities Strategy), April 4, 2024, available at: https://scag.ca.gov/connect-socal, accessed on January 26, 2026.

considered in the determination of significance (i.e., the extent to which a project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The amendments do not establish a quantified or performance-based threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)).

The California Natural Resources Agency (CNRA) has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (see CEQA Guidelines Section 15064(h)(3)). A project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the cumulative problem within the geographic area of the project (see 14 CCR Section 15064[h][3].)

However, CEQA Guidelines Section 15064.4 does not establish a threshold of significance. CEQA Guidelines Section 15064.6 provides lead agencies the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts, if any threshold chosen is supported by substantial evidence.

The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions. Nor have the South Coast Air Quality Management District (SCAQMD), CARB, or any other State or regional agency adopted a numerical significance threshold for assessing GHG emissions that is applicable to the project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the project's impacts related to GHG emissions focuses on its consistency with Statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the project's GHG-related impacts on the environment.

Notwithstanding, for informational purposes, the analysis also calculates the amount of GHG emissions that would be attributable to the project using recommended air quality models, as described below. The primary purpose of quantifying the project's GHG emissions is to satisfy CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the project's incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. However, the significance of the project's GHG emissions impacts is not based on the amount of GHG emissions resulting from the project.

8.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:

Project-Related Sources of Greenhouse Gases

The proposed project would result in direct and indirect GHG emissions. Direct project-related GHG emissions would include emissions from construction activities, area sources, mobile sources, and refrigerants, while indirect sources would include emission from energy consumption, water demand, and solid waste generation. The most recent version of the California Emissions Estimator Model (CalEEMod), version 2022.1 was used to calculate project-related GHG emissions; refer to Appendix A, *Air Quality Modeling Sheets.* Table 7, *Project-Related Greenhouse Gas Emissions* presents both direct and indirect GHG emissions.

Table 7 Project Related Greenhouse Gas Emissions

Source	CO_2	CH_4	N_2O	Refrigerants	CO_2e
	Metric Tons/year[1]				
Direct Emissions					
Construction (amortized over 30 years)	19.07	<0.01	<0.01	<0.01	19.22
Mobile Source	7,519.65	0.23	0.33	8.85	7,631.12
Area Source	1.00	<0.01	<0.01	--	1.01
Refrigerants	--	--	--	2.63	2.63
Total Direct Emissions[2]	*7,539.72*	*0.23*	*0.33*	*11.49*	*7,653.97*
Indirect Emissions					
Energy Consumption	435.10	0.05	<0.01	--	437.85
Water Demand	10.06	0.36	<0.01	--	21.50
Solid Waste	28.39	2.84	--	--	99.34
Total Indirect Emissions[2]	*473.55*	*3.24*	*0.01*	*0.00*	*558.69*
Total Project-Related Emissions[2]	***8,212.67 $MTCO_2e$/year***				

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model.
2. Totals may be slightly off due to rounding.

Source: Refer to Appendix A, *Air Quality Modeling Sheets*.

Construction

Project construction would primarily generate GHG emissions from construction equipment operating on-site, as well as construction worker trips, vendor trips, and material delivery trips to and from the project site. Project-generated construction GHG emissions were modeled with the CARB-approved California Emissions Estimator Model,

version 2022.1 (CalEEMod), which applies typical construction phasing, equipment usage, and vehicle activity assumptions for land development projects. For modeling purposes, the project was assumed to be constructed in a single phase over a 19-month construction period. Anticipated construction activities include grading, paving, building construction, and architectural coating applications. Project construction would also require import of approximately 380 cubic yards during the grading phase. See Appendix A, *Air Quality Modeling Sheets* for more information regarding the construction assumptions used in this analysis.

Construction GHG emissions are amortized (i.e., total construction emissions divided by the lifetime of the project, assumed to be 30 years),[4] then added to the operational emissions. As shown in Table 7, construction of the proposed project would result in a total of 19.22 $MTCO_2e$ per year when amortized over 30 years; and a total of approximately 576.6 $MTCO_2e$ from all construction activities.

Mobile Source

Mobile source GHG emissions are estimated by multiplying the project's total vehicle miles traveled (VMT) by the vehicle emission factors. Vehicle emission factors were based on CalEEMod default values for Riverside County. Project-generated vehicle emissions have been estimated using CalEEMod based on the project's average daily trips (2,815 trips) per the *Riverside Sheriffs' Association Project - Transportation Study Scoping Agreement* (TIA Scoping Agreement), prepared by Michael Baker International and dated February 12, 2026. Mobile emissions is the single largest source of GHG emissions from the project, resulting in approximately 7,628.89 $MTCO_2e$ per year of mobile source-generated GHG emissions; refer to Table 7.

Area Source

GHG emissions associated with area sources include consumer products, landscape maintenance, and architectural coating applications. Specifically, landscape maintenance equipment such as lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers would generate exhaust emissions. Area source GHG emissions were calculated using standard emission rates from CARB, EPA, SCAQMD, and CalEEMod model defaults. As noted in Table 7, the proposed project would result in 1.01 $MTCO_2e$ per year of area source GHG emissions.

Refrigerants

Refrigerants are substances used in equipment for air conditioning and refrigeration. Most of the refrigerants used today are hydrochlorofluorocarbons (HFCs) or blends thereof, which can have high global warming potential (GWP) values. All equipment that use refrigerants have a charge size (i.e., quantity of refrigerant the equipment contains) and operational refrigerant leak rate, and each refrigerant has a GWP that is specific to that refrigerant. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual

[4] In accordance with SCAQMD guidance, projected GHGs from construction have been quantified and amortized over 30 years, which is the number of years considered to represent the life of the project. The amortized construction emissions are added to the annual average operational emissions.

emissions from the lifetime estimate. As noted in Table 7, the proposed project would result in 2.63 $MTCO_2e$ per year of GHG emissions from refrigerants.

Energy Consumption

Energy consumption emissions were calculated using CalEEMod and project-specific land use data. As detailed in Section 2.3.6, *Utilities*, the site has existing electricity and natural gas services connected to the site from IDD and SoCalGas. The project would include sustainability features such as solar-ready roofs and all energy-efficient appliances. The project would indirectly result in 437.85 $MTCO_2e$ per year of GHG emissions due to energy consumption; refer to Table 7.

Water Demand

The project would be required to comply with CALGreen, which requires newer developments to be fitted with low flow plumbing fixtures and fittings, as well as water-efficient landscaping. Specifically, the project would install low-flow water fixtures, water-efficiency irrigation, and draught tolerant landscape to reduce water consumption during operation. Water consumption from the proposed project was calculated using CalEEMod default values. Emissions from indirect energy impacts due to water supply would result in 21.50 $MTCO_2e$ per year; refer; refer to Table 7.

Solid Waste

CalEEMod quantifies GHG emissions associated with solid waste in landfills. While the proposed project would not directly emit GHG emissions from solid waste, CalEEMod quantifies the GHG emissions from the decomposition over a span of 20 to 30 years of solid waste generated from a project. The project would be required to comply with existing legislation (AB 341, AB 1826, AB 827, and SB 1383) that promote business recycling and organics recycling programs to divert solid waste from landfills. Solid waste associated with operations of the proposed project would result in 99.34 $MTCO_2e$ per year; refer to Table 7.

Overall, as shown in Table 7, the total amount of project related operational GHG emissions from direct and indirect sources combined would be 8,210.41 $MTCO_2e$ per year. Nonetheless, as detailed above, the City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions, nor have the SCAQMD, CARB, or any other State or regional agency adopted a numerical GHG significance threshold for assessing GHG emissions that is applicable to the project. As such, the project's consistency with applicable Statewide, regional, and local plans adopted for reducing GHG emissions is used to determine the significance of the project's GHG-related impacts on the environment, and quantitative GHG emissions provided above are for informational purposes only. As shown under Response 8(b) below, the project would be consistent with CARB's 2022 Scoping Plan, and SCAG's Connect SoCal 2024. As such, the project would result in less than significant impacts in regard to GHG emissions.

b) LESS THAN SIGNIFICANT IMPACT:

Consistency With Applicable GHG Plans

CARB encourages local jurisdictions can adopt a "CEQA-qualified Climate Action Plan (CAP)," which meets the requirements of Section 15183.5(b) of the CEQA Guidelines for "a plan for the reduction of greenhouse gas emissions." The City has not adopted a qualified CAP. As such, this consistency analysis focuses on the project's consistency with Statewide, regional, and local plans adopted for the purpose of reducing the emissions of GHG, including CARB's 2022 Scoping Plan and SCAG's Connect SoCal 2024.

The 2022 Scoping Plan was developed to achieve carbon neutrality by 2045 through a substantial reduction in fossil fuel dependence, while at the same time increasing deployment of efficient non-combustion technologies and distribution of clean energy. Connect SoCal 2024 incorporates local land use projections and circulation networks in city and county general plans and sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce GHG emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the CARB.

2022 Scoping Plan Consistency Analysis

The 2022 Scoping Plan identifies reduction measures necessary to achieve the goal of carbon neutrality by 2045 or earlier. Provided in Table 8, *2022 Scoping Plan Project Consistency Analysis*, is an evaluation of applicable reduction actions by emissions source category to determine how the project would be consistent with or exceed reduction actions outlined in the 2022 Scoping Plan.

Table 8 2022 Scoping Plan Consistency Analysis

Actions	Project Consistency Analysis
Smart Growth / Vehicles Miles Traveled (VMT)	
Reduce VMT per capita to 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045	Consistent. The project site is near a major highway (I-10), with transit service (bus) provided along Dana Shore Drive near the project site. As detailed in the TIA Scoping Agreement, the project meets one of the VMT screening criteria "Local-Serving Retail" and is presumed to have a less than significant VMT impact. Further, the project seeks to establish a members-only integrated shopping retail and business complex, with the larger anchor tenant being the Riverside Sheriff's Association Benefit's Trust Facility in the southern portion of the site and smaller specialty retail and service establishments located along Monterey Avenue, Dinah Shore Drive, and Via Vail. The Riverside Sheriff's Association Benefit's Trust Facility would provide the following principal uses: professional services use and medical offices, a meeting hall for occasional private events, and a private health/fitness clinic serving the police union members. As such, the project would provide multiple

Actions	Project Consistency Analysis
	uses within walking distance for members and introduce jobs in a centralized area, thus reducing VMT. Further, in accordance with Title 24 and CALGreen, the project would include bicycle facilities (34 bike parking spaces) as well as electric vehicle charging stations/parking and vanpool parking spaces, all of which would promote an alternative mode of transportation and reduce fuel consumption. Therefore, the project would focus growth near destinations and mobility options.
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030	Consistent. The project is expected to consist of natural gas heating and/or cooking on-site. The City of Rancho Mirage has not adopted an ordinance or program limiting the use of natural gas for on-site cooking and/or heating. However, if adopted, the project would comply with the applicable goals or policies limiting the use of natural gas equipment in the future. It should be noted that the project would install high efficiency lighting and appliances. Additionally, although not a mandate for the proposed project, 2025 Title 24 standards encourage the use of energy-efficient heat pumps for space and water heating and strategies to shift energy use away from peak demand times. As such, the project would be consistent with this action.
Construction Equipment	
Achieve 25% of energy demand electrified by 2030 and 75% electrified by 2045	Not Applicable. It should be noted that project construction is proposed to be completed prior to 2030. As such, the project would not be required to have 25 percent of construction equipment energy demand electrified. Additionally, the City of Rancho Mirage has not adopted an ordinance or program requiring electricity-powered construction equipment which would be consistent with the 2022 Scoping Plan. However, if such programs or ordinances are adopted in the future, the project would be required to comply with the applicable goals or policies requiring the use of electric construction equipment in the future.
Non-combustion Methane Emissions	
Divert 75% of organic waste from landfills by 2025	Consistent. SB 1383 establishes targets to achieve a 50 percent reduction in the level of Statewide disposal of organic waste to a 75 percent reduction by 2025. The law establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. The project would comply with local and regional regulations during its operational phase.
High GWP Potential Emissions	
Low GWP refrigerants introduced as building	Consistent. SB 1383 requires a 40 percent reduction of hydrofluorocarbon (HFC) emissions below 2013 levels by 2030, which drives the transition to ultra-low-GWP refrigerants and reduces emissions of short-lived climate pollutants. The

Actions	Project Consistency Analysis
electrification increases, mitigating HFC emissions	project would comply with local and regional regulations during operations.
Source: California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, December 2022.	

Connect SoCal 2024 Consistency Analysis

The latest Connect SoCal 2024 was adopted by SCAG on April 4, 2024. The goals established for Connect SoCal 2024 provide a foundation for setting a vision for how the future of the SCAG Region will evolve over the next 25 years. The plan performance assessment process provides an important means for determining how well the program of investments included in Connect SoCal 2024 correspond to its foundational goals and to its vision for the future of the SCAG Region. Table 9, *Connect SoCal 2024 Project Consistency Analysis*, shows the project's consistency with the four goals found within Connect SoCal 2024. Each of the four Connect SoCal 2024 goals are supported by three sub-goals which provide more specific objectives within that specific focus area. The plan performance measures are designed to support achievement of these regional goals and sub-goals, with many of the measures supporting multiple goals. As shown, the proposed project would be consistent with the GHG emission reduction strategies contained in Connect SoCal 2024.

Table 9 Connect SoCal 2024 Project Consistency Analysis

Goals and Sub-Goals	Project Consistency Analysis
Mobility: Build and maintain an integrated multimodal transportation network	
Support investments that are well-maintained and operated, coordinated, resilient and result in improved safety, improved air quality and minimized greenhouse gas emissions	Consistent. The project proposes a mix of commercial, office, medical, and health and fitness uses in a developed area of the City. Transit service (bus) is provided along Dana Shore Drive near the project site. In accordance with Title 24 and CALGreen, the project would include bicycle facilities (34 bike parking spaces) as well as electric vehicle charging stations/parking and vanpool parking spaces, all of which would promote an alternative mode of transportation and reduce fuel consumption As detailed in Section 3, *Air Quality*, the project would not result in significant air quality impacts. Additionally, as demonstrated throughout this section, the project would not result in significant GHG impacts. As such, the project would be well-maintained and operated, coordinated, and resilient, and would not worsen air quality or exacerbate GHG impacts.
Ensure that reliable, accessible, affordable and appealing travel options are readily	Consistent. The proposed project would promote reliable and safe multimodal transportation by providing bicycle, EV, and vanpool facilities on-site. The project proposes a mix of commercial, office, medical, and health and fitness uses in a

Goals and Sub-Goals	Project Consistency Analysis
available, while striving to enhance equity in the offerings in high-need communities	developed area and would introduce jobs near existing residential uses. Transit service (bus) is provided along Dana Shore Drive near the project site, and the site is approximately 0.43-mile from the nearest highway (I-10). As such, the project would help ensure that reliable, accessible, affordable and appealing travel options exist.
Support planning for people of all ages, abilities and backgrounds	Consistent. The project proposes a mix of commercial, office, medical, and health and fitness uses in a developed area, providing job opportunities for people in the community. .
Communities: Develop, connect and sustain livable and thriving communities.	
Create human-centered communities in urban, suburban and rural settings to increase mobility options and reduce travel distances	Consistent. The proposed project would enhance mobility and reduce travel distances by developing a central mixed-use plaza and multi-purpose field serving the police union members, and by providing bicycle, EV, and vanpool facilities on-site.
Produce and preserve diverse housing types in an effort to improve affordability, accessibility and opportunities for all households	Not Applicable. The proposed project is not a housing development. As such, this goal is not applicable to the proposed project.
Environment: Create a healthy region for the people of today and tomorrow.	
Develop communities that are resilient and can mitigate, adapt to and respond to chronic and acute stresses and disruptions, such as climate change	Consistent. The project would include sustainability features such as solar-ready roofs, all energy efficient appliances, low-flow fixtures, water-efficiency irrigation, draught tolerant landscape, among others to reduce energy dependency, reduce water demand, and support climate adaptation; thus, the project would promote resilience, sustainability, and livability. Further, the project would encourage the use of bicycle and clean air vehicles by including bike racks and designating electric vehicle and vanpool parking spaces with electric vehicle chargers installed to encourage multimodal transportation, thereby reducing vehicle trips and GHG emissions. The project also includes two (2) detention basins, which would ensure water quality is maintained or improved from the proposed development. Overall, these project design features align with regional objectives for a healthy, efficient, and resilient community.
Integrate the region's development pattern and transportation network to improve air quality, reduce	Consistent. As detailed in Section 3, *Air Quality*, the project would not result in significant air quality impacts and as demonstrated throughout this section, the project would not result in significant GHG impacts. Further, the project would install energy efficient appliances in accordance with the

Goals and Sub-Goals	Project Consistency Analysis
greenhouse gas emissions and enable more sustainable use of energy and water	latest Title 24 and install water-efficient irrigation systems as mandated by CALGreen. As such, the project would not worsen air quality or increase greenhouse gas emissions and would enable more sustainable use of energy and water.
Conserve the region's resources.	Consistent. As demonstrated throughout this IS/MND, the proposed project would not deplete or result in significant adverse impacts to the region's resources including biological resources, cultural resources, energy, paleontological resources, water, mineral resources, tribal cultural resources, among others.
Economy: Support a sustainable, efficient and productive regional economic environment that provides opportunities for all people in the region	
Improve access to jobs and educational resources	Consistent. The project proposes a mix of commercial, office, medical, and health and fitness uses in a developed area, thereby improving access to jobs.
Advance a resilient and efficient goods movement system that supports the economic vitality of the region, attainment of clean air and quality of life for our communities	Not Applicable. The project is not a warehousing and manufacturing use. As such, this goal is not applicable to the proposed project.
Source: Southern California Association of Governments, *Connect SoCal, A Plan for Navigating to a Brighter Future, Chapter 3, The Plan*, April 4, 2024.	

In summary, as shown in Table 8 and Table 9, the project would be consistent with CARB's 2022 Scoping Plan and SCAG's Connect SoCal 2024. Impacts would be less than significant in this regard.

8.3 Mitigation Measures:

None required.

9 - Hazards and Hazardous Materials

HAZARDS AND HAZARDOUS MATERIALS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Sources:

CalFire, *Fire Hazard Severity Zones Viewer*, https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones, accessed February 2, 2026.
California Environmental Protection Agency, *Cortese List Data Resources*, https://calepa.ca.gov/sitecleanup/corteselist/, accessed October 27, 2025.
City of Rancho Mirage, *Local Hazards Mitigation Plan*, adopted September 19, 2024.
Riverside County Airport Land Use Commission, *Riverside County Airport Land Use Compatibility Plan*, October 14, 2004.

9.1 Setting

The California Health and Safety Code defines a hazardous material as a substance or waste that poses a risk of endangering human health or safety and, or, a risk of degrading the environment. Criteria for identifying hazardous substances are based on whether the substance, due do "quantity, concentration, or physical, chemical or infectious characteristics, may:

1. Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.
2. Pose a substantial present or potential hazard to human health or the environment, due to factor including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed."

9.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:

Exposure of the public or the environment to hazardous materials could occur through improper handling or use of hazardous materials or hazardous wastes particularly by untrained personnel, a transportation accident, environmentally unsound disposal methods, or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

Project construction could expose construction workers and the public to temporary hazards related to the transport, use, and maintenance of construction materials (i.e., oil, diesel fuel, and transmission fluid), and/or import/export of soils. Project construction activities would be compliant with the applicable laws and regulations governing the use, storage, and transportation of hazardous materials/waste, ensuring that potentially hazardous materials are used and handled in an appropriate manner. Impacts concerning the routine transport, use, or disposal of hazardous materials during project construction would be less than significant.

Hazardous materials are not typically associated with operation of office and commercial uses. Anticipated hazardous materials use may include cleaning products, disinfectants, and the use of pesticides and herbicides for landscape maintenance. Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. As such, impacts concerning the routine transport, use, or disposal of hazardous materials during project operations would be less than significant.

b) LESS THAN SIGNIFICANT IMPACT:

One of the means through which human exposure to hazardous substance could occur is through accidental release. Incidents that result in an accidental release of hazardous substance into the environment can cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. If not cleaned up immediately and completely, the hazardous substances can migrate into the soil or enter a local stream or channel causing contamination of soil and water. Human exposure of contaminated soil, soil vapor, or water can have potential health effects on a variety of factors, including the nature of the contaminant and the degree of exposure.

During project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluids 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. As required by various State laws, the construction contractor is required to use standard construction controls and safety procedures that would avoid and 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 forgoing analysis, impacts associated with accidental release of hazardous materials during construction activities would be less than significant.

Upon adherence to existing regulations related to hazards and hazardous materials safety, impacts pertaining to the potential for accidental conditions during project operations would be less than significant.

c) LESS THAN SIGNIFICANT IMPACT:

There are two schools within a 0.25-mile radius of the project site: the California Nurses Educational Institute and the San Joaquin Valley College Rancho Mirage campus. However, as noted above, adherence to local, State, and Federal regulations regarding the use of hazardous materials would ensure the project would not create a significant hazard to the public or the environment. Impacts would be less than significant in this regard.

d) NO IMPACT:

Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB) to compile and update a regulatory sites list (pursuant to 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 Health and Safety Code Section 116395. Government Code Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations, to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

The project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur in this regard.

e) NO IMPACT:
The Palm Springs International Airport is located approximately 6.75 miles northwest of the proposed project site. Further, the project site is not within the boundary of the Palm Spring International Airport Influence Area. Accordingly, the project would not result in a safety hazard for people residing or working in the project area. No impact would occur in this regard.

f) LESS THAN SIGNIFICANT IMPACT:
The City adopted a *Local Hazards Mitigation Plan* (LHMP) in 2024. The purpose of the LHMP is to identify hazards, review and assess past disaster occurrences, estimate the probability of future occurrences and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. Implementation of the proposed project would not conflict with the provisions of the LHMP.

Further, the project would be reviewed by the Riverside County Sheriff's Department and Riverside County Fire Department to ensure the project meets standards relative to emergency vehicle access. Accordingly, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant in this regard.

g) LESS THAN SIGNIFICANT IMPACT:
The project site is located within an urbanized portion of the City. As identified on CalFire's Find your Fire Hazard Severity Zone (FHSZ) map, the project site is located within a Local Responsibility Area (LRA), meaning the financial responsibility of preventing and suppressing wildfires is primarily the responsibility of a Local agency (city, county, city and county, or district). Further, there are no areas in the vicinity of the project site designated as High or Very High fire risk zones. Accordingly, implementation of the proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Impacts would be less than significant.

9.3 Mitigation Measures:

None required.

10 - Hydrology and Water Quality

HYDROLOGY AND WATER QUALITY – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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?	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☐	☐	☒	☐
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?	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Sources:
Coachella Valley Water District, *Water Shortage Contingency Plan*, June 2021.

Michael Baker International, *Preliminary Water Quality Management Plan*, January 2026.
Michael Baker International, *Riverside Sheriffs' Association – Commercial Center Preliminary Hydrology & Hydraulics Report Rancho Mirage, California*, January 2026.
Water Systems Consulting, Inc., *2020 Coachella Valley Regional Urban Water Management Plan*, June 30, 2021.

10.1 Setting

The proposed project site lies within the Whitewater River Watershed, the regional drainage feature that extends from the slopes of Mount San Gorgonio and the San Bernardino Mountains to the Salton Sea. The Whitewater River is the valley's main drainage feature and is fed by mountain streams along its course. In the higher elevations of the Whitewater River, the river has water generally year-round, but is ephemeral in the low desert stretch, and has been channelized throughout much of the valley to control stormwater flows. The Coachella Valley Water District (CVWD) and Riverside County Flood Control maintain major tributary facilities that guide stormwater flows into the Whitewater River/Coachella Valley Stormwater Channel.

As identified in the City's General Plan Public Services and Facilities Element, CVWD provides domestic water services to the City. All domestic water in the City comes from the Whitewater River Subbasin which underlies the majority of the Coachella Valley floor. CVWD would also provide wastewater services to the proposed project.

10.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:
As part of Section 402 of the Clean Water Act, the Environmental Protection Agency (EPA) established regulations under the National Pollutant Discharge Elimination System (NPDES) program to control direct stormwater discharge. In California, the State Water Resources Control Board (SWRCB) administers the General Construction Permit under the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCBs) to preserve, protect, enhance, and restore water quality. The City lies within the RWQCB Colorado River Basin.

Construction

Typical construction activities would require the use of gasoline- and diesel-powered heavy equipment, such as backhoes, water pumps, bulldozers, and air compressors. Chemicals such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances would also likely be used during construction. An accidental release of any of these substances could degrade surface water runoff quality and contribute additional sources of pollution to the existing drainage system. Therefore, small quantities of pollutants have the potential to enter the storm drainage system during project construction and degrade water quality. In general, construction-related impacts to water quality could occur in the following periods of activity:

- During the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest; and

- Following construction, before the establishment of ground cover, when the erosion potential may remain relatively high.

Because development of the project would disturb more than one acre of soil, construction activities would be required to obtain coverage under the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities requirements (and all subsequent revisions and amendments). To demonstrate compliance with NPDES requirements, a Notice of Intent must be prepared and submitted to the SWRCB, providing notification and intent to comply with the Construction General Permit. The Construction General Permit also requires that non-stormwater discharges from construction sites be eliminated or reduced to the maximum extent practicable, a stormwater pollution prevention program (SWPPP) that governs construction activities for the project be developed, and routine inspections be performed of all stormwater pollution prevention measures and control practices being used at the site, including inspections before and after storm events. Permittees must verify compliance with permit requirements by monitoring their effluent, maintaining records, and filing periodic reports. The SWPPP would include a site map showing the construction site perimeter, proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns. The SWPPP would identify the BMPs that would be used to protect stormwater runoff and the placement of those BMPs. The SWPPP would also identify a visual monitoring program, a chemical monitoring program for "nonvisible" pollutants to be implemented if there is a failure of BMPs. Upon completion of construction, a Notice of Termination would be submitted to the SWRCB to indicate that construction has been completed. Compliance with NPDES requirements would reduce short-term construction-related impacts to water quality to a less than significant level.

Operation

Per City requirements as prescribed in Chapter 7.03 of the City's Code of Ordinances, *Stormwater Management and Discharge Control*, the project must implement permanent Site Design Best Management Practices (BMPs) where necessary.

To accommodate this requirement, a project-specifical Preliminary Water Quality Management Plan (WQMP) has been prepared for the proposed project (on-file with the City). In compliance with Municipal Code Section 15.64.140(b), the project is required to retain urban runoff on site, as the project site is greater than one acre and located northerly of the Whitewater River Channel. Runoff within the project site would be conveyed into three underground infiltration basins and then conveyed through various storm drain facilities for water quality treatment. As identified in the WQMP, the potential pollutants generated by the proposed project include bacteria/viruses, heavy metals, nutrients, toxic organic compounds, sediment/turbidity, trash and debris, and oil and grease.

Compliance with the City's Municipal Code and provisions of the WQMP would ensure that operation of the project would not violate any water quality standards or waste discharge requirements. A less than significant impact would occur.

b) LESS THAN SIGNIFICANT IMPACT:

The proposed project would increase impervious surfaces at the project site compared to existing conditions. However, implementation of the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impedes sustainable groundwater management of the basin. According to the project's Geotechnical Investigation, groundwater was not encountered at the maximum explored depth of 51 feet. Further, the project site is not currently used for groundwater extraction or groundwater recharge.

The Coachella Valley Water District (CVWD) would provide domestic water supply service to the project site. According to the 2020 Coachella Valley Regional Urban Water Management Plan, groundwater is the principal source of municipal water supply in the Coachella Valley. However, CVWD also utilizes imported water from the Colorado River and the State Water Project to allow for groundwater recharge as necessary. Additionally, as noted in CVWD's Water Shortage Contingency Plan, CVWD water supplies have a high degree of reliability. As such, sufficient water supplies are available from CVWD to serve the proposed project, and that local groundwater basins would not be substantially depleted as a result of serving the project, Thus, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

c) LESS THAN SIGNIFICANT IMPACT:

Project impacts would be significant if development of the property substantially alters an existing drainage pattern, increases the rate or amount of runoff, contributes runoff that exceeds the existing local drainage system, and results in substantial erosion, or impedes or redirects flood flows. The proposed project would increase impervious surfaces compared to existing conditions. As such, long-term operation of the project would not have the potential to result in substantial erosion or siltation given the nature of proposed use and the urbanized project setting. Further, the proposed project is required to comply with Chapter 7.03 of City's Municipal Code, *Stormwater Management and Discharge Control*, and Section 15.64.570 et al, *Erosion Control Plan*. Included in the requirements are the approvals of a SWPPP, a project-specific final hydrology study, and a final WQMP prior to the issuance of building permits. In compliance with the NPDES the project will mitigate silt and other contaminant runoff from project-induced erosion and runoff through the implementation of BMPs prescribed in the WQMP. Implementation of required BMPs will also reduce pollutants of concern that may otherwise enter nearby receiving waters and will help reduce short and long-term water quality impacts caused by the construction and operation of the proposed project. Approval of and compliance with the final WQMP, SWPPP, and the required BMPs will reduce project impacts to surface waters by reducing erosion and siltation in storm flows. With the implementation of these standard requirements, the project would not result in substantial erosion or siltation either on- or off-site and impacts would be less than significant.

Implementation of the proposed project would result in a similar drainage pattern as the existing condition, which currently generally flow easterly. Therefore, the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Impacts would be less than significant in this regard.

The proposed collection locations and basin sizes would be designed to retain 100% of the worst case 100-year storm event and infiltrate within 72 hours. As such, the project would not 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. Further, the project would not impede or redirect flood flows. A less than significant impact would occur.

d) NO IMPACT:
According to the FEMA National Flood Hazard Layer Viewer, the project site is designated as Flood Zone X, an area of minimal flood hazard and low flood risk. Further, the proposed collection locations and basin sizes would be designed to retain 100% of the worst case 100-year storm event and infiltrate within 72 hours. No impact would occur.

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 project site is located over 30 miles inland from the Pacific Ocean, a sufficient distance so as to not be subject to tsunami impacts. No impact would occur in this regard.

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 project site is not in the vicinity of a reservoir, harbor, lake, or storage tank capable of creating a seiche. No impacts would occur in this regard.

e) LESS THAN SIGNIFICANT IMPACT:
As described above, the proposed project would be required to be in conformance with all applicable water quality requirements and would implement a SWPPP and a WQMP subject to approval by the City and the Regional Water Quality Control Board for both construction activities and the long term operation of the site. The WQMP would incorporate grading, hydrology, and BMPs to achieve requisite water quality standards. The Project design would continue to retain the stormwater flows per the existing standards via the proposed collection basins.

Operational water demand is projected to align with the approved water demand for the designated project site land use. Project water demand will be constrained by water conservation standards established by CVWD and approved by the City which include drought-tolerant landscaping and water efficient appliances. The project would not obstruct the implementation of the City's water quality control plan or the region's sustainable groundwater management plan. Impacts would be less than significant.

10.3 Mitigation Measures:

None required.

11 - Land Use and Planning

LAND USE AND PLANNING – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Sources:

City of Palm Desert, *Palm Desert Zoning Map, 2025*, https://cpd.maps.arcgis.com/apps/View/index.html?appid=179bbcfe81114c0da54b800e9ccc0ff2, accessed November 5, 2025.
City of Rancho Mirage, *Interactive Zoning Map (GIS Web App),* https://ranchomirage.maps.arcgis.com/apps/webappviewer/index.html?id=6b0092873a7b4634b355dec1443c79b4, accessed November 5, 2025.
City of Rancho Mirage, *Land Use and Zoning Map*, August 3, 2013.
City of Rancho Mirage, Monterey Specific Plan, 1995.
Coachella Valley Association of Governments, *CVMSHCP Open Data, 2025*, https://mshcp-cvag.hub.arcgis.com/datasets/387482ac34d8412f83cb04992ddfc1d4_0/explore?location=33.785870%2C-116.441541%2C11.73, accessed November 5, 2025.

11.1 Setting

The Land Use Element of the City's 2017 General Plan guides development within the City by defining how and where each type of project may be built. The specific plans provide additional defining, with the Monterey Specific Plan guiding development on the project site and those to the south of the project. In total, there are seven different commercial land uses defined in the Land Use Element as the City places substantial emphasis on hosting a variety of "high-quality" commercial uses that are "conveniently and appropriately distributed." The Monterey Specific Plan established the area along the Dinah Shore Drive corridor, inclusive of the project site, as a commercial area servicing the central Coachella Valley area. Existing commercial land uses occur along the Dinah Shore Drive corridor within a mile of the I-10 corridor including Community Commercial (C-C), General Commercial (C-G), and Office (O). A variety of residential uses, Medium Density Residential (R-M), High Density Residential (R-H), Very Low Density Residential (R-L-2) along with Open Space-Public Park (OS-PP), and undeveloped land within the City of Palm Desert are also found along the northside Dinah Shore Drive corridor in the project vicinity.

11.2 Discussion of Impacts:

a) NO IMPACT:
The project site is located within the General Commercial (G-C) land use designation of the Monterey Specific Plan Area (MSPA). To the west is the existing Rancho Mirage Marketplace within the General Commercial land use designation and part of the MSPA. To the south is the Rancho Mirage Dog Park within the Community Park land use designation and to the southeast is High Density Residential with an Affordable Housing Overlay both within the MSPA. To the west of the project site are Medium Density Residential (R-M) and Office (O) zoned lands, and a Planned Commercial (PC) to the north (in the City of Palm Desert). Additional residential uses in the vicinity include a Very Low Density Residential (R-L-2) located south and west of the project site. These neighborhoods are a combination of built out and well-established and planned future residential development. The project site is separated from surrounding neighborhoods by public right-of-way and an approximately 28-acre public park and will not adversely affect these land uses, and will not divide an established community. There will be no impacts in this regard.

b) NO IMPACT:
The General Plan defines the project site's designated Community Commercial (C-C) land use and zone as one that provides for regional- or community-scale shopping centers and malls that may be anchored by several department stores or other large-scale facilities. In alignment, the project proposes a community-scale shopping center anchored by a membership organization facility. The professional office, retail, parking areas, and landscape design are consistent with the City's General Plan and Land Use and Zoning regulations.

The Monterey Specific Plan provides additional guidance on the community-scale shopping center, defining the Dinah Shore Drive corridor area as an integrated shopping retail and business complex under a single master plan. The project would provide commercial retail fronting onto Dinah Shore Drive with the professional office use to the southern portion of the site, with parking and landscape areas behind the street-facing retail and interspersed across the wider retail and business complex. As such, the project is consistent with the Monterey Specific Plan.

Rancho Mirage participates in the regional Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), and the subject parcel is within a fee mitigation area established by the CVMSHCP. The location of the project site is not in a designated conservation area per the CVMSHCP and will not impact the efficacy of the CVMSHCP. There are no environmental conflicts with respect to the land use policy or adopted environmental mitigation policy. No project impacts are expected.

11.3 Mitigation Measures:

None required.

12 - Mineral Resources

MINERAL RESOURCES – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Sources:

California Geologic Survey, *Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the Palm Springs Production-Consumption Region*, Riverside County, California, 2007.

12.1 Setting

As identified in the City's General Plan Conservation and Open Space Element, mineral resources in the City include sands and gravel. There are currently no mines or extraction sites in Rancho Mirage. The California Surface Mining and Reclamation Act of 1975 (SMARA) requires the State Geologist to classify land based on the known or inferred mineral resource potential of that land. The guidelines require the State Geologist to classify specified areas into Mineral Resource Zones (MRZs). Lands in the City are classified as MRZ-1 and MRZ-3.

12.2 Discussion of Impacts:

a) NO IMPACT:
The project site is in an area designated as MRZ-1, indicating there is low potential for the presence of significant mineral resources. The project site is not identified as being located in an area with known mineral resources. No impact would occur in this regard.

b) NO IMPACT:
The project site has not been identified as a locally important mineral resource recovery site. No portion of the project site is allocated for mineral land uses. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur.

12.3 Mitigation Measures:

None required.

13 - Noise

NOISE – Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Sources:

California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol,* September 2013.

California Department of Transportation, *Transportation and Construction Vibration Guidance Manual, Table 19*, September 2013.

County of Riverside Airport Land Use Commission, *Riverside County Airport Land Use Compatibility Plan Policy Document, Map PS-3, Noise Compatibility Contour*s, adopted March 2005.

Cyril M. Harris, *Noise Control in Buildings*, 1994.

Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, June 26, 2015.

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Federal Highway Administration, *Roadway Construction Noise Model User Guide, Appendix A*, https://www.fhwa.dot.gov/Environment/noise/construction_noise/rcnm/rcnm10.cfm#appa, accessed on March 3, 2026.

Federal Highway Administration, *Roadway Construction Noise Model (RCNM)*, 2006

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed February 23, 2026.

Michael Baker International, *Riverside Sheriffs' Association Project - Transportation Study Scoping Agreement*, February 12, 2026.

State of California Governor's Office of Planning and Research, *General Plan Guidelines*, July 2017.

Urban Crossroads, *Core Rancho Mirage Noise and Vibration Analysis in the City of Rancho Mirage,* January 2025.

13.1 Setting

Noise

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and 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 3 dBA to around 140 dBA.

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 (is reduced) at a rate between 3 dBA and 4.5 dBA 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 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are several 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. This is commonly used to describe the "average" noise levels within the environment. Noise exposure over a longer period 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 (or an additional 10 dBA) for sounds occurring between 10:00 p.m. and 7:00 a.m. when sounds seem to be louder. 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 (background) noise conditions. Typical L_{dn} noise levels for light- and medium-density residential areas range from 55 dBA to 65 dBA. Similarly, Community Noise Equivalent Level (CNEL) is a measure of 24-hour noise levels, not an actual sound level heard at any time, that incorporates a 5-dBA penalty for sounds occurring between 7:00 p.m. and 10:00 p.m. and a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively

Groundborne Vibration

Sources of ground-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. Typically, ground-borne vibration, generated by man-made activities, attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore usually confined to short distances (i.e., 500 feet or less) from the source. Both construction and operation of development projects can generate ground-borne vibration.

Table 10, *Human Reaction and Damage to Building from Continuous Vibration Levels*, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in Table 10 should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Table 10 Human Reaction and Damage to Buildings from Continuous Vibration Levels

Maximum PPV (inch/sec)	Vibration Annoyance Potential Criteria	Vibration Damage Potential Threshold Criteria	FTA Vibration Damage Criteria
0.008	—	Extremely fragile historic buildings, ruins, ancient monuments	—
0.01	Barely Perceptible	—	—
0.04	Distinctly Perceptible	—	—
0.10	Strongly Perceptible	Fragile buildings	—
0.12	—	—	Buildings extremely susceptible to vibration damage
0.20	—	—	Non-engineered timber and masonry buildings
0.25	—	Historic and some old buildings	—
0.30	—	Older residential structures	Engineered concrete and masonry (no plaster)
0.40	Severe	—	—
0.50	—	New residential structures, modern industrial/commercial buildings	Reinforced-concrete, steel, or timber (no plaster)

Maximum PPV (inch/sec)	Vibration Annoyance Potential Criteria	Vibration Damage Potential Threshold Criteria	FTA Vibration Damage Criteria
PPV = peak particle velocity; inch/sec = inches per second; FTA = Federal Transit Administration			
Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, 2020 and Federal Transit Administration, *Transit Noise and Vibration Assessment Manual*, 2018			

Regulatory Framework

State

Governor's Office of Land Use and Climate Innovation Noise Element Guidelines

The Governor's Office of Land Use and Climate Innovation (LCI) 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 LCI 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). Table 11, *Land Use Compatibility for Community Noise Environments*, presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

Table 11 Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85
Transient Lodging – Motel, Hotels	50 – 65	60 – 70	70 – 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 – 85

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	NA	70 – 80	80 – 85
Office Buildings, Business Commercial, Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

Notes: NA = Not Applicable; L_{dn} = Day/Night Average; CNEL = community noise equivalent level; dBA = A-weighted decibels
Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable - New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable – New construction or development should generally not be undertaken.

Source: State of California Governor's Office of Planning and Research, *General Plan Guidelines*, July 2017.

Local

Rancho Mirage General Plan

The City of Rancho Mirage General Plan takes steps to address stationary and mobile noise sources in the City and includes programs and policies to reduce these noise sources to the extent possible. Chapter 7, Noise Element of the Rancho Mirage General Plan, includes the following policies to avoid or reduce potential noise impacts to an acceptable level:

Policy N 1.1 Land use patterns, associated traffic and its distribution, and individual developments shall be assessed for their potential to generate adverse and incompatible noise impacts. Noise exceeding normally acceptable levels shall be appropriately mitigated.

Policy N 1.2 Noise sensitive land uses, including residences, resorts, community open space, schools, libraries, churches, hospitals, and convalescent homes, shall be protected from high noise levels emitted by both existing and future noise sources.

Policy N 1.3 Project designs shall be required to include measures that assure that interior noise levels for residential development do not exceed 45 dBA CNEL.

Policy N 1.4 Land uses allowed adjacent to Rancho Mirage's major arterial roads and highways, or the Southern Pacific Railroad/I-10 corridor, should generally be limited to those that are compatible with higher noise levels to maximize noise-related land use compatibility.

Policy N 1.5 Develop and maintain a circulation plan that is consistent with the resort residential character of Rancho Mirage, avoids impacts to existing and planned sensitive receptors/uses, and provides fixed routes for existing and future truck traffic.

Rancho Mirage Municipal Code

Rancho Mirage Municipal Code (Municipal Code) Section 17.18.060 states that all "uses, activities, and processes shall not generate or emit any noise or sound beyond the property line of the subject parcel, which exceeds the maximum level identified in the Municipal Code Chapter 8.45 (Noise)." Chapter 8.45 (Noise Ordinance) establishes exterior noise level limits (dBA) for land use zones throughout the City. Table 12, *Rancho Mirage Exterior Noise Level Limits*, describes exterior noise level limits for a cumulative period of more than 30 minutes in any hour of the applicable time period, as set forth in the Noise Ordinance.

Table 12 Rancho Mirage Exterior Noise Level Limits

For a cumulative period of more than 30 minutes in any hour of the applicable time period:		
Land Use/Zone	**Time of Day**	**Noise Level (dBA)**
Residential, Low Density (R-E, H-R, R-L-2, R-L-3)	7:00 a.m. to 6:00 p.m. 6:00 p.m. to 10:00 p.m. 10:00 p.m. to 7:00 a.m.	55 50 45
Residential, Medium and High Density, Hospital, Open Space (OS, R-M, R-H, MHP)	7:00 a.m. to 6:00 p.m. 6:00 p.m. to 10:00 p.m. 10:00 p.m. to 7:00 a.m.	60 55 50
Commercial Office, Resort Commercial, Mixed Use, Institutional (O, P, Rs-H, M-U)	7:00 a.m. to 6:00 p.m. 6:00 p.m. to 10:00 p.m. 10:00 p.m. to 7:00 a.m.	65 60 55
Commercial Neighborhood, General Commercial, Commercial Recreation, Light Industrial (C-N, C-G, I-L)	7:00 a.m. to 6:00 p.m. 6:00 p.m. to 10:00 p.m. 10:00 p.m. to 7:00 a.m.	70 65 60
Source**:** City of Rancho Mirage, *Rancho Mirage Municipal Code, Section 8.45.030, Table A-1*.		

Table 13, *Rancho Mirage Exterior Noise Level Limits: dBA Adjustments* describes noise level (dBA) adjustments made for cumulative periods of time less than 30 minutes in an hour, as set forth in the Noise Ordinance.

Table 13 Rancho Mirage Exterior Noise Level Limits: dBA Adjustments

For cumulative periods of time less than 30 minutes in an hour:	
Time Period	**dBA Adjustment**
15-30 minutes per hour	+3
10-15 minutes per hour	+5
5-10 minutes per hour	+10
1-5 minutes per hour	+15
Any period of time less than 1 minute per hour	+20
Source: City of Rancho Mirage, *Rancho Mirage Municipal Code, Section 8.45.030, Table B-1*.	

The Noise Ordinance states that, if the measured ambient noise level exceeds the dBA limits shown in Table 13, the noise limits and their adjustments for the first three categories in Table 13 shall be increased in five dBA increments as needed to encompass or reflect said ambient noise level. The maximum noise level under the last two categories in Table 13 shall be increased, if necessary, only to equal the ambient noise level.

Construction Noise Standards. Several activities and noise sources are exempt from the above-described noise limits, including "construction, alteration, repair, grading or improvement of any building, structure, road or improvement to real property for which a permit has been issued by the city if said construction occurs within the allowable hours set forth in Section 15.04.030(A)(11)." Per Section 15.04.030(A)(10), construction-related activities are prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, and all day on Sundays and holidays, without the written permission of the Building Official or unless performed by the person actually occupying the buildings to be improved.

Vibration Standards. Municipal Code Section 17.18.080 addresses vibration in all new and modified uses and structures and states that "no vibration associated with any use shall be allowed which is discernible beyond the boundary line of the subject property." However, the city has not adopted specific, quantified vibration level standards. The *Caltrans Transportation and Construction Vibration Manual* identifies various vibration damage criteria for different building classes. This evaluation uses the Caltrans architectural damage threshold for continuous vibrations at older residential structures of 0.3 inch/sec PPV. As the nearest structures to project construction areas are residences, this threshold is considered appropriate. Consistent with RMMC Section 17.18.080, the vibration standards are applied at the boundary line of the subject property and/or outdoor activity areas of frequent human use.

Existing Conditions

Stationary Sources

The project area is located within an urbanized area. The primary sources of stationary noise in the project vicinity are urban-related activities (i.e., mechanical equipment, commercial areas, parking areas, and pedestrians). The noise associated with these sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise.

Mobile Sources

The majority of the existing traffic noise in the project area is generated from vehicles traveling along Dinah Shore Drive.

Noise Measurements

Existing ambient noise levels in the vicinity of the project site have been characterized in a previously approved project located immediately to the south of the project site as documented in the *Core Rancho Mirage Noise and Vibration Analysis in the City of Rancho Mirage* (Core Rancho Mirage Noise Analysis), prepared by Urban Crossroads and dated January 2025. Specifically, the noise measurements recorded in this report appear to be representative of typical existing noise conditions in the project vicinity. Noise measurements collected for the Core Rancho Mirage Noise Analysis were recorded on May 23, 2024. Five long-term noise measurements were conducted and average noise levels (L_{eq}) are provided for daytime, evening and nighttime

conditions; refer to Table 14, *Ambient Noise Level Measurements*. It is acknowledged that the noise environment at the time of this analysis is consistent with the noise environment at the time the noise measurements were conducted on May 23, 2024, based on the fact that the surrounding land uses are the same and no major development has occurred.

Table 14 Ambient Noise Level Measurements

Location	Description	Energy Average Noise Level (dBA Leq)		
		Daytime	Evening	Nighttime
L1	Near a residence at 102 Clear Water Way	55.5	56.8	54.4
L2	Near the Unitarian Universalist Church at 72425 Via Vail	51.9	54.4	51.5
L3	Near the Rancho Mirage Dog Park at 34100 Key Largo Avenue	55.5	56.8	54.4
L4	Near a residence at 34620 Via Josefina	53.1	59.0	51.5
L5	Near a residence at 72740 Via Florencia	53.9	59.0	51.5

Source: Urban Crossroads, *Core Rancho Mirage Noise and Vibration Analysis in the City of Rancho Mirage*, dated January 2025.

13.2 Discussion of Impacts:

c) LESS THAN SIGNIFICANT:

Construction Noise Impacts

Ground-borne noise and other types of construction-related noise impacts typically occur during the initial grading phase, which has the potential to create the highest levels of noise. Construction equipment produce maximum noise levels when equipment is operating under full power conditions (i.e., the equipment engine at maximum speed). However, equipment used on construction sites typically operates under less than full power conditions, or part power. To characterize construction-period noise levels more accurately, the average (L_{eq}) noise level associated with each construction stage is calculated based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage. These noise levels are typically associated with multiple pieces of equipment simultaneously operating on part power.

Per Municipal Code Section 15.04.030(A)(11), construction activities are recognized as a part of urban life and would be exempt from provisions of the noise ordinance (exterior noise standards) provided that they occur within the allowed hours of construction. As such, the City does not have an established quantitative construction noise standard. Nevertheless, for the purpose of this analysis, construction noise associated with the proposed project were compared to the construction noise standards adopted by the Federal Transit Administration (FTA). According to the FTA's *Transit Noise and Vibration Impact Assessment Manual*, a significant impact would occur if construction noise exceeds 80 dBA L_{eq} at residential uses.

Sensitive receptors near the project site include single family residential uses located approximately 100 feet to the west of the project site when measured from site property line to the residential receptor property line. However, construction activities would occur throughout the project site and would not be concentrated near sensitive receptors for extended periods of time. The General Noise Assessment methodology prescribed in the FTA *Transit Noise and Vibration Impact Assessment Manual*, recommends evaluating construction noise from the center of the site, stating under the variable distance in its construction noise calculation to "assume that all equipment operates at the center of the project." As such, the following evaluation would utilize the distance of 425 feet (geographical center of the project site to the property boundary line of the residential receptors to the west) to analyze potential construction noise.

The estimated construction noise levels at the nearest noise-sensitive receptors are presented in Table 15, *Construction Noise Levels at the Nearest Receptors.* Noise levels from construction equipment and activities were modeled using the Federal Highway Administration's Roadway Construction Noise Model (RCNM); refer to Appendix E, *Noise* for detailed noise modeling output. The project would be constructed in two phases. Phase 1 would include the following: all site infrastructure; water retention areas; landscaping; the plaza; and Buildings 4 through 8 with their associated hardscape improvements. Future phases would include Buildings 1 through 3, which would be developed on a land-lease basis as tenants are secured. However, for the purpose of this analysis, construction activities are modeled to occur at a single-phase to be conservative. Project construction equipment is based on CalEEMod results conducted for the proposed project which estimated the types and quantity of equipment that would be used on-site during each construction phase; refer to Appendix A, *Air Quality Modeling Sheets*. To present a conservative impact analysis, the estimated noise levels were calculated for a scenario in which all heavy construction equipment were assumed to operate simultaneously.

Table 15 Construction Noise Levels at the Nearest Receptors

Phase	Estimated Exterior Construction Noise Level at 425 feet (Center of the Site to Residential Receptors to the West) (dBA L_{eq})[1]	Federal Transit Administration Construction Noise Threshold (dBA L_{eq})	Exceedance of Threshold?
Grading	68.7	80	No
Building Construction	67.7		No
Paving	65.9		No
Architectural Coating	55.1		No
Notes: [1] These noise levels conservatively assume the simultaneous operation of all heavy construction equipment at the same precise location. Refer to Appendix A, *Air Quality/GHG/Energy Analysis* for a list of modeled heavy construction equipment.			
Source: Federal Highway Administration, *Roadway Construction Noise Model (RCNM)*, 2006 (see Appendix F, *Noise Data*).			

As shown in Table 15, construction-generated noise levels would range from 55.1 dBA L_{eq} to 68.7 dBA L_{eq} at the nearest sensitive receptor (single-family residences) property boundary located approximately 425 feet to the west from the geographic center of the project site. Additionally, it should be noted that modeling of construction noise levels in Table 13-6 assumes that construction equipment would operate simultaneously and represents a worse-case scenario. Pursuant to the Municipal Code Section 15.04.030(A)(11), construction activities are recognized as a part of urban life and would be exempt from provisions of the noise ordinance (exterior noise standards) provided that they occur within the allowed hours of construction. Per Section 15.04.030(A)(10), construction-related activities are prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, and all day on Sundays and holidays. As previously stated, construction noise levels were compared to the FTA's construction noise significance threshold of 80 dBA L_{eq} for residential uses. As shown in Table 15, construction noise would not exceed the FTA's 80 dBA L_{eq} significance threshold. As such, a less than significant impact would occur in this regard.

Construction Trips Noise Impacts

Construction activities would also cause increased noise along access routes along Dinah Shore Drive due to movement of equipment and workers, as well as haul trips. According to Caltrans, a doubling of traffic (100 percent increase) on a roadway would result in a perceptible increase in traffic noise levels (3 dBA). As such, a significant impact would occur if construction-related trips double existing traffic volumes.

According to the CalEEMod results, project construction would generate a total maximum of 76 one-way trips per day, comprising of 63 one-way worker trips per day, 12 one-way vendor trips per day, and 1 one-way hauling trips per day; refer to Appendix A. Based on the Core Rancho Mirage Noise Analysis, Dinah Shore Drive (west of Monterey Avenue) would have an average daily traffic (ADT) of approximately 11,070 in the year 2026. As such, project-related construction trips would not result in a doubling of the traffic volumes along Dinah Shore Drive, and therefore, would not be a perceptible increase (3 dBA) in traffic noise. Additionally, mobile traffic noise from construction trips would be temporary and would cease upon project completion. Thus, impacts in this regard would be less than significant.

Mobile Noise – Operations

Future development generated by the proposed project would result in additional traffic on adjacent roadways, thereby increasing vehicular noise in the vicinity of existing and proposed land uses. According to Caltrans, a doubling of traffic (100 percent increase) on a roadway would result in a perceptible increase in traffic noise levels (3 dBA). According to the *Riverside Sheriffs' Association Project - Transportation Study Scoping Agreement* (TIA Scoping Agreement) prepared by Michael Baker International, dated February 12, 2026, the proposed project would generate approximately 2,815 average daily trips after accounting for internal trip reduction. As discussed above, Dinah Shore Drive (west of Monterey Avenue) currently has traffic volumes of approximately 11,070 ADT. Therefore, the project's trip generation (approximately 2,815 ADT) would not double existing traffic

volumes and an increase in traffic noise along local roadways would be imperceptible. Project-related operational traffic noise impacts would be less than significant.

Stationary Noise Impacts

Stationary noise sources associated with the project would include those typical commercial and office areas (e.g., mechanical equipment, crowd noise, and parking lot noise.). These noise sources are typically intermittent and short in duration and would be comparable to existing sources of noise experienced at surrounding residential and commercial uses. Further, all stationary noise activities would be required to comply with the City's Municipal Code and the California Building Code requirements pertaining to noise attenuation. The project would have a significant impact if the stationary noise levels exceeds the City's residential daytime and nighttime exterior noise standards of 55 and 45 dBA, respectively.

Mechanical Equipment

The proposed project would construct a total of eight buildings and would include heating, ventilation, and air conditioning (HVAC) units on the rooftop of each building. Typically, mechanical equipment noise is approximately 66 dBA at 3 feet from the source. Based upon the Inverse Square Law, sound levels decrease by 6 dBA for each doubling of distance from the source. At this point of project development, the exact location of the HVAC units on each proposed rooftop is unknown. As such, HVAC noise levels are calculated based on the distance from the closest building to the nearest sensitive receptor property line. The nearest sensitive receptor to the project site is the single-family residential use located approximately 220 feet west of proposed Building-4 façade. At 220 feet, the noise level from a single HVAC unit would be approximately 29 dBA. For the purpose of this analysis, it is conservatively assumed that all eight HVAC units would operate simultaneously at the same distance. Therefore, operation of eight HVAC units would generate a combined noise level of approximately 38.1 dBA at the nearest sensitive receptors to the west, when operating simultaneously. As such, noise levels from HVAC units would be approximately 38.1 dBA which would not exceed the City's daytime and nighttime exterior noise standards of 55 and 45 dBA, respectively, at the nearest sensitive receptors. Further, noise from the HVAC units would be lower than the existing ambient noise levels; refer to Table 14. Impacts would be less than significant in this regard.

Outdoor Gathering Area Noise

The project would include outdoor gathering areas that have the potential to be accessed by groups of people intermittently for various occasions (e.g., events, other social gatherings, etc.). Specifically, outdoor gathering areas are proposed in the central mixed-use plaza between Building 7 and Building 8 and a multi-purpose field is proposed along the southern portion of the project site. Noise generated by groups of people (i.e., crowds) is dependent on several factors including vocal effort, impulsiveness, and the random orientation of the crowd members. Crowd noise is estimated at 60 dBA at one meter (3.28 feet) away for raised normal speaking. This noise level would have a +5 dBA adjustment for the impulsiveness of the noise source, and a -3 dBA adjustment for the random orientation of the crowd members. Therefore, crowd noise would be approximately 62 dBA at one meter from the source.

The multi-purpose field proposed along the southern portion of the site would be the closest to the nearest sensitive receptors (Rancho Mirage Dog Park) located approximately 90 feet to the south. At approximately 90 feet (property line of the project site to the property line of the park use) crowd noise levels would be approximately 33 dBA. As such, crowd noise from the proposed project would not exceed the City's daytime exterior noise standard of 55. The proposed project would not operate during nighttime hours and therefore would not generate crowd noise. Further, crowd noise from the outdoor gathering areas would be lower than the existing ambient noise levels; refer to Table 14. Impacts would be less than significant.

Parking Areas

A total of approximately 319 surface parking spaces would be provided for employees and visitors. Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-byes may be an annoyance to nearby noise-sensitive receptors. Estimates of the maximum noise levels associated with parking lot activities are presented in Table 16, *Typical Maximum Noise Levels Generated by Parking Lots*.

Table 16 Typical Maximum Noise Levels Generated by Parking Lots

Noise Source	Maximum Noise Levels at 50 Feet from Source
Car door slamming	61 dBA L_{eq}
Car starting	36 dBA L_{eq}
Car idling	53 dBA L_{eq}
Source: Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, June 26, 2015.	

As shown in Table 16, parking lot activities can result in noise levels up to 61 dBA at a distance of 50 feet. It is noted that parking lot noise are instantaneous noise levels compared to noise standards in the CNEL scale, which are averaged over time. As a result, actual noise levels over time resulting from parking lot activities would be far lower than the ambient noise levels identified in Table 14. The proposed parking lot would have intermittent parking lot noise due to the movement of vehicles. The nearest sensitive receptor (existing single-family residential use) would be located approximately 150 feet from the nearest parking lot area. At the distance of 150 feet, noise from parking activities would be approximately 43 dBA to 53 dBA L_{eq}. However, an existing six-foot high wall is located along northern and eastern boundaries of the single-family residential sensitive receptors. The existing wall would break the line of sight between parking lot activities and the residences and would provide up to approximately 8 dBA of noise attenuation. With this attenuation, parking-related noise levels would be reduced to approximately 35 to 45 dBA L_{eq} and would not exceed the City's daytime and nighttime exterior noise standards of 55 dBA and 45 dBA, respectively. Further, parking lot noise levels would be lower than the existing ambient noise levels refer to Table 14. Therefore, noise associated with parking activities would result in less than significant impacts.

d) LESS THAN SIGNIFICANT:

Construction

Project construction can generate varying degrees of groundborne vibration, depending on the construction phase and equipment used. Operation of construction 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. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The Caltrans *Transportation and Construction Vibration Manual* identifies various vibration damage criteria for different building classes. The nearest sensitive receptor structure is the existing single-family residential building located approximately 115 feet to the west and are considered newer residential structures. As such, this evaluation uses the FTA architectural damage threshold for continuous vibrations at engineered concrete and masonry structures (i.e., residential structures) of 0.3 inch/-sec PPV in accordance with Municipal Code Section 17.18.080. The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. This analysis uses the Caltrans human annoyance criterion of 0.4 inch/sec PPV. Typical vibration produced by construction equipment is illustrated in Table 17, *Typical Vibration Levels for Construction Equipment*. It should be noted that the project would not require the use of pile drivers.

Table 17 Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inch/sec)	Approximate peak particle velocity at 115 feet (inch/sec)[1]
Vibratory Rollers	0.210	0.0392
Large bulldozer	0.089	0.0166
Loaded trucks	0.076	0.0142
Jackhammer	0.035	0.0065
Small bulldozer	0.003	0.0006

Equipment	Approximate peak particle velocity at 25 feet (inch/sec)	Approximate peak particle velocity at 115 feet (inch/sec)[1]
Notes: 1. Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$ where: PPV_{equip} = the peak particle velocity in inch/sec of the equipment adjusted for the distance PPV_{ref} = the reference vibration level in inch/sec from Table 7-4 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines* D = the distance from the equipment to the receiver		
Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual, Table 7-4 Vibration Source Levels for Construction Equipment*, September 2018.		

Construction activities are anticipated to occur up to the project boundary line. Therefore, the nearest structure (i.e. single-family residential building) would be located approximately 115 feet to the west of the project site boundary. As shown in Table 17, groundborne vibration from project construction activities would range from 0.0006 to 0.0392 inch/sec PPV at a distance of 115 feet. As a result, construction groundborne vibration would not exceed the Caltrans and FTA significance criteria of 0.3 inch/sec PPV for building damage and 0.4 inch/sec PPV for human annoyance at the nearest sensitive receptor. Therefore, vibration impacts would be less than significant impact during construction.

Operations

Implementation of the proposed project would not involve land uses that include or require equipment, facilities, or activities that would result in perceptible groundborne vibration. Heavy duty trucks (i.e., delivery trucks, garbage collections trucks, etc.) would occasionally travel to and from the site. However, according to the FTA, it is unusual for vibration from sources, such as buses and trucks, to be perceptible, even in locations close to major roads. As such, it can be reasonably inferred that operation of the proposed project would not create perceptible vibration impacts to the nearest sensitive receptors. Therefore, vibration impacts related to human annoyance and building damage during operation would be less than significant.

e) NO IMPACT:

The nearest airport to the project site is Palm Springs International Airport approximately 6.75 miles to the northwest. According to the County of Riverside Airport Land Use Commission, the project site is not located within the Palm Springs International Airport noise contours. The project site is not in the vicinity of a private airstrip. Therefore, project implementation would not expose people residing or working in the project area to excessive noise levels associated with aircraft. Therefore, no impact related to airport land use compatibility would occur.

13.3 Mitigation Measures:

None required.

14 - Population and Housing

POPULATION AND HOUSING – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Sources:

City of Rancho Mirage, *Interactive Zoning Map (GIS Web App)*, https://ranchomirage.maps.arcgis.com/apps/webappviewer/index.html?id=6b0092873a7b4634b355dec1443c79b4, accessed November 5, 2025.

City of Rancho Mirage, *General Plan 2017 Update, Land Use Element,* November 16, 2017

City of Rancho Mirage, *Monterey Specific Plan*, 1995.

City of Rancho Mirage, About Rancho Mirage, https://ranchomirageca.gov/our_city/about_rancho_mirage/index.php, Accessed March 31, 2026

14.1 Setting

The City of Rancho Mirage is approximately 24.7 square miles and hosts a full-time population of 16,804 residents with a day time population of 25,635 residents. The City has an estimated maximum build out population of 25,573 according to the General Plan.

14.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:

The proposed project will provide would develop office facilities and commercial uses in proximity to the I-10 Corridor. The retail component of the project is conservatively estimated to support up to 62 full-time jobs (based on 1 job/ 300 square feet), 177 full-time jobs supported by the professional office (based on 1 job/ 150 square feet), and the membership organization facility is estimated to support up to 22 full-time jobs (based on 1 job/ 1,000 square feet). The majority users of the membership organization facility would be existing employees, albeit a limited number of new jobs are anticipated to support the operation and maintenance of the facility. The majority of the employees are expected to be existing local residents.

As a vacant site it is currently bringing no jobs to the City. Given the moderate number of jobs supported by the proposed uses, the project is not expected to create substantial unplanned employment or associated population growth in the City. Additionally, nor does

the project require the extension of roads or other infrastructure, the majority of the project's employees, users, and visitors are expected to be existing visitors and local residents. To the limited extent the project may attract new visitors and local residents to the City, this could result in an incremental population increase. Impacts would be less than significant.

b) NO IMPACT:

The proposed project will occur on currently vacant lands adjacent to a well-established shopping center and within a Community Commercial (C-C) land use designation and General Commercial Specific Plan Area. There will be no impacts with regards to the displacement of local residents or housing.

14.3 Mitigation Measures:

None required.

15 - Public Services

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

Sources:
City of Rancho Mirage *General Plan 2017 Update Safety Element, Fire Protection Services*
City of Rancho Mirage, *Monterey Specific Plan 1995*

15.1 Setting

Fire Protection Services

The City maintains a cooperative agreement with the State of California (CalFire) and the Riverside County Fire Department (RCFD) for fire protection services. RCFD operates several stations that service the City. The closest fire station to the project site is Riverside County Station 35, located at 31920 Robert Road in the unincorporated community of Thousand Palms, which is approximately one mile north of the project site. Riverside County Station 69, located at 71751 Gerald Ford Drive in Rancho Mirage, is approximately 1.2 miles southwest of the project site.

Police Protection Services

Police protection services in the City are provided through a contractual agreement with the Riverside County Sheriff's Department (RCSD), which operates out of the Palm Desert Sheriff's Station, located at 73-705 Gerald Ford Drive in the City of Palm Desert, approximately 1.3 miles southeast of the project site.

Schools

The City is served by two public school districts: the Palm Springs Unified School District (PSUSD) and the Desert Sands Unified School District (DSUSD). PSUSD serves the majority of the City; further the site is within the boundaries of the PSUSD..

Parks

The City currently has five parks, one designated dog park, and five local trails. Adjacent south of the project site is the Rancho Mirage Dog Park. This dog park is approximately 4.5-acres and is located at 34100 Key Largo Drive.

15.2 Discussion of Impacts:

a)i). LESS THAN SIGNIFICANT IMPACT:

As mentioned above, the City contracts with CalFire and RCFD for fire protection services. Impacts relative to construction and operation are discussed below.

Construction
Construction activities associated with the proposed project could create a temporarily increased demand for fire protection services at the project site. All construction activities would be subject to compliance with all applicable State and local regulations in place to reduce risk of construction-related fire, such as installation of temporary construction fencing to restrict site access and maintenance of a clean construction site. As a result, project construction would not result in the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, and would not adversely impact service ratios, response times, or other RCFD performance standards. A less than significant impact would occur in this regard.

Operation
As an office facility and commercial center, the project would not lead to substantial population growth that could increase the need for new or physically altered fire protection facilities; refer to Section 14, *Population and Housing*. Notwithstanding, in conformance with Municipal Code Section 3.29.120, the project would be required to pay development impact fees (DIF), which would be applied toward acquiring, designing, constructing, improving, providing and maintaining, to the extent permitted by law, fire services facilities and equipment. This would ensure operational impacts to fire protection services are less than significant.

Thus, the project would not 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 relative to fire protection. A less than significant impact would occur.

ii. LESS THAN SIGNIFICANT IMPACT:
Police protection services in the City are provided by RCSD. Impacts relative to project construction and operation are discussed below.

Construction activities associated with the proposed project could create a temporarily increased demand for police protection services at the project site. However, all construction activities would be subject to compliance with Municipal Chapter 15.04, California Building Code, 2025 Edition. Specifically, Municipal Code 15.04.010 adopts by reference the CBC. Chapter 33, Safeguards During Construction, of the CBC includes emergency access requirements which would minimize site safety hazards and potential construction-related impacts to police services. As a result, project construction would not result in the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, and would not adversely impact service ratios, response times, or other RCSD performance standards. A less than significant impact would occur in this regard.

The project would not lead to substantial population growth that could increase the need for new or physically altered police protection facilities; refer to Section 14, *Population and Housing*. While the project may lead to a slight increase in demand for law enforcement services, this increase is expected to be minimal and would not require the construction of new facilities. Thus, the project would not 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 relative to police protection. A less than significant impact would occur.

iii. NO IMPACT:
As an office facility and commercial center, the project would not result in a substantial population growth that could increase the need for new or physically altered school facilities; refer to Section 14, *Population and Housing*. No impact would occur in this regard.

iv. NO IMPACT:
As an office facility and commercial center, the project would not lead to substantial population growth that could increase the need for new or physically altered park facilities; refer to Section 14, *Population and Housing*. Accordingly, there would be no impact relative to parks.

v. NO IMPACT:
As an office facility and commercial center, the project would not lead to substantial population growth that could increase the need for new or physically altered facilities, including libraries or general governmental facilities; refer to Section 14, *Population and Housing*. Accordingly, no impact would occur in this regard.

15.3 Mitigation Measures:

None required.

16 - Recreation

RECREATION – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Source:
City of Rancho Mirage, *Parks and Trails Map 2024*, https://cms3.revize.com/revize/ranchomirageca/CITY%20STAFF%20USE%20THIS%20FILE/Department%20Files/Parks&Trails_Map_13x15_112024_1%20(1).pdf, accessed November 5, 2025.

16.1 Setting

The City of Rancho Mirage currently has five public parks, one designated dog park, and five public trails.

16.2 Discussion of Impacts:

a) NO IMPACT:

As discussed in Section 14, *Population and Housing*, the project does not propose any residential uses that could lead to population growth that would subsequently increase the use of existing and regional parks and/or recreation facilities. No impact would occur in this regard.

b) LESS THAN SIGNIFICANT IMPACT:

The proposed project does not include the development of publicly accessible recreational facilities. As such, the proposed project does not require the construction or expansion of recreational facilities and potential impacts are less than significant.

16.3 Mitigation Measures:

None required.

17 - Transportation

TRANSPORTATION – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Sources:
Michael Baker International, *Transportation Impact Analysis, Riverside Sheriff's Association Benefit Trust – Mixed Use Project, Rancho Mirage, California,* May 20, 2026.

Michael Baker International, *Riverside Sheriffs' Association Benefit's Trust– Shared Parking Assessment, March 31, 2026.*

17.1 Setting

The following discussion is based on the *Transportation Impact Analysis* (Appendix F) a*nd Shared Parking Assessment* (Appendix G) of this Initial Study.

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law, which initiated a process to change transportation impact analyses completed in support of CEQA documentation. SB 743 eliminated level of service (LOS) as a basis for determining significant transportation impacts under CEQA and provides a new performance metric, vehicle miles travelled (VMT) pursuant to CEQA Guidelines Section 15064.3

However, as required by the City of Rancho Mirage, the *Transportation Impact Analysis* was prepared in accordance with the *Riverside County Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled* (County Transportation Guidelines), dated December 2020. The scope of the *Transportation Impact Analysis* has been coordinated with City staff. Thus, Response 4.17(a) include an analysis on the project's potential to conflict with adopted LOS performance standards near the project site under "Roadway Facilities".

17.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:

This section discusses the project's potential impacts to the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Transit Facilities

SunLine Transit Agency (STA) provides bus rides (transit services) in the area including a fixed-route bus service and Dial-a-Ride service. Dial-a-Ride service is provided for locations within three quarters of a mile of an STA local route, meaning service is provided in the area within the vicinity of the project site.

The *Transportation Impact Analysis* concluded that the site is along Route 14, which runs seven days a week. Route 14 spans between Palm Desert, Rancho Mirage, and Thousand Palms. The northbound route runs from about 6 a.m. to 10 p.m. with approximate headways of 60-minutes. The southbound route runs from about 6 a.m. to 9:30 p.m. with about approximate headways of 60-minutes. The closest transit stop to the project site is located approximately 850 feet east of the limits of the project site, between the Dinah Shore Drive/Mirium Way intersection and the Dinah Shore Drive/Shoppers Lane intersection.

The project would not induce significant population growth and is consistent with the anticipated land uses for the project site; refer to Section 11, *Land Use and Planning*, and Section 14, *Population and Housing*. As a result, it is anticipated that existing transit service in the area would be able to adequately accommodate the increase in project-generated transit trips. Thus, project impacts on existing and future transit services in the area within the vicinity of the project site are expected to be less than significant.

Roadway Facilities

LOS is commonly used as a qualitative description of intersection operation and is based on the type of traffic control and experienced delay at the intersection. The *Highway Capacity Manual* (HCM) 6th Edition published by the Transportation Research Board in 2016 was utilized in the analysis to determine the operating LOS at each of the study intersections. LOS can range from LOS A (free-flow conditions) to LOS F (severely congested conditions). Delay in seconds per vehicle (sec/veh) passing through the intersection is the primary measure of effectiveness for signalized, stop-controlled, and roundabout intersections.

The City's General Plan sets LOS D as the minimum acceptable traffic operations condition for intersections. For the purposes of this analysis and consistent with the County Transportation Guidelines, improvements may be required when: existing traffic conditions exceed the General Plan target LOS; project traffic, when added to existing traffic, will determine the LOS to below the target LOS; or; cumulative traffic exceeds the target LOS

The Transportation Impact Analysis study scenarios are listed below:

1. Existing Year 2026 Condition;
2. Existing Year 2026 Plus Project Conditions;
3. Opening Year Without Project Conditions (Existing plus Ambient Growth plus Cumulative Projects); and
4. Opening Year Plus Project Conditions (Existing plus Ambient Growth plus Cumulative Projects plus Project).

The following study intersections were examined in the Transportation Impact Analysis:

1. Varner Road & Monterey Avenue
2. I-10 SB Ramps & Monterey Avenue
3. Dinah Shore Drive & Key Largo Avenue
4. Key Largo Avenue & Project Driveway
5. Dinah Shore Drive & Project Driveway
6. Dinah Shore Drive & Miriam Way
7. Dinah Shore Drive & Shoppers Lane
8. Dinah Shore Drive & Monterey Avenue

To determine the existing operations of the study intersections, peak hour intersection movement counts were collected on Tuesday April 7th, 2026. Intersection counts were collected during the peak a.m. commute period from 7:00 a.m. to 9:00 a.m. as well as the peak p.m. commute period from 4:00 p.m. to 6:00 p.m. The counts used in this analysis represent the highest hour within each peak period for each study intersection.

The proposed project is forecasted to generate approximately 2,603 daily vehicle trips with 76 AM (48 inbound and 28 outbound) peak hour trips and 118 PM (55 inbound and 63 outbound) peak hour trips.

The key findings from the Transportation Impact Analysis are summarized below:

- *Existing Year 2026*. In the Existing Year 2026 condition, all intersections operate at acceptable LOS D or better during the a.m. and p.m. Peak Hours.

- *Existing Year 2026 Plus Project Conditions*. In the Existing Year 2026 Plus Project condition, all intersections operate at acceptable LOS D or better during the a.m. and p.m. Peak Hours.

- *Opening Year Without Project Conditions*. In the Opening Year Without Project condition, all intersections operate at acceptable LOS D or better during the a.m. and p.m. Peak Hours.

- *Opening Year Plus Project Conditions*. In the Opening Year Plus Project condition, all intersections operate at acceptable LOS D or better during the a.m. and p.m. Peak Hours.

The study intersections are shown to operate at acceptable LOS under the study scenarios and no operational adverse effects were identified, no additional improvements are necessary or required. Thus, the proposed project's transportation impacts on nearby roadways would be less than significant.

Bicycle and Pedestrian Facilities

The existing bikeway facilities and sidewalk gaps are identified within the Transportation Impact Analysis. Within proximity to the project site, Class II Bike Lanes are located along both sides of Dinah Shore Drive, East of Monterey Avenue; as well as provided southbound along Monterey Avenue, approximately 1,200 feet south of Dinah Shore Drive. On other nearby roadways, bicyclists generally utilize a shoulder adjacent to motor vehicle travel lanes.

Sidewalks are generally provided throughout the study area, with good connectivity within the study area. However, there are intermittent gaps in existing sidewalk infrastructure, particularly along arterials adjacent to undeveloped properties. Notable gaps in sidewalks in immediate vicinity of the project site include:

- Dinah Shore Drive on both sides of the street between Miriam Way and Bobe Hope Drive
- Key Largo Avenue northbound between Dinah Shore Drive and south of Via Vail
- Monterey Avenue northbound between Varner Road and Dinah Shore Drive

The project would not induce significant population growth and is consistent with the anticipated land use for the project site; refer to Section 11 and Section 14. As a result, it is anticipated that existing bicycle and pedestrian facilities in the area within the vicinity of the project site would be able to adequately accommodate the increase in project-generated trips. Thus, project impacts on existing and future bicycle and pedestrian facilities in the area within the vicinity of the project site are expected to be less than significant.

b) LESS THAN SIGNIFICANT IMPACT:

The City's *Transportation Analysis Policy* as well as the County Transportation Guidelines outline VMT metrics and thresholds of significance. As outlined in these guiding documents, certain land use projects that meet certain screening threshold criteria based on project size, location, proximity to transit, or trip-making potential may be presumed to have a less than significant transportation impact under CEQA.

Accordingly, a VMT screening was conducted as part of the Transportation Impact Analysis. The report summarizes each of the screening criteria as well as the individual project's evaluation and result for each criterion. The project meets one the screening criteria as locally serving and can be presumed to have a less than significant under CEQA. Therefore, a detailed project specific VMT calculation is not required and the project impact is considered less than significant in this regard.

c) LESS THAN SIGNIFICANT IMPACT:

The project proposes two (2) access points. One full-access driveway is proposed on the east side of Key Largo venue, approximately 170 feet south of the intersection of Dinah Shore Drive and Key Largo Avenue. Another project driveway is proposed on the east side of the site that would connect with the existing parking lot of the Monterey Market Place shopping center. This shared access provides partial access to Dinah Shore Drive (left-in / right-in / right-out only) via the existing driveway approximately 570 feet west of Miriam Way.

The project does not propose to construct a hazardous geometric design, modify existing roadways or include uses that are incompatible with the City's Land Use Plan. Accordingly, the project would not have the potential to substantially increase hazards due to a geometric design feature or incompatible use, and impacts would be less than significant in this regard.

d) LESS THAN SIGNIFICANT IMPACT:

As part of project review and prior construction, both the Fire Department and Police Department will review the site plan to ensure safety measures are addressed including emergency access. Therefore, the proposed project will have a less than significant impact on emergency access.

17.3 Mitigation Measures:

None required.

18 - Tribal Cultural Resources

TRIBAL CULTURAL RESOURCES – Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 § 5020.1(k), or	☐	☒	☐	☐
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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Source:
BCR Consulting LLC, *Cultural Resources Assessmen*t Rancho Mirage Sheriff Facility Project Rancho Mirage, Riverside County, California, January 23, 2026.
City of Rancho Mirage, *AB 52 consultation materials*.

18.1 Setting

Ethnography

The project site is situated in an area occupied by the Cahuilla. The Cahuilla were seminomadic hunter-gatherers who spoke a Cupan variation of the Takic language subfamily. Spanish missionaries first encountered the Cahuilla in the late 18th century. The territory of the Cahuilla ranges from the area near the Salton Sea up into the San Bernardino Mountains and San Gorgonio Pass.

A records search was completed at the South Coast Information Center (SCIC). The records search included a review of recorded historic and prehistoric cultural resources, as well as a review of known cultural resources, and survey and excavation reports generated from projects

located within one mile of the project site. In addition, a review was conducted of the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and documents and inventories from the California Office of Historic Preservation including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

18.2 Discussion of Impacts:

i-ii) Less Than Significant with Mitigation Incorporation.

As part of the *Cultural Resources Assessment* (Appendix C), desktop research was conducted including a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF). The NAHC concluded that the SLF results were negative. This database maintained by the NAHC contains records of known sacred sites, cultural resources, and other culturally significant locations reported by Native American tribes.

As detailed in Section 5, *Cultural Resources*, no historic resources listed or eligible for listing in a State or local register of historical resources are located on the project site. Therefore, no impacts related to historic tribal cultural resources defined in Public Resources Code Section 5020.1(k) would occur.

AB 52 requires lead agency consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a project site.

On March 3, 2026, the City provided AB 52 consultation notification letters to Native American Tribal governments (refer to Appendix H). Below is a summary of the outreach:

- March 4, 2026 - The Yuma Quechan Indian Tribe deferred to local tribes.

- April 2, 2026 - The Agua Caliente Band of Cahuilla Indians (ACBCI) requested formal government to government consultation and requested the presence of an approved Agua Caliente Native American Cultural Resource Monitor (mitigation measure CUL-2); the presence of an archaeologist that meets the Secretary of Interior's standards during any ground disturbing activities (mitigation measure CUL-1); and a copy of IS/MND. Further, the ACBCI confirms the project area is not located within the boundaries of the ACBCI Reservation; however, the site is within the ACBCI's Traditional Use Area.

- April 29, 2026 - The Morongo Band of Mission Indians requested consultation and stated that they received the City's letter on March 31. City staff reached out to the Tribal government to state that the deadline to request consultation had passed. Three Morongo contacts (contacts obtained from list provided by the Native American Heritage Commission on February 20, 2026) were mailed certified letters on March 3 and also emailed.

The results of the *Cultural Resources Assessment* did not indicate whether the project site supports known tribal cultural resources; however the report recognizes that although no prehistoric archaeological resources were identified on the surface during the field survey, many others with significant buried components have been recorded nearby and ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. As such, the project requires archeological monitoring (MM CR-1).

As a result of consultation, cultural monitoring and archaeological monitoring would be required during ground-disturbing activities to minimize impacts to potential unknown tribal cultural resources in compliance with MM CR-1 and CR-2. Implementation of these measures would ensure that impacts relative to tribal cultural resources are less than significant.

18.3 Mitigation Measures:

CR-1: Qualified Archeological Monitor. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall retain a qualified archaeological monitor to be on-site during earthmoving activities and present a cultural resource sensitivity training for construction personnel (i.e., Worker Environmental Awareness Program [WEAP]). The qualified archaeologist would prepare an archaeological monitoring and discovery plan that will apply to the entire project area and includes, at a minimum, a discussion of key personnel and their specific roles and responsibilities, archaeological monitoring methods, a discussion of archaeological resource classes that may be encountered during construction, and protocols for identifying, evaluating, treating, and temporary curation of archaeological resources that may be encountered. Should any cultural resources be discovered during implementation of the monitoring plan, the monitor(s) shall be authorized to temporarily halt all construction-related activities within a 100-foot radius of the discovery while the resource is evaluated for significance in consultation with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO). If the resource is determined significant, the qualified archaeologist should make recommendations to the City on measures that should be implemented to treat cultural resources in accordance with the protocols developed in the mitigation and discovery plan. No further grading shall occur in the discovery area until the City is notified by the qualified archaeologist that treatment has been completed.

CR-2: Cultural Resource Monitor. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall enter into monitoring agreement(s) with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO), for the appropriate amount of Native American Monitor(s). The Project Applicant/Owner/Developer shall expect for the monitoring agreement process to take 3-4 weeks. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall provide evidence to the City of Rancho Mirage Planning Department that a Native American Monitoring Agreement has been executed with ACBCI THPO.

CR-3: Artifact Disposition. In the event cultural resources are identified during ground disturbing activities, the landowner(s) shall relinquish ownership of all cultural resources. Avoidance is the first option of preservation. If avoidance is not feasible, a reburial location shall be selected in consultation with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO). This shall include measures and provisions to protect the reburial area from any future impacts. Reburial shall not occur until all cataloguing, analysis and special studies have been completed on the cultural resources. The reburial location shall remain confidential. If reburial on-site is not feasible, ACBCI THPO shall curate all cultural resources of pre- contact origin. The disposition of historic resources shall be discussed among ACBCI THPO, the project Archaeologist, and the City of Rancho Mirage.

19 - Utilities and Service Systems

UTILITIES AND SERVICE SYSTEMS – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statues and regulations related to solid waste?	☐	☐	☒	☐

Sources:

California Department of Resources Recycling and Recovery, *Estimated Solid Waste Generation Rates*, https://www2.calrecycle.ca.gov/wastecharacterization/general/rates, accessed February 2, 2026.

Coachella Valley Water District, *Wastewater Treatment*, https://www.cvwd.org/163/Wastewater-Treatment, accessed February 2, 2026.

Water Systems Consulting, Inc., *2020 Coachella Valley Regional Urban Water Management Plan*, June 30, 2021.

19.1 Setting

The proposed project is located on a vacant parcel surrounded by development on three of four sides. The site would be required to create new internal utility and road connections to existing services and right-of-way along Dinah Shore Drive and Key Largo Avenue.

Domestic Water (Drinking Water)

The Coachella Valley Groundwater Basin is the main source of domestic water for the Coachella Valley. The basin is comprised of several subbasins which are divided by tectonic faults; the Indio Subbasin provides domestic water for the project site. Several water agencies utilize and manage portions of the basin throughout the Coachella Valley, including and principally Coachella Valley Water District (CVWD), which provides domestic water service to the subject property. CVWD supplements natural recharge by importing and percolating Colorado River water into the groundwater basin. CVWD is also a state water project contractor. CVWD serves a population of approximately 270,000 and manages 100,000+ accounts, via 100+ production wells, 2,000 miles of pipeline, and 100+ million gallons of storage in above-ground reservoirs. CVWD manages the domestic water infrastructure in the City.

Wastewater

CVWD provides wastewater service to more than 105,200 home and business accounts and operates five water reclamation plants from Palm Desert to Thermal. It maintains more than 1,100 miles of sewer pipelines and 27 lift stations that collect and transport wastewater to the nearest water reclamation facility.

Solid Waste

The City contracts with Burrtec Waste and Recycling Services to provide solid waste collection, recycling, and green waste disposal services. Pursuant to the State's recycling and landfill diversion regulations, Burrtec processes recyclable materials and green waste separately from solid waste. Recyclable materials are sorted at a Burrtec Materials Recovery Facility (MRF). Green waste may be composted or applied as alternative daily landfill cover.

19.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:

The project site is undeveloped land; however, it is located within a partially built-out urban area of Rancho Mirage and is located adjacent to an established commercial center; hence, the project has direct access to existing utility services.

Water

Private domestic, irrigation, and fire lines would be constructed on-site to connect to existing CVWD water facilities. Payment of standard water connection fees and ongoing user fees would ensure that the project's share on existing water facilities are adequately offset. The proposed project is consistent with land uses anticipated for the area and have been taken into account for water forecasting for development needs. Therefore, it is not anticipated that project implementation would require construction of new or expanded water facilities. Less than significant impacts would occur in this regard.

Wastewater

CVWD would provide wastewater collection and treatment services for the proposed development. On-site sewer laterals would connect to existing sewer facilities in Key Largo Road. Compliance with the required sewer connections and wastewater discharge rate would be verified prior to issuance of building permits by the City. Further, the project would be required to pay the standard connection fees and ongoing user fees. Payment of these fees would fund improvements and upgrades to surrounding sewer lines as needed and would offset the project's increase in demand for wastewater collection services. Following compliance with relevant laws, ordinances, and regulations, it is not anticipated that project implementation would require construction of new or expanded wastewater facilities that would result in a significant environmental effect. Impacts would be less than significant in this regard.

Stormwater

Runoff within the project site would be conveyed into three underground infiltration basins and then conveyed through various storm drain facilities for water quality treatment. The majority of runoff onsite would be conveyed to onsite basins. A small portion of the runoff onsite would be treated in landscaped areas and would then drain off site. It is anticipated the proposed drainage system would adequately provide drainage treatments, detention, and conveyance in accordance with City's requirements. Construction of the new storm drain improvements would be subject to compliance with all applicable local, State, and Federal laws, ordinances, and regulations. Impacts in this regard would be less than significant.

Dry Utilities

The project site would be served by Imperial Irrigation District (IID) for electricity services and Southern California Gas (SoCalGas) for natural gas services. The project would involve constructing new private on-site dry utility lines associated with such services. Payment of standard utility connection fees and ongoing user fees would ensure impacts to these utility services are adequately offset. The project's potential environmental impacts for construction in this regard are analyzed throughout this Initial Study. Construction of the project's dry utilities would also be subject to compliance with all applicable local, State, and Federal laws, ordinances, and regulations. As such, project impacts would be less than significant in this regard.

c) LESS THAN SIGNIFICANT IMPACT:

CVWD would provide water supplies to the project site. According to the 2020 Coachella Valley Regional Urban Water Management Plan (2020 UWMP), CVWD would be capable of providing adequate water supply to its service area under a normal supply and demand scenario, single dry-year supply and demand scenario, and multiple dry-year supply and demand scenarios through 2045. The 2020 UWMP water supply predictions are based on existing General Plan designations and account for increased demand as growth within the City occurs. Based on the General Plan, the project site is designated Community Commercial (C-C). The purpose of the C-C designation is to provide regional- or

community-scale shopping centers and malls that may be anchored by several department stores or other large-scale facilities. As concluded in Section 11, the proposed development is consistent with the allowed used under the C-C designation. Thus, impacts in this regard would be less than significant.

c) LESS THAN SIGNIFICANT IMPACT:

The project is consistent with the land use designation for the parcel, payment of standard sewer connection fees and ongoing user fees would ensure that sufficient capacity is available. As such, the project's potential impacts on wastewater treatment provider would be fully mitigated via payment of fees and CVWD's service commitment. Impacts would be less than significant.

d, e) LESS THAN SIGNIFICANT IMPACT:

Burrtec Waste and Recycling Services provides solid waste, recycling, and green waste disposal services to the City of Rancho Mirage. As identified in the Public Services and Facilities Element of the City's General Plan, most trash in the City is taken to the Edom Hill Transfer Station located in Cathedral City. The Edom Hill transfer station has a maximum permitted throughput of 3,500 tons per day and a permitted capacity of 3,500 tons per day for general waste (e.g, agricultural, construction/demolition, food wastes, green materials, industrial, metals, tires). In addition, the transfer facility has a separate area for composting (construction/demolition and green materials) that has a maximum permitted throughput of 500 tons per day, and a permitted capacity of 10,221 cubic yards.

Construction

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. AB 939 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 2022 Green Building Code, which includes design and construction measures that act to reduce construction-related waste through material conservation and other construction-related efficiency measures. Compliance with these regulations would ensure the project's construction-related solid waste impacts would be less than significant.

Operation

Based on CalRecycle's waste generation rates for commercial development (5 pounds of waste per 1,000 square feet per day), project operations associated with the three commercial buildings, fraternal order of police lodge, and health and fitness totaling approximately 32,229 square feet, are expected to generate approximately 161.15 pounds per day. Based on CalRecycle's waste generation rates for office development (6 pounds of waste per 1,000 square feet per day), project operations associated with the office uses totaling approximately 35,361 square feet, are expected to generate approximately 212.17 pounds per day. As such, the proposed project is anticipated to generate approximately 0.19 tons (373.32 pounds) per day, or approximately 69.35 tons per year. This represents

less than 0.1 percent of Edom Hill transfer station's maximum permitted throughput of 3,500 tons per day As such, the project is not anticipated to 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. Impacts in this regard would be less than significant.

19.3 Mitigation Measures:

None required.

20 - Wildfire

WILDFIRE – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Sources:

CalFire, *Fire Hazard Severity Zones Viewer*, https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones, accessed February 2, 2026.

City of Rancho Mirage, *Local Hazards Mitigation Plan*, adopted September 19, 2024.

20.1 Setting

As identified in the City's General Plan, the northern area of the City consists of a mixture of native desert landscape and urban development. These areas are characterized by white sandy soil with native shrubs with standard housing and commercial developments. There are areas designated as High and Very High fire hazard zones adjacent to the City's southern boundary according to the General Plan. CalFire's most recent Fire Hazard Severity Zone map shows moderate fire hazard severity zones in the southern and western portions of the City.

In the Coachella Valley, the potential for wildfire predominantly occurs in the surrounding brush covered hillsides where slope, dry vegetation and high winds form ideal wildfire conditions. Zones where the cities of the Coachella Valley transition to the outlying hillsides form Wildland Urban Interfaces, which are particularly susceptible to wildfire risk. The California Department of Forestry and Fire Protection (CalFire) provides the Fire Hazard Severity Zone Viewer, an online map application that displays the 2024 adopted State Responsibility Area Fire Hazard Severity Zone boundaries where CalFire takes the responsibility for wildland fire protection, and the 2025 adopted Local Responsibility Area where the Riverside County Fire Department is responsible for wildland fire protection.

Although there is no record of any significant wildfire occurring in Rancho Mirage, the City is considered to have a moderate risk of wildfire. Moderate Local Responsibility Area Fire Hazard Severity Zones occur on the lower and upper slopes of the Santa Rosa and San Jacinto Mountains. The project site is located in the northern portion of the City where no immediate fire risk has been identified.

In preparation for emergencies and natural disasters, Rancho Mirage has adopted the 2023 Local Hazard Mitigation Plan (LHMP) which outlines potential wildfire risks and assigns responsibilities to the appropriate agencies to ensure accurate and coordinated responses to wildfires. The City also participates in Riverside County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) and also coordinates with the Riverside County Fire Department, the California Department of Forestry and Riverside County Sheriff's Department to receive a wide range of emergency response services. The City's Emergency Preparedness Commission provides resources and emergency preparation education to residents and business to reduce potential impacts of natural disasters. Two main evacuation routes for the City include US Interstate 10 (I-10) and State Highway 111 (SR-111).

20.2 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT:
The project is located within one mile of I-10 and therefore has direct access to an evacuation route via two existing access drives to the east and west. The project would not change on-site circulation or highway access. The project is also subject to evaluation and approval by the Riverside County Fire Department to certify that it will not substantially impair an adopted emergency response or an evacuation route, and therefore, impacts are expected to be less than significant.

b, c) LESS THAN SIGNIFICANT IMPACT:
The project site not located within a State Responsibility Area or within an area designated as a Very High Fire Hazard Severity Zone. The project site itself is a relatively flat parcel, and is located along Dinah Shore Drive, a major six-lane thoroughfare that connects to I-10. Dinah Shore Drive (roadway) would act as a natural fuel break between the project site and the undeveloped land to the north. Natural vegetation on the project site and general area is very thin due to the lack of soil formation and is not a significant fuel source. Vegetation on developed properties is subject to fire review for defensible space and other factors. Utility tie-ins exist in the immediate area including water sources, power lines, and fuel break. Maintenance of existing infrastructure would not exacerbate a wild fire risk as the project site occurs in a partially developed portion of the City. The project is designed to facilitate firefighting around the entire proposed building through provision of minimum hose runs. The project would not exacerbate wildfire risks or expose occupants to pollutant

concentrations or the uncontrolled spread of a wildfire. Impacts would be less than significant in this regard.

d) LESS THAN SIGNIFICANT IMPACT:
The project site does not occur in a flood risk zone, nor does it occur in a Very High Fire Hazard Severity Zone. Furthermore, the site is generally flat and not susceptible to landslide or liquefaction. Project construction would include site grading and onsite stormwater drainage minimizing downstream impact to adjacent or nearby properties. The project does not pose a risk of exposing people or structure to significant risks such as downslope or downstream flooding, landslides, post-fire slope instability, or drainage changes. Impacts would be less than significant.

20.3 Mitigation Measures:

None required.

21 - Mandatory Findings of Significance

MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

21.1 Discussion of Impacts:

a) LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

As concluded in Section 4, *Biological Resources*; to reduce or avoid potential impacts to special status wildlife, sensitive natural communities, wildlife movement, and native wildlife nursery sites, the project would implement mitigation measures BIO-1 Special Status Plant Survey; BIO-2 Burrowing Owl Survey; and BIO-3 Nesting Bird Survey. In addition, BIO-4 CVMSHCP Local Development Mitigation Fee is required. With implementation of these mitigation measures, impacts to biological resources would be reduced to a less than significant level.

As concluded in Section 5, *Cultural Resources* and Section 18, *Tribal Cultural Resources*, no archaeological or tribal cultural resources are known to occur on-site. Further, the Cultural Resources Assessment concluded that no historic or prehistoric cultural or archaeological resources were identified on the project site during the field survey and during the cultural/archaeological records search; and although no prehistoric archaeological resources were identified on the surface during the field survey, many others with significant buried components have been recorded in the project vicinity and ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. To reduce this potential impact to archeological resources, mitigation measure CR-1 Qualified Archeological Monitor is required.

In addition, as a result of AB 52 consultation, cultural resource monitoring would be required during ground-disturbing activities to minimize impacts to potential unknown tribal cultural resources in compliance with mitigation measure CR-2 (Cultural Resource Monitor). In the event artifacts are found during construction, mitigation measure CR-3 (Artifact Disposition) shall be implemented. Impacts would be less than significant with mitigation incorporated in this regard.

As analyzed, the project would not 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 prehistory.

b) 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 Section 1 through Section 20, the proposed project would not result in significant environmental impacts in with implementation of the 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 considerable when viewed in connection with the effects of past projects, current projects, or probable future projects. Impacts would be less than significant with mitigation incorporated in this regard.

c) 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, transportation, and other environmental resource topics. As concluded in these previous discussions, the project would not have environmental effect which would cause substantial adverse effects on human beings, either directly or indirectly, following conformance with the existing regulatory framework and implementation of project mitigation measures. Impacts would be less than significant with mitigation incorporated in this regard.

Table 18 Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Party	Timing	Verification (Date and Initials)
BIOLOGICAL RESOURCES			
BIO-1: Special-Status Plant Surveys. Prior to project implementation and during the appropriate blooming periods for special-status plant species with the potential to occur within the project site, a qualified botanist shall conduct rare plant surveys, with a focus on Coachella Valley milk-vetch, to determine presence or absence of any special-status plant species on-site. The surveys shall be inclusive of, at a minimum, areas proposed for disturbance and shall follow the U.S. Fish and Wildlife Service's (USFWS) Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants (2000) and/or California Department of Fish and Wildlife's (CDFW) Protocols for Surveying and Evaluating Impacts to Special-Status Native Plan Populations and Sensitive Natural Communities (2018). A report summarizing the methods and results of rare plant surveys shall be submitted to the City of Rancho Mirage. If individual or populations of special-status plant species are found within the areas proposed for disturbance, measures to avoid and minimize impacts shall be recommended. If state- and/or federally-listed plant species are present and avoidance is infeasible, consultation with the CDFW and/or USFWS would be required and an Incidental Take Permit(s) (ITP) from the CDFW and/or USFWS shall be obtained prior to the commencement of Project activities. Mitigation measures identified in the ITP shall be implemented to comply with requirements of the take authorization. If non-listed special-status species are present and unavoidable, consultation with the CDFW shall occur regarding the need for preparation and implementation of a Habitat Mitigation and Monitoring Plan.	Project Applicant/ Owner	Prior to grading	

Mitigation Measure	Responsible Party	Timing	Verification (Date and Initials)
BIO-2: Burrowing Owl Survey. Prior to construction, two preconstruction burrowing owl clearance surveys shall be conducted, with the first survey occurring 14–30 days prior to any vegetation removal or ground-disturbing activities occurring and the second survey occurring 24 hours prior to disturbance. A report summarizing methods and results of burrowing owl surveys shall be submitted to the City of Rancho Mirage. If an occupied burrow is found outside, but within 500 feet, of the development footprint, the qualified biologist shall establish a "no-disturbance" buffer around the burrow location(s). The burrow(s) will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Project activities will be permitted within the buffer until the young are no longer dependent on the burrow. If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on-site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat	Project Applicant/ Owner	14-days prior to grading	

Mitigation Measure	Responsible Party	Timing	Verification (Date and Initials)
determined through coordination with the Wildlife Agencies.			
BIO-3: Nesting Bird Survey. Within 30 days of ground-disturbing activities associated with project implementation that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the Project region, or as determined by a qualified biologist), the Project Applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present on the Project site. The surveys shall continue on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground-disturbing activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground-disturbing activities. A report summarizing methods and results of nesting bird surveys shall be submitted to the City of Rancho Mirage. If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with the CDFW, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. A report summarizing methods and results of rare plant surveys shall be submitted to the City.	Project Applicant/ Owner	30-days prior to grading	
BIO-4: CVMSHCP Local Development Mitigation Fee. As a signatory to the Coachella Valley Multiple Species Habitat Conservation Plan, the City of Rancho Mirage shall require payment of the local development mitigation fee prior to issuance of building permits for the proposed use on the project site at the rates applicable at the time of payment of the fee as set forth in the most recent fee schedule. The Project Applicant shall be required to provide	Project Applicant/ Owner	Prior to grading	

Mitigation Measure	Responsible Party	Timing	Verification (Date and Initials)
documentation to the City of Rancho Mirage confirming payment of the local development mitigation fee.			
CULTURAL RESOURCES			
CR-1: Qualified Archeological Monitor. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall retain a qualified archaeological monitor to be on-site during earthmoving activities and present a cultural resource sensitivity training for construction personnel (i.e., Worker Environmental Awareness Program [WEAP]). The qualified archaeologist would prepare an archaeological monitoring and discovery plan that will apply to the entire project area and includes, at a minimum, a discussion of key personnel and their specific roles and responsibilities, archaeological monitoring methods, a discussion of archaeological resource classes that may be encountered during construction, and protocols for identifying, evaluating, treating, and temporary curation of archaeological resources that may be encountered. Should any cultural resources be discovered during implementation of the monitoring plan, the monitor(s) shall be authorized to temporarily halt all construction-related activities within a 100-foot radius of the discovery while the resource is evaluated for significance in consultation with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO). If the resource is determined significant, the qualified archaeologist should make recommendations to the City on measures that should be implemented to treat cultural resources in accordance with the protocols developed in the mitigation and discovery plan. No further grading shall occur in the discovery area until the City is notified by the qualified archaeologist that treatment has been completed.	Project Applicant/ Owner/Developer	Prior to grading	
CR-2: Cultural Resource Monitor. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall enter into monitoring agreement(s) with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO), for the appropriate	Project Applicant/ Owner/Developer	Prior to grading	

Mitigation Measure	Responsible Party	Timing	Verification (Date and Initials)
amount of Native American Monitor(s). The Project Applicant/Owner/Developer shall expect for the monitoring agreement process to take 3-4 weeks. Prior to issuance of grading/construction permits, the Project Applicant/Owner/Developer shall provide evidence to the City of Rancho Mirage Planning Department that a Native American Monitoring Agreement has been executed with ACBCI THPO.			
CR-3: Artifact Disposition. In the event cultural resources are identified during ground disturbing activities, the landowner(s) shall relinquish ownership of all cultural resources. Avoidance is the first option of preservation. If avoidance is not feasible, a reburial location shall be selected in consultation with the Agua Caliente Band of Cahuilla Indians (ACBCI) Tribal Historic Preservation Office (THPO). This shall include measures and provisions to protect the reburial area from any future impacts. Reburial shall not occur until all cataloguing, analysis and special studies have been completed on the cultural resources. The reburial location shall remain confidential. If reburial on-site is not feasible, ACBCI THPO shall curate all cultural resources of pre-contact origin. The disposition of historic resources shall be discussed among ACBCI THPO, the project Archaeologist, and the City of Rancho Mirage.	Project Applicant/ Owner/Developer	During construction	
TRIBAL CULTURAL RESOURCES			
Refer to CR-1, CR-2, and CR-3			

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CHAPTER 5: APPENDICES

Appendix A –

Air Quality Modeling Sheets

Riverside County Sheriff's Association Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

2.2.2. Onsite Construction Emissions by Year, Unmitigated

2.2.3. Offsite Construction Emissions by Year, Unmitigated

2.2.4. Total Construction Emissions by Year, Mitigated

2.2.5. Onsite Construction Emissions by Year, Mitigated

2.2.6. Offsite Construction Emissions by Year, Mitigated

2.3. Operations Emissions Compared Against Thresholds

2.4. Operations Emissions by Sector, Unmitigated

2.5. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Grading (2026)

3.1.1. Onsite - Unmitigated

3.1.2. Offsite - Unmitigated

3.1.3. Onsite - Mitigated

3.1.4. Offsite - Mitigated

3.2. Building Construction (2026)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.2.3. Onsite - Mitigated

3.2.4. Offsite - Mitigated

3.3. Building Construction (2027)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.3.3. Onsite - Mitigated

3.3.4. Offsite - Mitigated

3.4. Building Construction (2028)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

3.4.3. Onsite - Mitigated

3.4.4. Offsite - Mitigated

3.5. Paving (2027)

3.5.1. Onsite - Unmitigated

3.5.2. Offsite - Unmitigated

3.5.3. Onsite - Mitigated

3.5.4. Offsite - Mitigated

3.6. Architectural Coating (2027)

3.6.1. Onsite - Unmitigated

3.6.2. Offsite - Unmitigated

3.6.3. Onsite - Mitigated

3.6.4. Offsite - Mitigated

3.7. Architectural Coating (2028)

3.7.1. Onsite - Unmitigated

3.7.2. Offsite - Unmitigated

3.7.3. Onsite - Mitigated

3.7.4. Offsite - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Riverside County Sheriff's Association
Construction Start Date	9/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30000
Precipitation (days)	0.80000
Location	33.8015421250946, -116.3959627912627
County	Riverside-Salton Sea
City	Rancho Mirage
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5671
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.39

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Strip Mall	9.87000	1000sqft	5.02200	9,870.00	4,000.00	—	—	—

Fast Food Restaurant w/o Drive Thru	9.87000	1000sqft	0.00000	9,870.00	4,000.00	—	—	—
General Office Building	29.8910	1000sqft	0.00000	29,891.0	4,000.00	—	—	—
Medical Office Building	11.3570	1000sqft	0.00000	11,357.0	4,000.00	—	—	—
Health Club	7.66700	1000sqft	0.00000	7,667.00	4,000.00	—	—	—
Parking Lot	322.000	Space	2.89800	0.00000	173.000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.03628	1.71552	15.1229	18.7857	0.02783	0.64766	7.29905	7.94671	0.59596	3.47585	4.07181	—	3,250.42	3,250.42	0.12919	0.07594	1.84292	3,267.28
Mit.	2.03628	1.71552	15.1229	18.7857	0.02783	0.64766	2.05745	2.70511	0.59596	0.94147	1.53743	—	3,250.42	3,250.42	0.12919	0.07594	1.84292	3,267.28
% Reduced	—	—	—	—	—	—	72%	66%	—	73%	62%	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.62820	6.38438	16.8876	24.8547	0.04013	0.64766	7.29905	7.94671	0.59596	3.47585	4.07181	—	4,720.35	4,720.35	0.16963	0.09531	0.06423	4,753.06
Mit.	6.62820	6.38438	16.8876	24.8547	0.04013	0.64766	2.05745	2.70511	0.59596	0.94147	1.53743	—	4,720.35	4,720.35	0.16963	0.09531	0.06423	4,753.06
% Reduced	—	—	—	—	—	—	72%	66%	—	73%	62%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99000	1.82174	7.59360	11.2170	0.01981	0.26461	0.92836	1.05224	0.24373	0.43085	0.54488	—	2,309.49	2,309.49	0.07988	0.05596	0.59955	2,328.77
Mit.	1.99000	1.82174	7.59360	11.2170	0.01981	0.26461	0.31255	0.57716	0.24373	0.12533	0.31987	—	2,309.49	2,309.49	0.07988	0.05596	0.59955	2,328.77
% Reduced	—	—	—	—	—	—	66%	45%	—	71%	41%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36318	0.33247	1.38583	2.04711	0.00362	0.04829	0.16943	0.19203	0.04448	0.07863	0.09944	—	382.363	382.363	0.01323	0.00926	0.09926	385.554
Mit.	0.36318	0.33247	1.38583	2.04711	0.00362	0.04829	0.05704	0.10533	0.04448	0.02287	0.05838	—	382.363	382.363	0.01323	0.00926	0.09926	385.554
% Reduced	—	—	—	—	—	—	66%	45%	—	71%	41%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.03628	1.71552	15.1229	18.7857	0.02783	0.64766	7.29905	7.94671	0.59596	3.47585	4.07181	—	3,250.42	3,250.42	0.12919	0.04288	0.84858	3,267.28
2027	1.36175	1.14486	9.83704	15.0435	0.02593	0.34164	0.40636	0.74800	0.31471	0.09928	0.41399	—	3,076.98	3,076.98	0.10516	0.07594	1.84292	3,104.08

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.02453	1.70347	15.1347	18.2096	0.02783	0.64766	7.29905	7.94671	0.59596	3.47585	4.07181	—	3,218.06	3,218.06	0.12373	0.07900	0.05238	3,233.96
2027	6.62820	6.38438	16.8876	24.8547	0.04013	0.63976	0.60243	1.24219	0.58898	0.14524	0.73422	—	4,720.35	4,720.35	0.16963	0.09531	0.06423	4,753.06
2028	6.55641	6.33360	10.2104	15.4347	0.02790	0.32066	0.46838	0.78903	0.29541	0.11382	0.40923	—	3,204.12	3,204.12	0.11196	0.07928	0.04819	3,230.59
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.41189	0.34624	3.05830	3.96231	0.00648	0.12388	0.92836	1.05224	0.11403	0.43085	0.54488	—	754.849	754.849	0.02749	0.01450	0.14806	760.005
2027	1.99000	1.82174	7.59360	11.2170	0.01981	0.26461	0.31255	0.57716	0.24373	0.07614	0.31987	—	2,309.49	2,309.49	0.07988	0.05596	0.59955	2,328.77
2028	1.09043	1.06294	1.24635	1.93255	0.00335	0.03858	0.05873	0.09731	0.03554	0.01424	0.04978	—	390.682	390.682	0.01344	0.00951	0.09897	393.951
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07517	0.06319	0.55814	0.72312	0.00118	0.02261	0.16943	0.19203	0.02081	0.07863	0.09944	—	124.974	124.974	0.00455	0.00240	0.02451	125.827
2027	0.36318	0.33247	1.38583	2.04711	0.00362	0.04829	0.05704	0.10533	0.04448	0.01390	0.05838	—	382.363	382.363	0.01323	0.00926	0.09926	385.554
2028	0.19900	0.19399	0.22746	0.35269	0.00061	0.00704	0.01072	0.01776	0.00649	0.00260	0.00909	—	64.6818	64.6818	0.00223	0.00157	0.01639	65.2231

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	7.08324	7.72946	0.59452	3.42484	4.01935	—	2,959.64	2,959.64	0.12006	0.02401	0.00000	2,969.79
2027	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	0.00000	0.33657	0.30965	0.00000	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	0.00000	2,405.30
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	7.08324	7.72946	0.59452	3.42484	4.01935	—	2,959.64	2,959.64	0.12006	0.02401	0.00000	2,969.79
2027	6.49563	6.27095	16.3353	22.8911	0.03735	0.63470	0.00000	0.63470	0.58392	0.00000	0.58392	—	3,908.18	3,908.18	0.15853	0.03171	0.00000	3,921.60
2028	6.44238	6.22646	9.73309	14.0536	0.02513	0.31559	0.00000	0.31559	0.29035	0.00000	0.29035	—	2,530.97	2,530.97	0.10267	0.02053	0.00000	2,539.66

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.38891	0.32626	2.98093	3.64987	0.00609	0.12310	0.85387	0.97697	0.11325	0.41286	0.52611	—	642.946	642.946	0.02608	0.00522	0.00000	645.152
2027	1.89829	1.74245	7.25699	10.0167	0.01783	0.26099	0.00000	0.26099	0.24011	0.00000	0.24011	—	1,823.18	1,823.18	0.07396	0.01479	0.00000	1,829.43
2028	1.07540	1.04868	1.19186	1.71797	0.00305	0.03799	0.00000	0.03799	0.03495	0.00000	0.03495	—	305.279	305.279	0.01238	0.00248	0.00000	306.326
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07098	0.05954	0.54402	0.66610	0.00111	0.02247	0.15583	0.17830	0.02067	0.07535	0.09602	—	106.447	106.447	0.00432	0.00086	0.00000	106.812
2027	0.34644	0.31800	1.32440	1.82804	0.00325	0.04763	0.00000	0.04763	0.04382	0.00000	0.04382	—	301.848	301.848	0.01224	0.00245	0.00000	302.884
2028	0.19626	0.19138	0.21751	0.31353	0.00056	0.00693	0.00000	0.00693	0.00638	0.00000	0.00638	—	50.5424	50.5424	0.00205	0.00041	0.00000	50.7158

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07757	0.06966	0.15274	1.34845	0.00051	0.00144	0.21581	0.21725	0.00144	0.05101	0.05246	—	290.786	290.786	0.00913	0.01886	0.84858	297.485
2027	0.13099	0.11499	0.44611	2.10557	0.00253	0.00506	0.40636	0.41142	0.00506	0.09928	0.10434	—	679.901	679.901	0.00793	0.05649	1.84292	698.777
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11745	0.10092	0.51061	1.35270	0.00278	0.00506	0.40636	0.41142	0.00506	0.09928	0.10434	—	643.595	643.595	0.00897	0.05955	0.05238	661.617
2027	0.17428	0.15006	0.55229	1.96367	0.00278	0.00506	0.60243	0.60749	0.00506	0.14524	0.15030	—	812.166	812.166	0.01110	0.06360	0.06423	831.462
2028	0.11403	0.10714	0.47730	1.38111	0.00278	0.00506	0.46838	0.47344	0.00506	0.11382	0.11888	—	673.148	673.148	0.00929	0.05874	0.04819	690.934
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02298	0.01998	0.07737	0.31245	0.00039	0.00078	0.07449	0.07527	0.00078	0.01799	0.01877	—	111.903	111.903	0.00141	0.00928	0.14806	114.852
2027	0.09171	0.07929	0.33661	1.20038	0.00198	0.00361	0.31255	0.31616	0.00361	0.07614	0.07975	—	486.318	486.318	0.00593	0.04117	0.59955	499.333
2028	0.01504	0.01427	0.05450	0.21458	0.00030	0.00059	0.05873	0.05932	0.00059	0.01424	0.01483	—	85.4028	85.4028	0.00106	0.00703	0.09897	87.6244
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	0.00419	0.00365	0.01412	0.05702	0.00007	0.00014	0.01359	0.01374	0.00014	0.00328	0.00343	—	18.5269	18.5269	0.00023	0.00154	0.02451	19.0151
2027	0.01674	0.01447	0.06143	0.21907	0.00036	0.00066	0.05704	0.05770	0.00066	0.01390	0.01456	—	80.5154	80.5154	0.00098	0.00682	0.09926	82.6703
2028	0.00274	0.00260	0.00995	0.03916	0.00005	0.00011	0.01072	0.01083	0.00011	0.00260	0.00271	—	14.1394	14.1394	0.00018	0.00116	0.01639	14.5072

2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.03628	1.71552	15.1229	18.7857	0.02783	0.64766	2.05745	2.70511	0.59596	0.94147	1.53743	—	3,250.42	3,250.42	0.12919	0.04288	0.84858	3,267.28
2027	1.36175	1.14486	9.83704	15.0435	0.02593	0.34164	0.40636	0.74800	0.31471	0.09928	0.41399	—	3,076.98	3,076.98	0.10516	0.07594	1.84292	3,104.08
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.02453	1.70347	15.1347	18.2096	0.02783	0.64766	2.05745	2.70511	0.59596	0.94147	1.53743	—	3,218.06	3,218.06	0.12373	0.07900	0.05238	3,233.96
2027	6.62820	6.38438	16.8876	24.8547	0.04013	0.63976	0.60243	1.24219	0.58898	0.14524	0.73422	—	4,720.35	4,720.35	0.16963	0.09531	0.06423	4,753.06
2028	6.55641	6.33360	10.2104	15.4347	0.02790	0.32066	0.46838	0.78903	0.29541	0.11382	0.40923	—	3,204.12	3,204.12	0.11196	0.07928	0.04819	3,230.59
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.41189	0.34624	3.05830	3.96231	0.00648	0.12388	0.29649	0.42037	0.11403	0.12533	0.23937	—	754.849	754.849	0.02749	0.01450	0.14806	760.005
2027	1.99000	1.82174	7.59360	11.2170	0.01981	0.26461	0.31255	0.57716	0.24373	0.07614	0.31987	—	2,309.49	2,309.49	0.07988	0.05596	0.59955	2,328.77
2028	1.09043	1.06294	1.24635	1.93255	0.00335	0.03858	0.05873	0.09731	0.03554	0.01424	0.04978	—	390.682	390.682	0.01344	0.00951	0.09897	393.951
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07517	0.06319	0.55814	0.72312	0.00118	0.02261	0.05411	0.07672	0.02081	0.02287	0.04368	—	124.974	124.974	0.00455	0.00240	0.02451	125.827
2027	0.36318	0.33247	1.38583	2.04711	0.00362	0.04829	0.05704	0.10533	0.04448	0.01390	0.05838	—	382.363	382.363	0.01323	0.00926	0.09926	385.554
2028	0.19900	0.19399	0.22746	0.35269	0.00061	0.00704	0.01072	0.01776	0.00649	0.00260	0.00909	—	64.6818	64.6818	0.00223	0.00157	0.01639	65.2231

2.2.5. Onsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	1.84164	2.48786	0.59452	0.89046	1.48498	—	2,959.64	2,959.64	0.12006	0.02401	0.00000	2,969.79
2027	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	0.00000	0.33657	0.30965	0.00000	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	0.00000	2,405.30
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	1.84164	2.48786	0.59452	0.89046	1.48498	—	2,959.64	2,959.64	0.12006	0.02401	0.00000	2,969.79
2027	6.49563	6.27095	16.3353	22.8911	0.03735	0.63470	0.00000	0.63470	0.58392	0.00000	0.58392	—	3,908.18	3,908.18	0.15853	0.03171	0.00000	3,921.60
2028	6.44238	6.22646	9.73309	14.0536	0.02513	0.31559	0.00000	0.31559	0.29035	0.00000	0.29035	—	2,530.97	2,530.97	0.10267	0.02053	0.00000	2,539.66
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.38891	0.32626	2.98093	3.64987	0.00609	0.12310	0.22201	0.34511	0.11325	0.10734	0.22060	—	642.946	642.946	0.02608	0.00522	0.00000	645.152
2027	1.89829	1.74245	7.25699	10.0167	0.01783	0.26099	0.00000	0.26099	0.24011	0.00000	0.24011	—	1,823.18	1,823.18	0.07396	0.01479	0.00000	1,829.43
2028	1.07540	1.04868	1.19186	1.71797	0.00305	0.03799	0.00000	0.03799	0.03495	0.00000	0.03495	—	305.279	305.279	0.01238	0.00248	0.00000	306.326
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07098	0.05954	0.54402	0.66610	0.00111	0.02247	0.04052	0.06298	0.02067	0.01959	0.04026	—	106.447	106.447	0.00432	0.00086	0.00000	106.812
2027	0.34644	0.31800	1.32440	1.82804	0.00325	0.04763	0.00000	0.04763	0.04382	0.00000	0.04382	—	301.848	301.848	0.01224	0.00245	0.00000	302.884
2028	0.19626	0.19138	0.21751	0.31353	0.00056	0.00693	0.00000	0.00693	0.00638	0.00000	0.00638	—	50.5424	50.5424	0.00205	0.00041	0.00000	50.7158

2.2.6. Offsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07757	0.06966	0.15274	1.34845	0.00051	0.00144	0.21581	0.21725	0.00144	0.05101	0.05246	—	290.786	290.786	0.00913	0.01886	0.84858	297.485
2027	0.13099	0.11499	0.44611	2.10557	0.00253	0.00506	0.40636	0.41142	0.00506	0.09928	0.10434	—	679.901	679.901	0.00793	0.05649	1.84292	698.777

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11745	0.10092	0.51061	1.35270	0.00278	0.00506	0.40636	0.41142	0.00506	0.09928	0.10434	—	643.595	643.595	0.00897	0.05955	0.05238	661.617
2027	0.17428	0.15006	0.55229	1.96367	0.00278	0.00506	0.60243	0.60749	0.00506	0.14524	0.15030	—	812.166	812.166	0.01110	0.06360	0.06423	831.462
2028	0.11403	0.10714	0.47730	1.38111	0.00278	0.00506	0.46838	0.47344	0.00506	0.11382	0.11888	—	673.148	673.148	0.00929	0.05874	0.04819	690.934
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02298	0.01998	0.07737	0.31245	0.00039	0.00078	0.07449	0.07527	0.00078	0.01799	0.01877	—	111.903	111.903	0.00141	0.00928	0.14806	114.852
2027	0.09171	0.07929	0.33661	1.20038	0.00198	0.00361	0.31255	0.31616	0.00361	0.07614	0.07975	—	486.318	486.318	0.00593	0.04117	0.59955	499.333
2028	0.01504	0.01427	0.05450	0.21458	0.00030	0.00059	0.05873	0.05932	0.00059	0.01424	0.01483	—	85.4028	85.4028	0.00106	0.00703	0.09897	87.6244
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.00419	0.00365	0.01412	0.05702	0.00007	0.00014	0.01359	0.01374	0.00014	0.00328	0.00343	—	18.5269	18.5269	0.00023	0.00154	0.02451	19.0151
2027	0.01674	0.01447	0.06143	0.21907	0.00036	0.00066	0.05704	0.05770	0.00066	0.01390	0.01456	—	80.5154	80.5154	0.00098	0.00682	0.09926	82.6703
2028	0.00274	0.00260	0.00995	0.03916	0.00005	0.00011	0.01072	0.01083	0.00011	0.00260	0.00271	—	14.1394	14.1394	0.00018	0.00116	0.01639	14.5072

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.3785	13.7573	16.7078	181.925	0.47973	0.35396	41.2805	41.6345	0.33426	10.4683	10.8025	192.418	51,406.1	51,598.5	20.9563	2.02452	139.706	52,865.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.8899	11.3481	18.1861	115.245	0.42557	0.34878	41.2805	41.6293	0.33037	10.4683	10.7986	192.418	45,933.7	46,126.1	20.9761	2.08567	19.1010	47,291.1
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.6795	12.1101	17.4951	137.287	0.44695	0.35132	41.2593	41.6107	0.33228	10.4630	10.7953	192.418	48,093.0	48,285.4	20.9524	2.04800	69.3533	49,488.9

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.49651	2.21010	3.19286	25.0549	0.08157	0.06412	7.52983	7.59394	0.06064	1.90949	1.97013	31.8570	7,962.34	7,994.20	3.46890	0.33907	11.4822	8,193.45

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.1305	11.5770	16.1979	178.532	0.47665	0.31181	41.2805	41.5923	0.29341	10.4683	10.7617	—	48,726.0	48,726.0	1.36771	1.94190	123.816	49,462.7
Area	2.19463	2.15365	0.02512	2.98594	0.00018	0.00530	—	0.00530	0.00401	—	0.00401	—	12.2787	12.2787	0.00052	0.00011	—	12.3230
Energy	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	2,628.00	2,628.00	0.29757	0.03095	—	2,644.67
Water	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Waste	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Total	15.3785	13.7573	16.7078	181.925	0.47973	0.35396	41.2805	41.6345	0.33426	10.4683	10.8025	192.418	51,406.1	51,598.5	20.9563	2.02452	139.706	52,865.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.1734	9.65825	17.7014	114.838	0.42266	0.31194	41.2805	41.5925	0.29353	10.4683	10.7618	—	43,265.8	43,265.8	1.38798	2.00317	3.21047	43,900.7
Area	1.66318	1.66318	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	2,628.00	2,628.00	0.29757	0.03095	—	2,644.67
Water	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Waste	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Total	12.8899	11.3481	18.1861	115.245	0.42557	0.34878	41.2805	41.6293	0.33037	10.4683	10.7986	192.418	45,933.7	46,126.1	20.9761	2.08567	19.1010	47,291.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.7009	10.1784	16.9980	135.407	0.44395	0.31186	41.2593	41.5712	0.29346	10.4630	10.7564	—	45,419.1	45,419.1	1.36402	1.96544	53.4628	46,092.4

Area	1.92527	1.90506	0.01239	1.47252	0.00009	0.00262	—	0.00262	0.00198	—	0.00198	—	6.05526	6.05526	0.00025	0.00005	—	6.07709
Energy	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	2,628.00	2,628.00	0.29757	0.03095	—	2,644.67
Water	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Waste	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Total	13.6795	12.1101	17.4951	137.287	0.44695	0.35132	41.2593	41.6107	0.33228	10.4630	10.7953	192.418	48,093.0	48,285.4	20.9524	2.04800	69.3533	49,488.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.13542	1.85756	3.10213	24.7118	0.08102	0.05692	7.52983	7.58674	0.05356	1.90949	1.96305	—	7,519.65	7,519.65	0.22583	0.32540	8.85138	7,631.12
Area	0.35136	0.34767	0.00226	0.26873	0.00002	0.00048	—	0.00048	0.00036	—	0.00036	—	1.00252	1.00252	0.00004	0.00001	—	1.00613
Energy	0.00973	0.00487	0.08847	0.07431	0.00053	0.00672	—	0.00672	0.00672	—	0.00672	—	435.096	435.096	0.04927	0.00512	—	437.855
Water	—	—	—	—	—	—	—	—	—	—	—	3.46383	6.59263	10.0565	0.35597	0.00853	—	21.4991
Waste	—	—	—	—	—	—	—	—	—	—	—	28.3932	0.00000	28.3932	2.83780	0.00000	—	99.3381
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.63085	2.63085
Total	2.49651	2.21010	3.19286	25.0549	0.08157	0.06412	7.52983	7.59394	0.06064	1.90949	1.97013	31.8570	7,962.34	7,994.20	3.46890	0.33907	11.4822	8,193.45

2.5. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.1305	11.5770	16.1979	178.532	0.47665	0.31181	41.2805	41.5923	0.29341	10.4683	10.7617	—	48,726.0	48,726.0	1.36771	1.94190	123.816	49,462.7
Area	2.19463	2.15365	0.02512	2.98594	0.00018	0.00530	—	0.00530	0.00401	—	0.00401	—	12.2787	12.2787	0.00052	0.00011	—	12.3230
Energy	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	2,628.00	2,628.00	0.29757	0.03095	—	2,644.67
Water	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Waste	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Total	15.3785	13.7573	16.7078	181.925	0.47973	0.35396	41.2805	41.6345	0.33426	10.4683	10.8025	192.418	51,406.1	51,598.5	20.9563	2.02452	139.706	52,865.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.1734	9.65825	17.7014	114.838	0.42266	0.31194	41.2805	41.5925	0.29353	10.4683	10.7618	—	43,265.8	43,265.8	1.38798	2.00317	3.21047	43,900.7
Area	1.66318	1.66318	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	2,628.00	2,628.00	0.29757	0.03095	—	2,644.67
Water	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Waste	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Total	12.8899	11.3481	18.1861	115.245	0.42557	0.34878	41.2805	41.6293	0.33037	10.4683	10.7986	192.418	45,933.7	46,126.1	20.9761	2.08567	19.1010	47,291.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.7009	10.1784	16.9980	135.407	0.44395	0.31186	41.2593	41.5712	0.29346	10.4630	10.7564	—	45,419.1	45,419.1	1.36402	1.96544	53.4628	46,092.4
Area	1.92527	1.90506	0.01239	1.47252	0.00009	0.00262	—	0.00262	0.00198	—	0.00198	—	6.05526	6.05526	0.00025	0.00005	—	6.07709
Energy	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	2,628.00	2,628.00	0.29757	0.03095	—	2,644.67
Water	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Waste	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Total	13.6795	12.1101	17.4951	137.287	0.44695	0.35132	41.2593	41.6107	0.33228	10.4630	10.7953	192.418	48,093.0	48,285.4	20.9524	2.04800	69.3533	49,488.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.13542	1.85756	3.10213	24.7118	0.08102	0.05692	7.52983	7.58674	0.05356	1.90949	1.96305	—	7,519.65	7,519.65	0.22583	0.32540	8.85138	7,631.12
Area	0.35136	0.34767	0.00226	0.26873	0.00002	0.00048	—	0.00048	0.00036	—	0.00036	—	1.00252	1.00252	0.00004	0.00001	—	1.00613
Energy	0.00973	0.00487	0.08847	0.07431	0.00053	0.00672	—	0.00672	0.00672	—	0.00672	—	435.096	435.096	0.04927	0.00512	—	437.855
Water	—	—	—	—	—	—	—	—	—	—	—	3.46383	6.59263	10.0565	0.35597	0.00853	—	21.4991
Waste	—	—	—	—	—	—	—	—	—	—	—	28.3932	0.00000	28.3932	2.83780	0.00000	—	99.3381
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.63085	2.63085
Total	2.49651	2.21010	3.19286	25.0549	0.08157	0.06412	7.52983	7.59394	0.06064	1.90949	1.97013	31.8570	7,962.34	7,994.20	3.46890	0.33907	11.4822	8,193.45

3. Construction Emissions Details

3.1. Grading (2026)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	—	0.64622	0.59452	—	0.59452	—	2,959.64	2,959.64	0.12006	0.02401	—	2,969.79
Dust From Material Movement	—	—	—	—	—	—	7.08324	7.08324	—	3.42484	3.42484	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	—	0.64622	0.59452	—	0.59452	—	2,959.64	2,959.64	0.12006	0.02401	—	2,969.79
Dust From Material Movement	—	—	—	—	—	—	7.08324	7.08324	—	3.42484	3.42484	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.23612	0.19841	1.80462	2.10202	0.00329	0.07790	—	0.07790	0.07167	—	0.07167	—	356.778	356.778	0.01447	0.00289	—	358.003
Dust From Material Movement	—	—	—	—	—	—	0.85387	0.85387	—	0.41286	0.41286	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04309	0.03621	0.32934	0.38362	0.00060	0.01422	—	0.01422	0.01308	—	0.01308	—	59.0687	59.0687	0.00240	0.00048	—	59.2714
Dust From Material Movement	—	—	—	—	—	—	0.15583	0.15583	—	0.07535	0.07535	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07523	0.06812	0.07176	1.32972	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	218.071	218.071	0.00843	0.00744	0.69725	221.196
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00233	0.00154	0.08098	0.01874	0.00051	0.00144	0.01974	0.02119	0.00144	0.00506	0.00650	—	72.7155	72.7155	0.00070	0.01142	0.15133	76.2886
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06366	0.05622	0.07788	0.75315	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	185.646	185.646	0.00298	0.00744	0.01811	187.955

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00216	0.00139	0.08665	0.01919	0.00051	0.00144	0.01974	0.02119	0.00144	0.00506	0.00650	—	72.7811	72.7811	0.00070	0.01142	0.00393	76.2068
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00803	0.00714	0.00857	0.11351	0.00000	0.00000	0.02362	0.02362	0.00000	0.00554	0.00554	—	23.9190	23.9190	0.00032	0.00086	0.03628	24.2187
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00027	0.00018	0.01024	0.00228	0.00006	0.00017	0.00238	0.00255	0.00017	0.00061	0.00078	—	8.76903	8.76903	0.00008	0.00138	0.00789	9.18940
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00147	0.00130	0.00156	0.02072	0.00000	0.00000	0.00431	0.00431	0.00000	0.00101	0.00101	—	3.96007	3.96007	0.00005	0.00014	0.00601	4.00968
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00005	0.00003	0.00187	0.00042	0.00001	0.00003	0.00043	0.00047	0.00003	0.00011	0.00014	—	1.45181	1.45181	0.00001	0.00023	0.00131	1.52141

3.1.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	—	0.64622	0.59452	—	0.59452	—	2,959.64	2,959.64	0.12006	0.02401	—	2,969.79
Dust From Material Movement	—	—	—	—	—	—	1.84164	1.84164	—	0.89046	0.89046	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	—	0.64622	0.59452	—	0.59452	—	2,959.64	2,959.64	0.12006	0.02401	—	2,969.79
Dust From Material Movement	—	—	—	—	—	—	1.84164	1.84164	—	0.89046	0.89046	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23612	0.19841	1.80462	2.10202	0.00329	0.07790	—	0.07790	0.07167	—	0.07167	—	356.778	356.778	0.01447	0.00289	—	358.003
Dust From Material Movement	—	—	—	—	—	—	0.22201	0.22201	—	0.10734	0.10734	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04309	0.03621	0.32934	0.38362	0.00060	0.01422	—	0.01422	0.01308	—	0.01308	—	59.0687	59.0687	0.00240	0.00048	—	59.2714
Dust From Material Movement	—	—	—	—	—	—	0.04052	0.04052	—	0.01959	0.01959	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07523	0.06812	0.07176	1.32972	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	218.071	218.071	0.00843	0.00744	0.69725	221.196
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00233	0.00154	0.08098	0.01874	0.00051	0.00144	0.01974	0.02119	0.00144	0.00506	0.00650	—	72.7155	72.7155	0.00070	0.01142	0.15133	76.2886
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06366	0.05622	0.07788	0.75315	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	185.646	185.646	0.00298	0.00744	0.01811	187.955
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00216	0.00139	0.08665	0.01919	0.00051	0.00144	0.01974	0.02119	0.00144	0.00506	0.00650	—	72.7811	72.7811	0.00070	0.01142	0.00393	76.2068
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00803	0.00714	0.00857	0.11351	0.00000	0.00000	0.02362	0.02362	0.00000	0.00554	0.00554	—	23.9190	23.9190	0.00032	0.00086	0.03628	24.2187
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00027	0.00018	0.01024	0.00228	0.00006	0.00017	0.00238	0.00255	0.00017	0.00061	0.00078	—	8.76903	8.76903	0.00008	0.00138	0.00789	9.18940
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00147	0.00130	0.00156	0.02072	0.00000	0.00000	0.00431	0.00431	0.00000	0.00101	0.00101	—	3.96007	3.96007	0.00005	0.00014	0.00601	4.00968
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00005	0.00003	0.00187	0.00042	0.00001	0.00003	0.00043	0.00047	0.00003	0.00011	0.00014	—	1.45181	1.45181	0.00001	0.00023	0.00131	1.52141

3.2. Building Construction (2026)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15279	0.12785	1.17631	1.54785	0.00279	0.04520	—	0.04520	0.04159	—	0.04159	—	286.168	286.168	0.01161	0.00232	—	287.150
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02788	0.02333	0.21468	0.28248	0.00051	0.00825	—	0.00825	0.00759	—	0.00759	—	47.3783	47.3783	0.00192	0.00038	—	47.5409
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10068	0.08891	0.12317	1.19115	0.00000	0.00000	0.31009	0.31009	0.00000	0.07268	0.07268	—	293.609	293.609	0.00471	0.01177	0.02864	297.262

Vendor	0.01677	0.01201	0.38745	0.16155	0.00278	0.00506	0.09628	0.10134	0.00506	0.02660	0.03166	—	349.986	349.986	0.00427	0.04778	0.02374	364.355
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01258	0.01118	0.01342	0.17778	0.00000	0.00000	0.03700	0.03700	0.00000	0.00867	0.00867	—	37.4608	37.4608	0.00050	0.00134	0.05682	37.9301
Vendor	0.00209	0.00149	0.04514	0.01887	0.00033	0.00060	0.01149	0.01209	0.00060	0.00317	0.00378	—	41.7546	41.7546	0.00051	0.00570	0.04708	43.5141
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00230	0.00204	0.00245	0.03244	0.00000	0.00000	0.00675	0.00675	0.00000	0.00158	0.00158	—	6.20206	6.20206	0.00008	0.00022	0.00941	6.27976
Vendor	0.00038	0.00027	0.00824	0.00344	0.00006	0.00011	0.00210	0.00221	0.00011	0.00058	0.00069	—	6.91296	6.91296	0.00008	0.00094	0.00780	7.20426
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15279	0.12785	1.17631	1.54785	0.00279	0.04520	—	0.04520	0.04159	—	0.04159	—	286.168	286.168	0.01161	0.00232	—	287.150

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02788	0.02333	0.21468	0.28248	0.00051	0.00825	—	0.00825	0.00759	—	0.00759	—	47.3783	47.3783	0.00192	0.00038	—	47.5409
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10068	0.08891	0.12317	1.19115	0.00000	0.00000	0.31009	0.31009	0.00000	0.07268	0.07268	—	293.609	293.609	0.00471	0.01177	0.02864	297.262
Vendor	0.01677	0.01201	0.38745	0.16155	0.00278	0.00506	0.09628	0.10134	0.00506	0.02660	0.03166	—	349.986	349.986	0.00427	0.04778	0.02374	364.355
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01258	0.01118	0.01342	0.17778	0.00000	0.00000	0.03700	0.03700	0.00000	0.00867	0.00867	—	37.4608	37.4608	0.00050	0.00134	0.05682	37.9301
Vendor	0.00209	0.00149	0.04514	0.01887	0.00033	0.00060	0.01149	0.01209	0.00060	0.00317	0.00378	—	41.7546	41.7546	0.00051	0.00570	0.04708	43.5141
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00230	0.00204	0.00245	0.03244	0.00000	0.00000	0.00675	0.00675	0.00000	0.00158	0.00158	—	6.20206	6.20206	0.00008	0.00022	0.00941	6.27976
Vendor	0.00038	0.00027	0.00824	0.00344	0.00006	0.00011	0.00210	0.00221	0.00011	0.00058	0.00069	—	6.91296	6.91296	0.00008	0.00094	0.00780	7.20426
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Building Construction (2027)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87911	0.73563	6.70781	9.24139	0.01671	0.24041	—	0.24041	0.22118	—	0.22118	—	1,712.20	1,712.20	0.06945	0.01389	—	1,718.07
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16044	0.13425	1.22418	1.68655	0.00305	0.04387	—	0.04387	0.04036	—	0.04036	—	283.474	283.474	0.01150	0.00230	—	284.447

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11323	0.10199	0.10277	1.95553	0.00000	0.00000	0.31009	0.31009	0.00000	0.07268	0.07268	—	338.045	338.045	0.00366	0.01124	0.99621	342.484
Vendor	0.01776	0.01300	0.34334	0.15004	0.00253	0.00506	0.09628	0.10134	0.00506	0.02660	0.03166	—	341.855	341.855	0.00427	0.04525	0.84672	356.293
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09650	0.08473	0.11245	1.10930	0.00000	0.00000	0.31009	0.31009	0.00000	0.07268	0.07268	—	287.911	287.911	0.00418	0.01124	0.02587	291.392
Vendor	0.01677	0.01176	0.36874	0.15296	0.00278	0.00506	0.09628	0.10134	0.00506	0.02660	0.03166	—	342.213	342.213	0.00427	0.04525	0.02200	355.826
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07191	0.06388	0.07266	0.99297	0.00000	0.00000	0.22138	0.22138	0.00000	0.05189	0.05189	—	219.759	219.759	0.00262	0.00803	0.30736	222.525
Vendor	0.01251	0.00893	0.25658	0.10678	0.00198	0.00361	0.06874	0.07235	0.00361	0.01899	0.02261	—	244.288	244.288	0.00305	0.03232	0.26104	254.257
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01312	0.01166	0.01326	0.18122	0.00000	0.00000	0.04040	0.04040	0.00000	0.00947	0.00947	—	36.3836	36.3836	0.00043	0.00133	0.05089	36.8416
Vendor	0.00228	0.00163	0.04683	0.01949	0.00036	0.00066	0.01254	0.01320	0.00066	0.00347	0.00413	—	40.4447	40.4447	0.00050	0.00535	0.04322	42.0952
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87911	0.73563	6.70781	9.24139	0.01671	0.24041	—	0.24041	0.22118	—	0.22118	—	1,712.20	1,712.20	0.06945	0.01389	—	1,718.07
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16044	0.13425	1.22418	1.68655	0.00305	0.04387	—	0.04387	0.04036	—	0.04036	—	283.474	283.474	0.01150	0.00230	—	284.447
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11323	0.10199	0.10277	1.95553	0.00000	0.00000	0.31009	0.31009	0.00000	0.07268	0.07268	—	338.045	338.045	0.00366	0.01124	0.99621	342.484
Vendor	0.01776	0.01300	0.34334	0.15004	0.00253	0.00506	0.09628	0.10134	0.00506	0.02660	0.03166	—	341.855	341.855	0.00427	0.04525	0.84672	356.293
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09650	0.08473	0.11245	1.10930	0.00000	0.00000	0.31009	0.31009	0.00000	0.07268	0.07268	—	287.911	287.911	0.00418	0.01124	0.02587	291.392
Vendor	0.01677	0.01176	0.36874	0.15296	0.00278	0.00506	0.09628	0.10134	0.00506	0.02660	0.03166	—	342.213	342.213	0.00427	0.04525	0.02200	355.826
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07191	0.06388	0.07266	0.99297	0.00000	0.00000	0.22138	0.22138	0.00000	0.05189	0.05189	—	219.759	219.759	0.00262	0.00803	0.30736	222.525
Vendor	0.01251	0.00893	0.25658	0.10678	0.00198	0.00361	0.06874	0.07235	0.00361	0.01899	0.02261	—	244.288	244.288	0.00305	0.03232	0.26104	254.257
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01312	0.01166	0.01326	0.18122	0.00000	0.00000	0.04040	0.04040	0.00000	0.00947	0.00947	—	36.3836	36.3836	0.00043	0.00133	0.05089	36.8416
Vendor	0.00228	0.00163	0.04683	0.01949	0.00036	0.00066	0.01254	0.01320	0.00066	0.00347	0.00413	—	40.4447	40.4447	0.00050	0.00535	0.04322	42.0952
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Building Construction (2028)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13912	0.11641	1.04794	1.51882	0.00275	0.03525	—	0.03525	0.03243	—	0.03243	—	281.502	281.502	0.01142	0.00228	—	282.468
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02539	0.02124	0.19125	0.27718	0.00050	0.00643	—	0.00643	0.00592	—	0.00592	—	46.6058	46.6058	0.00189	0.00038	—	46.7658
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08316	0.08159	0.10225	1.02850	0.00000	0.00000	0.31009	0.31009	0.00000	0.07268	0.07268	—	282.578	282.578	0.00418	0.01124	0.02324	286.057
Vendor	0.01424	0.00923	0.35460	0.14691	0.00278	0.00506	0.09628	0.10134	0.00506	0.02660	0.03166	—	334.055	334.055	0.00427	0.04525	0.02030	347.666
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01026	0.01007	0.01075	0.15171	0.00000	0.00000	0.03639	0.03639	0.00000	0.00853	0.00853	—	35.4502	35.4502	0.00043	0.00132	0.04549	35.8999
Vendor	0.00167	0.00114	0.04049	0.01684	0.00030	0.00059	0.01130	0.01189	0.00059	0.00312	0.00372	—	39.1994	39.1994	0.00050	0.00531	0.03968	40.8349
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00187	0.00184	0.00196	0.02769	0.00000	0.00000	0.00664	0.00664	0.00000	0.00156	0.00156	—	5.86918	5.86918	0.00007	0.00022	0.00753	5.94363
Vendor	0.00031	0.00021	0.00739	0.00307	0.00005	0.00011	0.00206	0.00217	0.00011	0.00057	0.00068	—	6.48991	6.48991	0.00008	0.00088	0.00657	6.76069
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.13912	0.11641	1.04794	1.51882	0.00275	0.03525	—	0.03525	0.03243	—	0.03243	—	281.502	281.502	0.01142	0.00228	—	282.468
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02539	0.02124	0.19125	0.27718	0.00050	0.00643	—	0.00643	0.00592	—	0.00592	—	46.6058	46.6058	0.00189	0.00038	—	46.7658
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08316	0.08159	0.10225	1.02850	0.00000	0.00000	0.31009	0.31009	0.00000	0.07268	0.07268	—	282.578	282.578	0.00418	0.01124	0.02324	286.057
Vendor	0.01424	0.00923	0.35460	0.14691	0.00278	0.00506	0.09628	0.10134	0.00506	0.02660	0.03166	—	334.055	334.055	0.00427	0.04525	0.02030	347.666
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01026	0.01007	0.01075	0.15171	0.00000	0.00000	0.03639	0.03639	0.00000	0.00853	0.00853	—	35.4502	35.4502	0.00043	0.00132	0.04549	35.8999
Vendor	0.00167	0.00114	0.04049	0.01684	0.00030	0.00059	0.01130	0.01189	0.00059	0.00312	0.00372	—	39.1994	39.1994	0.00050	0.00531	0.03968	40.8349
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00187	0.00184	0.00196	0.02769	0.00000	0.00000	0.00664	0.00664	0.00000	0.00156	0.00156	—	5.86918	5.86918	0.00007	0.00022	0.00753	5.94363
Vendor	0.00031	0.00021	0.00739	0.00307	0.00005	0.00011	0.00206	0.00217	0.00011	0.00057	0.00068	—	6.48991	6.48991	0.00008	0.00088	0.00657	6.76069

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Paving (2027)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87761	0.73744	6.94439	9.95313	0.01395	0.29813	—	0.29813	0.27428	—	0.27428	—	1,511.11	1,511.11	0.06130	0.01226	—	1,516.29
Paving	0.36156	0.36156	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05049	0.04243	0.39954	0.57265	0.00080	0.01715	—	0.01715	0.01578	—	0.01578	—	86.9404	86.9404	0.00353	0.00071	—	87.2387
Paving	0.02080	0.02080	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00921	0.00774	0.07292	0.10451	0.00015	0.00313	—	0.00313	0.00288	—	0.00288	—	14.3940	14.3940	0.00058	0.00012	—	14.4434

Paving	0.00380	0.00380	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06101	0.05357	0.07110	0.70140	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	182.043	182.043	0.00265	0.00711	0.01636	184.244
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00366	0.00325	0.00370	0.05057	0.00000	0.00000	0.01127	0.01127	0.00000	0.00264	0.00264	—	11.1922	11.1922	0.00013	0.00041	0.01565	11.3331
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00067	0.00059	0.00068	0.00923	0.00000	0.00000	0.00206	0.00206	0.00000	0.00048	0.00048	—	1.85300	1.85300	0.00002	0.00007	0.00259	1.87633
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87761	0.73744	6.94439	9.95313	0.01395	0.29813	—	0.29813	0.27428	—	0.27428	—	1,511.11	1,511.11	0.06130	0.01226	—	1,516.29
Paving	0.36156	0.36156	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05049	0.04243	0.39954	0.57265	0.00080	0.01715	—	0.01715	0.01578	—	0.01578	—	86.9404	86.9404	0.00353	0.00071	—	87.2387
Paving	0.02080	0.02080	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00921	0.00774	0.07292	0.10451	0.00015	0.00313	—	0.00313	0.00288	—	0.00288	—	14.3940	14.3940	0.00058	0.00012	—	14.4434
Paving	0.00380	0.00380	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06101	0.05357	0.07110	0.70140	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	182.043	182.043	0.00265	0.00711	0.01636	184.244
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00366	0.00325	0.00370	0.05057	0.00000	0.00000	0.01127	0.01127	0.00000	0.00264	0.00264	—	11.1922	11.1922	0.00013	0.00041	0.01565	11.3331
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00067	0.00059	0.00068	0.00923	0.00000	0.00000	0.00206	0.00206	0.00000	0.00048	0.00048	—	1.85300	1.85300	0.00002	0.00007	0.00259	1.87633
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Architectural Coating (2027)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.13715	0.11335	0.83116	1.12539	0.00173	0.01905	—	0.01905	0.01752	—	0.01752	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	5.12772	5.12772	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02469	0.02041	0.14964	0.20261	0.00031	0.00343	—	0.00343	0.00316	—	0.00316	—	24.0375	24.0375	0.00098	0.00020	—	24.1200
Architectural Coatings	0.92319	0.92319	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00451	0.00372	0.02731	0.03698	0.00006	0.00063	—	0.00063	0.00058	—	0.00058	—	3.97969	3.97969	0.00016	0.00003	—	3.99334
Architectural Coatings	0.16848	0.16848	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01930	0.01695	0.02249	0.22186	0.00000	0.00000	0.06202	0.06202	0.00000	0.01454	0.01454	—	57.5821	57.5821	0.00084	0.00225	0.00517	58.2784
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00363	0.00322	0.00366	0.05006	0.00000	0.00000	0.01116	0.01116	0.00000	0.00262	0.00262	—	11.0783	11.0783	0.00013	0.00040	0.01549	11.2177
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00066	0.00059	0.00067	0.00914	0.00000	0.00000	0.00204	0.00204	0.00000	0.00048	0.00048	—	1.83413	1.83413	0.00002	0.00007	0.00257	1.85722
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13715	0.11335	0.83116	1.12539	0.00173	0.01905	—	0.01905	0.01752	—	0.01752	—	133.513	133.513	0.00542	0.00108	—	133.971

Architectural	5.12772	5.12772	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02469	0.02041	0.14964	0.20261	0.00031	0.00343	—	0.00343	0.00316	—	0.00316	—	24.0375	24.0375	0.00098	0.00020	—	24.1200
Architectural Coatings	0.92319	0.92319	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00451	0.00372	0.02731	0.03698	0.00006	0.00063	—	0.00063	0.00058	—	0.00058	—	3.97969	3.97969	0.00016	0.00003	—	3.99334
Architectural Coatings	0.16848	0.16848	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01930	0.01695	0.02249	0.22186	0.00000	0.00000	0.06202	0.06202	0.00000	0.01454	0.01454	—	57.5821	57.5821	0.00084	0.00225	0.00517	58.2784
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00363	0.00322	0.00366	0.05006	0.00000	0.00000	0.01116	0.01116	0.00000	0.00262	0.00262	—	11.0783	11.0783	0.00013	0.00040	0.01549	11.2177
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00066	0.00059	0.00067	0.00914	0.00000	0.00000	0.00204	0.00204	0.00000	0.00048	0.00048	—	1.83413	1.83413	0.00002	0.00007	0.00257	1.85722
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Architectural Coating (2028)

3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12985	0.10731	0.80814	1.11833	0.00173	0.01536	—	0.01536	0.01413	—	0.01413	—	133.517	133.517	0.00542	0.00108	—	133.975

Architectural	5.12772	5.12772	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02312	0.01911	0.14392	0.19916	0.00031	0.00273	—	0.00273	0.00252	—	0.00252	—	23.7770	23.7770	0.00096	0.00019	—	23.8586
Architectural Coatings	0.91316	0.91316	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00422	0.00349	0.02626	0.03635	0.00006	0.00050	—	0.00050	0.00046	—	0.00046	—	3.93655	3.93655	0.00016	0.00003	—	3.95006
Architectural Coatings	0.16665	0.16665	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01663	0.01632	0.02045	0.20570	0.00000	0.00000	0.06202	0.06202	0.00000	0.01454	0.01454	—	56.5156	56.5156	0.00084	0.00225	0.00465	57.2113
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00311	0.00305	0.00326	0.04602	0.00000	0.00000	0.01104	0.01104	0.00000	0.00259	0.00259	—	10.7532	10.7532	0.00013	0.00040	0.01380	10.8896
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00057	0.00056	0.00059	0.00840	0.00000	0.00000	0.00201	0.00201	0.00000	0.00047	0.00047	—	1.78032	1.78032	0.00002	0.00007	0.00228	1.80290
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12985	0.10731	0.80814	1.11833	0.00173	0.01536	—	0.01536	0.01413	—	0.01413	—	133.517	133.517	0.00542	0.00108	—	133.975
Architectural Coatings	5.12772	5.12772	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02312	0.01911	0.14392	0.19916	0.00031	0.00273	—	0.00273	0.00252	—	0.00252	—	23.7770	23.7770	0.00096	0.00019	—	23.8586
Architectural Coatings	0.91316	0.91316	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00422	0.00349	0.02626	0.03635	0.00006	0.00050	—	0.00050	0.00046	—	0.00046	—	3.93655	3.93655	0.00016	0.00003	—	3.95006
Architectural Coatings	0.16665	0.16665	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01663	0.01632	0.02045	0.20570	0.00000	0.00000	0.06202	0.06202	0.00000	0.01454	0.01454	—	56.5156	56.5156	0.00084	0.00225	0.00465	57.2113

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00311	0.00305	0.00326	0.04602	0.00000	0.00000	0.01104	0.01104	0.00000	0.00259	0.00259	—	10.7532	10.7532	0.00013	0.00040	0.01380	10.8896
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00057	0.00056	0.00059	0.00840	0.00000	0.00000	0.00201	0.00201	0.00000	0.00047	0.00047	—	1.78032	1.78032	0.00002	0.00007	0.00228	1.80290
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	1.42718	1.25833	1.76058	19.4050	0.05181	0.03389	4.48687	4.52076	0.03189	1.13782	1.16971	—	5,296.13	5,296.13	0.14866	0.21107	13.4578	5,376.20
Fast Food Restaurant w/o Drive Thru	8.89047	7.83860	10.9673	120.882	0.32273	0.21112	27.9504	28.1615	0.19866	7.08791	7.28658	—	32,991.6	32,991.6	0.92606	1.31483	83.8340	33,490.4

General Office Building	1.55334	1.36955	1.91620	21.1203	0.05639	0.03689	4.88347	4.92036	0.03471	1.23839	1.27310	—	5,764.27	5,764.27	0.16180	0.22973	14.6474	5,851.42
Medical Office Building	0.41982	0.37015	0.51789	5.70819	0.01524	0.00997	1.31986	1.32983	0.00938	0.33470	0.34408	—	1,557.91	1,557.91	0.04373	0.06209	3.95876	1,581.46
Health Club	0.83970	0.74035	1.03586	11.4172	0.03048	0.01994	2.63990	2.65984	0.01876	0.66945	0.68821	—	3,116.04	3,116.04	0.08747	0.12419	7.91807	3,163.15
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	13.1305	11.5770	16.1979	178.532	0.47665	0.31181	41.2805	41.5923	0.29341	10.4683	10.7617	—	48,726.0	48,726.0	1.36771	1.94190	123.816	49,462.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	1.21446	1.04978	1.92400	12.4820	0.04594	0.03390	4.48687	4.52077	0.03190	1.13782	1.16972	—	4,702.65	4,702.65	0.15086	0.21773	0.34895	4,771.66
Fast Food Restaurant w/o Drive Thru	7.56532	6.53946	11.9854	77.7552	0.28618	0.21121	27.9504	28.1616	0.19874	7.08791	7.28666	—	29,294.7	29,294.7	0.93978	1.35631	2.17376	29,724.5
General Office Building	1.32181	1.14257	2.09407	13.5853	0.05000	0.03690	4.88347	4.92038	0.03472	1.23839	1.27312	—	5,118.34	5,118.34	0.16420	0.23697	0.37980	5,193.44
Medical Office Building	0.35725	0.30880	0.56596	3.67171	0.01351	0.00997	1.31986	1.32983	0.00938	0.33470	0.34409	—	1,383.33	1,383.33	0.04438	0.06405	0.10265	1,403.63
Health Club	0.71454	0.61765	1.13201	7.34393	0.02703	0.01995	2.63990	2.65985	0.01877	0.66945	0.68822	—	2,766.86	2,766.86	0.08876	0.12810	0.20531	2,807.46
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	11.1734	9.65825	17.7014	114.838	0.42266	0.31194	41.2805	41.5925	0.29353	10.4683	10.7618	—	43,265.8	43,265.8	1.38798	2.00317	3.21047	43,900.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.23210	0.20190	0.33718	2.68598	0.00881	0.00619	0.81843	0.82462	0.00582	0.20755	0.21337	—	817.326	817.326	0.02455	0.03537	0.96208	829.442

Fast Food Restaurant w/o Drive Thru	1.44586	1.25773	2.10041	16.7320	0.05486	0.03854	5.09833	5.13687	0.03626	1.29289	1.32915	—	5,091.44	5,091.44	0.15291	0.22032	5.99314	5,166.91
General Office Building	0.25262	0.21975	0.36698	2.92340	0.00958	0.00673	0.89078	0.89751	0.00634	0.22589	0.23223	—	889.572	889.572	0.02672	0.03849	1.04712	902.759
Medical Office Building	0.06828	0.05939	0.09918	0.79011	0.00259	0.00182	0.24075	0.24257	0.00171	0.06105	0.06276	—	240.425	240.425	0.00722	0.01040	0.28300	243.989
Health Club	0.13656	0.11879	0.19838	1.58033	0.00518	0.00364	0.48153	0.48517	0.00342	0.12211	0.12554	—	480.884	480.884	0.01444	0.02081	0.56605	488.012
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	2.13542	1.85756	3.10213	24.7118	0.08102	0.05692	7.52983	7.58674	0.05356	1.90949	1.96305	—	7,519.65	7,519.65	0.22583	0.32540	8.85138	7,631.12

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	1.42718	1.25833	1.76058	19.4050	0.05181	0.03389	4.48687	4.52076	0.03189	1.13782	1.16971	—	5,296.13	5,296.13	0.14866	0.21107	13.4578	5,376.20
Fast Food Restaurant w/o Drive Thru	8.89047	7.83860	10.9673	120.882	0.32273	0.21112	27.9504	28.1615	0.19866	7.08791	7.28658	—	32,991.6	32,991.6	0.92606	1.31483	83.8340	33,490.4
General Office Building	1.55334	1.36955	1.91620	21.1203	0.05639	0.03689	4.88347	4.92036	0.03471	1.23839	1.27310	—	5,764.27	5,764.27	0.16180	0.22973	14.6474	5,851.42

Medical Office Building	0.41982	0.37015	0.51789	5.70819	0.01524	0.00997	1.31986	1.32983	0.00938	0.33470	0.34408	—	1,557.91	1,557.91	0.04373	0.06209	3.95876	1,581.46
Health Club	0.83970	0.74035	1.03586	11.4172	0.03048	0.01994	2.63990	2.65984	0.01876	0.66945	0.68821	—	3,116.04	3,116.04	0.08747	0.12419	7.91807	3,163.15
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	13.1305	11.5770	16.1979	178.532	0.47665	0.31181	41.2805	41.5923	0.29341	10.4683	10.7617	—	48,726.0	48,726.0	1.36771	1.94190	123.816	49,462.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	1.21446	1.04978	1.92400	12.4820	0.04594	0.03390	4.48687	4.52077	0.03190	1.13782	1.16972	—	4,702.65	4,702.65	0.15086	0.21773	0.34895	4,771.66
Fast Food Restaurant w/o Drive Thru	7.56532	6.53946	11.9854	77.7552	0.28618	0.21121	27.9504	28.1616	0.19874	7.08791	7.28666	—	29,294.7	29,294.7	0.93978	1.35631	2.17376	29,724.5
General Office Building	1.32181	1.14257	2.09407	13.5853	0.05000	0.03690	4.88347	4.92038	0.03472	1.23839	1.27312	—	5,118.34	5,118.34	0.16420	0.23697	0.37980	5,193.44
Medical Office Building	0.35725	0.30880	0.56596	3.67171	0.01351	0.00997	1.31986	1.32983	0.00938	0.33470	0.34409	—	1,383.33	1,383.33	0.04438	0.06405	0.10265	1,403.63
Health Club	0.71454	0.61765	1.13201	7.34393	0.02703	0.01995	2.63990	2.65985	0.01877	0.66945	0.68822	—	2,766.86	2,766.86	0.08876	0.12810	0.20531	2,807.46
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	11.1734	9.65825	17.7014	114.838	0.42266	0.31194	41.2805	41.5925	0.29353	10.4683	10.7618	—	43,265.8	43,265.8	1.38798	2.00317	3.21047	43,900.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.23210	0.20190	0.33718	2.68598	0.00881	0.00619	0.81843	0.82462	0.00582	0.20755	0.21337	—	817.326	817.326	0.02455	0.03537	0.96208	829.442
Fast Food Restaurant w/o Drive Thru	1.44586	1.25773	2.10041	16.7320	0.05486	0.03854	5.09833	5.13687	0.03626	1.29289	1.32915	—	5,091.44	5,091.44	0.15291	0.22032	5.99314	5,166.91

General Office Building	0.25262	0.21975	0.36698	2.92340	0.00958	0.00673	0.89078	0.89751	0.00634	0.22589	0.23223	—	889.572	889.572	0.02672	0.03849	1.04712	902.759
Medical Office Building	0.06828	0.05939	0.09918	0.79011	0.00259	0.00182	0.24075	0.24257	0.00171	0.06105	0.06276	—	240.425	240.425	0.00722	0.01040	0.28300	243.989
Health Club	0.13656	0.11879	0.19838	1.58033	0.00518	0.00364	0.48153	0.48517	0.00342	0.12211	0.12554	—	480.884	480.884	0.01444	0.02081	0.56605	488.012
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	2.13542	1.85756	3.10213	24.7118	0.08102	0.05692	7.52983	7.58674	0.05356	1.90949	1.96305	—	7,519.65	7,519.65	0.22583	0.32540	8.85138	7,631.12

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	109.746	109.746	0.01319	0.00160	—	110.552
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	501.679	501.679	0.06031	0.00731	—	505.365
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	855.014	855.014	0.10278	0.01246	—	861.296
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	324.860	324.860	0.03905	0.00473	—	327.247

Health Club	—	—	—	—	—	—	—	—	—	—	—	—	175.151	175.151	0.02105	0.00255	—	176.438
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	83.1703	83.1703	0.01000	0.00121	—	83.7814
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,049.62	2,049.62	0.24639	0.02986	—	2,064.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	109.746	109.746	0.01319	0.00160	—	110.552
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	501.679	501.679	0.06031	0.00731	—	505.365
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	855.014	855.014	0.10278	0.01246	—	861.296
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	324.860	324.860	0.03905	0.00473	—	327.247
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	175.151	175.151	0.02105	0.00255	—	176.438
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	83.1703	83.1703	0.01000	0.00121	—	83.7814
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,049.62	2,049.62	0.24639	0.02986	—	2,064.68
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	18.1697	18.1697	0.00218	0.00026	—	18.3032
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	83.0587	83.0587	0.00998	0.00121	—	83.6689
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	141.557	141.557	0.01702	0.00206	—	142.597

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	53.7843	53.7843	0.00647	0.00078	—	54.1795
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	28.9982	28.9982	0.00349	0.00042	—	29.2112
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	13.7698	13.7698	0.00166	0.00020	—	13.8710
Total	—	—	—	—	—	—	—	—	—	—	—	—	339.338	339.338	0.04079	0.00494	—	341.831

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	109.746	109.746	0.01319	0.00160	—	110.552
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	501.679	501.679	0.06031	0.00731	—	505.365
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	855.014	855.014	0.10278	0.01246	—	861.296
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	324.860	324.860	0.03905	0.00473	—	327.247
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	175.151	175.151	0.02105	0.00255	—	176.438
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	83.1703	83.1703	0.01000	0.00121	—	83.7814
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,049.62	2,049.62	0.24639	0.02986	—	2,064.68

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	109.746	109.746	0.01319	0.00160	—	110.552
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	501.679	501.679	0.06031	0.00731	—	505.365
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	855.014	855.014	0.10278	0.01246	—	861.296
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	324.860	324.860	0.03905	0.00473	—	327.247
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	175.151	175.151	0.02105	0.00255	—	176.438
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	83.1703	83.1703	0.01000	0.00121	—	83.7814
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,049.62	2,049.62	0.24639	0.02986	—	2,064.68
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	18.1697	18.1697	0.00218	0.00026	—	18.3032
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	83.0587	83.0587	0.00998	0.00121	—	83.6689
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	141.557	141.557	0.01702	0.00206	—	142.597
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	53.7843	53.7843	0.00647	0.00078	—	54.1795
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	28.9982	28.9982	0.00349	0.00042	—	29.2112

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	13.7698	13.7698	0.00166	0.00020	—	13.8710
Total	—	—	—	—	—	—	—	—	—	—	—	—	339.338	339.338	0.04079	0.00494	—	341.831

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.00196	0.00098	0.01780	0.01495	0.00011	0.00135	—	0.00135	0.00135	—	0.00135	—	21.2338	21.2338	0.00188	0.00004	—	21.2927
Fast Food Restaurant w/o Drive Thru	0.03095	0.01547	0.28132	0.23631	0.00169	0.02138	—	0.02138	0.02138	—	0.02138	—	335.666	335.666	0.02971	0.00063	—	336.597
General Office Building	0.00946	0.00473	0.08604	0.07227	0.00052	0.00654	—	0.00654	0.00654	—	0.00654	—	102.659	102.659	0.00909	0.00019	—	102.944
Medical Office Building	0.00360	0.00180	0.03269	0.02746	0.00020	0.00248	—	0.00248	0.00248	—	0.00248	—	39.0051	39.0051	0.00345	0.00007	—	39.1133
Health Club	0.00736	0.00368	0.06690	0.05619	0.00040	0.00508	—	0.00508	0.00508	—	0.00508	—	79.8199	79.8199	0.00706	0.00015	—	80.0413
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	578.384	578.384	0.05119	0.00109	—	579.989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.00196	0.00098	0.01780	0.01495	0.00011	0.00135	—	0.00135	0.00135	—	0.00135	—	21.2338	21.2338	0.00188	0.00004	—	21.2927

Fast Food Restaurant w/o Drive Thru	0.03095	0.01547	0.28132	0.23631	0.00169	0.02138	—	0.02138	0.02138	—	0.02138	—	335.666	335.666	0.02971	0.00063	—	336.597
General Office Building	0.00946	0.00473	0.08604	0.07227	0.00052	0.00654	—	0.00654	0.00654	—	0.00654	—	102.659	102.659	0.00909	0.00019	—	102.944
Medical Office Building	0.00360	0.00180	0.03269	0.02746	0.00020	0.00248	—	0.00248	0.00248	—	0.00248	—	39.0051	39.0051	0.00345	0.00007	—	39.1133
Health Club	0.00736	0.00368	0.06690	0.05619	0.00040	0.00508	—	0.00508	0.00508	—	0.00508	—	79.8199	79.8199	0.00706	0.00015	—	80.0413
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	578.384	578.384	0.05119	0.00109	—	579.989
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.00036	0.00018	0.00325	0.00273	0.00002	0.00025	—	0.00025	0.00025	—	0.00025	—	3.51549	3.51549	0.00031	0.00001	—	3.52524
Fast Food Restaurant w/o Drive Thru	0.00565	0.00282	0.05134	0.04313	0.00031	0.00390	—	0.00390	0.00390	—	0.00390	—	55.5734	55.5734	0.00492	0.00010	—	55.7275
General Office Building	0.00173	0.00086	0.01570	0.01319	0.00009	0.00119	—	0.00119	0.00119	—	0.00119	—	16.9964	16.9964	0.00150	0.00003	—	17.0436
Medical Office Building	0.00066	0.00033	0.00597	0.00501	0.00004	0.00045	—	0.00045	0.00045	—	0.00045	—	6.45774	6.45774	0.00057	0.00001	—	6.47565
Health Club	0.00134	0.00067	0.01221	0.01026	0.00007	0.00093	—	0.00093	0.00093	—	0.00093	—	13.2151	13.2151	0.00117	0.00002	—	13.2517
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00973	0.00487	0.08847	0.07431	0.00053	0.00672	—	0.00672	0.00672	—	0.00672	—	95.7581	95.7581	0.00847	0.00018	—	96.0237

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.00196	0.00098	0.01780	0.01495	0.00011	0.00135	—	0.00135	0.00135	—	0.00135	—	21.2338	21.2338	0.00188	0.00004	—	21.2927
Fast Food Restaurant w/o Drive Thru	0.03095	0.01547	0.28132	0.23631	0.00169	0.02138	—	0.02138	0.02138	—	0.02138	—	335.666	335.666	0.02971	0.00063	—	336.597
General Office Building	0.00946	0.00473	0.08604	0.07227	0.00052	0.00654	—	0.00654	0.00654	—	0.00654	—	102.659	102.659	0.00909	0.00019	—	102.944
Medical Office Building	0.00360	0.00180	0.03269	0.02746	0.00020	0.00248	—	0.00248	0.00248	—	0.00248	—	39.0051	39.0051	0.00345	0.00007	—	39.1133
Health Club	0.00736	0.00368	0.06690	0.05619	0.00040	0.00508	—	0.00508	0.00508	—	0.00508	—	79.8199	79.8199	0.00706	0.00015	—	80.0413
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	578.384	578.384	0.05119	0.00109	—	579.989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.00196	0.00098	0.01780	0.01495	0.00011	0.00135	—	0.00135	0.00135	—	0.00135	—	21.2338	21.2338	0.00188	0.00004	—	21.2927
Fast Food Restaurant w/o Drive Thru	0.03095	0.01547	0.28132	0.23631	0.00169	0.02138	—	0.02138	0.02138	—	0.02138	—	335.666	335.666	0.02971	0.00063	—	336.597

General Office Building	0.00946	0.00473	0.08604	0.07227	0.00052	0.00654	—	0.00654	0.00654	—	0.00654	—	102.659	102.659	0.00909	0.00019	—	102.944
Medical Office Building	0.00360	0.00180	0.03269	0.02746	0.00020	0.00248	—	0.00248	0.00248	—	0.00248	—	39.0051	39.0051	0.00345	0.00007	—	39.1133
Health Club	0.00736	0.00368	0.06690	0.05619	0.00040	0.00508	—	0.00508	0.00508	—	0.00508	—	79.8199	79.8199	0.00706	0.00015	—	80.0413
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.05332	0.02666	0.48475	0.40719	0.00291	0.03684	—	0.03684	0.03684	—	0.03684	—	578.384	578.384	0.05119	0.00109	—	579.989
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.00036	0.00018	0.00325	0.00273	0.00002	0.00025	—	0.00025	0.00025	—	0.00025	—	3.51549	3.51549	0.00031	0.00001	—	3.52524
Fast Food Restaurant w/o Drive Thru	0.00565	0.00282	0.05134	0.04313	0.00031	0.00390	—	0.00390	0.00390	—	0.00390	—	55.5734	55.5734	0.00492	0.00010	—	55.7275
General Office Building	0.00173	0.00086	0.01570	0.01319	0.00009	0.00119	—	0.00119	0.00119	—	0.00119	—	16.9964	16.9964	0.00150	0.00003	—	17.0436
Medical Office Building	0.00066	0.00033	0.00597	0.00501	0.00004	0.00045	—	0.00045	0.00045	—	0.00045	—	6.45774	6.45774	0.00057	0.00001	—	6.47565
Health Club	0.00134	0.00067	0.01221	0.01026	0.00007	0.00093	—	0.00093	0.00093	—	0.00093	—	13.2151	13.2151	0.00117	0.00002	—	13.2517
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00973	0.00487	0.08847	0.07431	0.00053	0.00672	—	0.00672	0.00672	—	0.00672	—	95.7581	95.7581	0.00847	0.00018	—	96.0237

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.47915	1.47915	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18404	0.18404	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.53145	0.49047	0.02512	2.98594	0.00018	0.00530	—	0.00530	0.00401	—	0.00401	—	12.2787	12.2787	0.00052	0.00011	—	12.3230
Total	2.19463	2.15365	0.02512	2.98594	0.00018	0.00530	—	0.00530	0.00401	—	0.00401	—	12.2787	12.2787	0.00052	0.00011	—	12.3230
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.47915	1.47915	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18404	0.18404	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.66318	1.66318	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.26994	0.26994	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03359	0.03359	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.04783	0.04414	0.00226	0.26873	0.00002	0.00048	—	0.00048	0.00036	—	0.00036	—	1.00252	1.00252	0.00004	0.00001	—	1.00613
Total	0.35136	0.34767	0.00226	0.26873	0.00002	0.00048	—	0.00048	0.00036	—	0.00036	—	1.00252	1.00252	0.00004	0.00001	—	1.00613

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.47915	1.47915	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18404	0.18404	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.53145	0.49047	0.02512	2.98594	0.00018	0.00530	—	0.00530	0.00401	—	0.00401	—	12.2787	12.2787	0.00052	0.00011	—	12.3230
Total	2.19463	2.15365	0.02512	2.98594	0.00018	0.00530	—	0.00530	0.00401	—	0.00401	—	12.2787	12.2787	0.00052	0.00011	—	12.3230
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.47915	1.47915	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18404	0.18404	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.66318	1.66318	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	0.26994	0.26994	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03359	0.03359	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04783	0.04414	0.00226	0.26873	0.00002	0.00048	—	0.00048	0.00036	—	0.00036	—	1.00252	1.00252	0.00004	0.00001	—	1.00613
Total	0.35136	0.34767	0.00226	0.26873	0.00002	0.00048	—	0.00048	0.00036	—	0.00036	—	1.00252	1.00252	0.00004	0.00001	—	1.00613

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.40095	2.78673	4.18768	0.14399	0.00345	—	8.81655
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.74081	10.8566	16.5974	0.58996	0.01414	—	35.5614
General Office Building	—	—	—	—	—	—	—	—	—	—	—	10.1803	19.1117	29.2919	1.04617	0.02508	—	62.9201
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	2.73079	5.25954	7.99033	0.28064	0.00673	—	17.0119
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.86892	1.79742	2.66634	0.08931	0.00214	—	5.53783

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00786	0.00786	< 0.000005	< 0.000005	—	0.00792
Total	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.40095	2.78673	4.18768	0.14399	0.00345	—	8.81655
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.74081	10.8566	16.5974	0.58996	0.01414	—	35.5614
General Office Building	—	—	—	—	—	—	—	—	—	—	—	10.1803	19.1117	29.2919	1.04617	0.02508	—	62.9201
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	2.73079	5.25954	7.99033	0.28064	0.00673	—	17.0119
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.86892	1.79742	2.66634	0.08931	0.00214	—	5.53783
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00786	0.00786	< 0.000005	< 0.000005	—	0.00792
Total	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.23194	0.46137	0.69332	0.02384	0.00057	—	1.45968
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.95046	1.79743	2.74789	0.09767	0.00234	—	5.88760
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.68546	3.16416	4.84962	0.17320	0.00415	—	10.4171

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.45211	0.87078	1.32289	0.04646	0.00111	—	2.81651
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.14386	0.29758	0.44144	0.01479	0.00035	—	0.91685
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00130	0.00130	< 0.000005	< 0.000005	—	0.00131
Total	—	—	—	—	—	—	—	—	—	—	—	3.46383	6.59263	10.0565	0.35597	0.00853	—	21.4991

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.40095	2.78673	4.18768	0.14399	0.00345	—	8.81655
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.74081	10.8566	16.5974	0.58996	0.01414	—	35.5614
General Office Building	—	—	—	—	—	—	—	—	—	—	—	10.1803	19.1117	29.2919	1.04617	0.02508	—	62.9201
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	2.73079	5.25954	7.99033	0.28064	0.00673	—	17.0119
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.86892	1.79742	2.66634	0.08931	0.00214	—	5.53783
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00786	0.00786	< 0.000005	< 0.000005	—	0.00792
Total	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.40095	2.78673	4.18768	0.14399	0.00345	—	8.81655
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.74081	10.8566	16.5974	0.58996	0.01414	—	35.5614
General Office Building	—	—	—	—	—	—	—	—	—	—	—	10.1803	19.1117	29.2919	1.04617	0.02508	—	62.9201
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	2.73079	5.25954	7.99033	0.28064	0.00673	—	17.0119
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.86892	1.79742	2.66634	0.08931	0.00214	—	5.53783
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00786	0.00786	< 0.000005	< 0.000005	—	0.00792
Total	—	—	—	—	—	—	—	—	—	—	—	20.9217	39.8198	60.7416	2.15007	0.05155	—	129.856
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.23194	0.46137	0.69332	0.02384	0.00057	—	1.45968
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.95046	1.79743	2.74789	0.09767	0.00234	—	5.88760
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.68546	3.16416	4.84962	0.17320	0.00415	—	10.4171
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.45211	0.87078	1.32289	0.04646	0.00111	—	2.81651
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.14386	0.29758	0.44144	0.01479	0.00035	—	0.91685

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00130	0.00130	< 0.000005	< 0.000005	—	0.00131
Total	—	—	—	—	—	—	—	—	—	—	—	3.46383	6.59263	10.0565	0.35597	0.00853	—	21.4991

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	5.58529	0.00000	5.58529	0.55823	0.00000	—	19.5410
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	61.2729	0.00000	61.2729	6.12400	0.00000	—	214.373
General Office Building	—	—	—	—	—	—	—	—	—	—	—	14.9818	0.00000	14.9818	1.49737	0.00000	—	52.4161
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	66.1039	0.00000	66.1039	6.60684	0.00000	—	231.275
Health Club	—	—	—	—	—	—	—	—	—	—	—	23.5526	0.00000	23.5526	2.35400	0.00000	—	82.4027
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	5.58529	0.00000	5.58529	0.55823	0.00000	—	19.5410
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	61.2729	0.00000	61.2729	6.12400	0.00000	—	214.373
General Office Building	—	—	—	—	—	—	—	—	—	—	—	14.9818	0.00000	14.9818	1.49737	0.00000	—	52.4161
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	66.1039	0.00000	66.1039	6.60684	0.00000	—	231.275
Health Club	—	—	—	—	—	—	—	—	—	—	—	23.5526	0.00000	23.5526	2.35400	0.00000	—	82.4027
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.92471	0.00000	0.92471	0.09242	0.00000	—	3.23524
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	10.1444	0.00000	10.1444	1.01390	0.00000	—	35.4919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.48040	0.00000	2.48040	0.24791	0.00000	—	8.67808
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	10.9442	0.00000	10.9442	1.09384	0.00000	—	38.2902
Health Club	—	—	—	—	—	—	—	—	—	—	—	3.89941	0.00000	3.89941	0.38973	0.00000	—	13.6427
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	28.3932	0.00000	28.3932	2.83780	0.00000	—	99.3381

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	5.58529	0.00000	5.58529	0.55823	0.00000	—	19.5410
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	61.2729	0.00000	61.2729	6.12400	0.00000	—	214.373
General Office Building	—	—	—	—	—	—	—	—	—	—	—	14.9818	0.00000	14.9818	1.49737	0.00000	—	52.4161
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	66.1039	0.00000	66.1039	6.60684	0.00000	—	231.275
Health Club	—	—	—	—	—	—	—	—	—	—	—	23.5526	0.00000	23.5526	2.35400	0.00000	—	82.4027
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	5.58529	0.00000	5.58529	0.55823	0.00000	—	19.5410
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	61.2729	0.00000	61.2729	6.12400	0.00000	—	214.373

General Office Building	—	—	—	—	—	—	—	—	—	—	—	14.9818	0.00000	14.9818	1.49737	0.00000	—	52.4161
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	66.1039	0.00000	66.1039	6.60684	0.00000	—	231.275
Health Club	—	—	—	—	—	—	—	—	—	—	—	23.5526	0.00000	23.5526	2.35400	0.00000	—	82.4027
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	171.496	0.00000	171.496	17.1405	0.00000	—	600.008
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.92471	0.00000	0.92471	0.09242	0.00000	—	3.23524
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	10.1444	0.00000	10.1444	1.01390	0.00000	—	35.4919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.48040	0.00000	2.48040	0.24791	0.00000	—	8.67808
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	10.9442	0.00000	10.9442	1.09384	0.00000	—	38.2902
Health Club	—	—	—	—	—	—	—	—	—	—	—	3.89941	0.00000	3.89941	0.38973	0.00000	—	13.6427
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	28.3932	0.00000	28.3932	2.83780	0.00000	—	99.3381

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06147	0.06147
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.4293	15.4293
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07269	0.07269
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29019	0.29019
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03681	0.03681
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06147	0.06147
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.4293	15.4293
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07269	0.07269
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29019	0.29019

Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03681	0.03681
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01018	0.01018
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.55450	2.55450
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01204	0.01204
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04804	0.04804
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00609	0.00609
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.63085	2.63085

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06147	0.06147
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.4293	15.4293

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07269	0.07269
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29019	0.29019
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03681	0.03681
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06147	0.06147
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.4293	15.4293
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07269	0.07269
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.29019	0.29019
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03681	0.03681
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8905	15.8905
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01018	0.01018
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.55450	2.55450

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01204	0.01204
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04804	0.04804
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00609	0.00609
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.63085	2.63085

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	9/1/2026	10/31/2026	5.00000	44.0000	—
Building Construction	Building Construction	11/1/2026	2/29/2028	5.00000	347.000	—
Paving	Paving	1/1/2027	1/31/2027	5.00000	21.0000	—
Architectural Coating	Architectural Coating	10/1/2027	3/31/2028	5.00000	131.000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	—	10.2000	HHDT,MHDT
Grading	Hauling	1.09091	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	23.7233	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	11.2526	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT

Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	—	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	4.74466	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	—	10.2000	HHDT,MHDT
Grading	Hauling	1.09091	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	23.7233	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	11.2526	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	—	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	4.74466	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	102,983	34,327.5	7,574.21

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	380.000	—	44.0000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	2.89800

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Strip Mall	0.00000	0%
Paving	Fast Food Restaurant w/o Drive Thru	0.00000	0%
Paving	General Office Building	0.00000	0%
Paving	Medical Office Building	0.00000	0%
Paving	Health Club	0.00000	0%
Paving	Parking Lot	2.89800	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00000	262.415	0.03300	0.00400
2027	0.00000	266.126	0.03300	0.00400
2028	0.00000	274.518	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Strip Mall	305.970	305.970	305.970	111,679	6,344.31	6,344.31	6,344.31	2,315,674
Fast Food Restaurant w/o Drive Thru	1,906.01	1,906.01	1,906.01	695,692	39,521.2	39,521.2	39,521.2	14,425,232
General Office Building	333.016	333.016	333.016	121,551	6,905.11	6,905.11	6,905.11	2,520,364
Medical Office Building	90.0042	90.0042	90.0042	32,851.5	1,866.25	1,866.25	1,866.25	681,179
Health Club	180.021	180.021	180.021	65,707.7	3,732.75	3,732.75	3,732.75	1,362,455
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Strip Mall	305.970	305.970	305.970	111,679	6,344.31	6,344.31	6,344.31	2,315,674
Fast Food Restaurant w/o Drive Thru	1,906.01	1,906.01	1,906.01	695,692	39,521.2	39,521.2	39,521.2	14,425,232
General Office Building	333.016	333.016	333.016	121,551	6,905.11	6,905.11	6,905.11	2,520,364

Medical Office Building	90.0042	90.0042	90.0042	32,851.5	1,866.25	1,866.25	1,866.25	681,179
Health Club	180.021	180.021	180.021	65,707.7	3,732.75	3,732.75	3,732.75	1,362,455
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Strip Mall	Wood Fireplaces	0	0
Strip Mall	Gas Fireplaces	0	0
Strip Mall	Propane Fireplaces	0	0
Strip Mall	Electric Fireplaces	0	0
Strip Mall	No Fireplaces	0	0
Strip Mall	Conventional Wood Stoves	0	0
Strip Mall	Catalytic Wood Stoves	0	0
Strip Mall	Non-Catalytic Wood Stoves	0	0
Strip Mall	Pellet Wood Stoves	0	0
Fast Food Restaurant w/o Drive Thru	Wood Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	Gas Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	Propane Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	Electric Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	No Fireplaces	0	0
Fast Food Restaurant w/o Drive Thru	Conventional Wood Stoves	0	0
Fast Food Restaurant w/o Drive Thru	Catalytic Wood Stoves	0	0
Fast Food Restaurant w/o Drive Thru	Non-Catalytic Wood Stoves	0	0
Fast Food Restaurant w/o Drive Thru	Pellet Wood Stoves	0	0
General Office Building	Wood Fireplaces	0	0
General Office Building	Gas Fireplaces	0	0

General Office Building	Propane Fireplaces	0	0
General Office Building	Electric Fireplaces	0	0
General Office Building	No Fireplaces	0	0
General Office Building	Conventional Wood Stoves	0	0
General Office Building	Catalytic Wood Stoves	0	0
General Office Building	Non-Catalytic Wood Stoves	0	0
General Office Building	Pellet Wood Stoves	0	0
Medical Office Building	Wood Fireplaces	0	0
Medical Office Building	Gas Fireplaces	0	0
Medical Office Building	Propane Fireplaces	0	0
Medical Office Building	Electric Fireplaces	0	0
Medical Office Building	No Fireplaces	0	0
Medical Office Building	Conventional Wood Stoves	0	0
Medical Office Building	Catalytic Wood Stoves	0	0
Medical Office Building	Non-Catalytic Wood Stoves	0	0
Medical Office Building	Pellet Wood Stoves	0	0
Health Club	Wood Fireplaces	0	0
Health Club	Gas Fireplaces	0	0
Health Club	Propane Fireplaces	0	0
Health Club	Electric Fireplaces	0	0
Health Club	No Fireplaces	0	0
Health Club	Conventional Wood Stoves	0	0
Health Club	Catalytic Wood Stoves	0	0
Health Club	Non-Catalytic Wood Stoves	0	0
Health Club	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0

Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	102,983	34,327.5	7,574.21

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Strip Mall	145,919	274.518	0.0330	0.0040	66,255.0

Fast Food Restaurant w/o Drive Thru	667,033	274.518	0.0330	0.0040	1,047,369
General Office Building	1,136,828	274.518	0.0330	0.0040	320,324
Medical Office Building	431,935	274.518	0.0330	0.0040	121,706
Health Club	232,881	274.518	0.0330	0.0040	249,059
Parking Lot	110,584	274.518	0.0330	0.0040	0.00000

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Strip Mall	145,919	274.518	0.0330	0.0040	66,255.0
Fast Food Restaurant w/o Drive Thru	667,033	274.518	0.0330	0.0040	1,047,369
General Office Building	1,136,828	274.518	0.0330	0.0040	320,324
Medical Office Building	431,935	274.518	0.0330	0.0040	121,706
Health Club	232,881	274.518	0.0330	0.0040	249,059
Parking Lot	110,584	274.518	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	731,096	75,062.5
Fast Food Restaurant w/o Drive Thru	2,995,878	75,062.5
General Office Building	5,312,639	75,062.5
Medical Office Building	1,425,082	75,062.5
Health Club	453,450	75,062.5
Parking Lot	0.00000	3,246.45

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	731,096	75,062.5
Fast Food Restaurant w/o Drive Thru	2,995,878	75,062.5
General Office Building	5,312,639	75,062.5
Medical Office Building	1,425,082	75,062.5
Health Club	453,450	75,062.5
Parking Lot	0.00000	3,246.45

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	10.3635	0.00000
Fast Food Restaurant w/o Drive Thru	113.692	0.00000
General Office Building	27.7986	0.00000
Medical Office Building	122.656	0.00000
Health Club	43.7019	0.00000
Parking Lot	0.00000	0.00000

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	10.3635	0.00000
Fast Food Restaurant w/o Drive Thru	113.692	0.00000
General Office Building	27.7986	0.00000
Medical Office Building	122.656	0.00000
Health Club	43.7019	0.00000

Parking Lot	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.03750	1.000000	0.00000	1.000000
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430.00	0.00000	0.60000	0.00000	1.000000
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088.00	1.80000	4.00000	4.00000	18.0000
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000
General Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.45455	0.60000	0.00000	1.000000
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00230	4.00000	4.00000	18.0000
Health Club	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.03750	1.000000	0.00000	1.000000

5.14.2. Mitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.03750	1.000000	0.00000	1.000000
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430.00	0.00000	0.60000	0.00000	1.000000
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088.00	1.80000	4.00000	4.00000	18.0000
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000
General Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.45455	0.60000	0.00000	1.000000
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00230	4.00000	4.00000	18.0000
Health Club	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.03750	1.000000	0.00000	1.000000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.4000	annual days of extreme heat
Extreme Precipitation	0.00000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00000	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.6994
AQ-PM	7.34287
AQ-DPM	43.3852
Drinking Water	45.3603
Lead Risk Housing	1.31065
Pesticides	0.00000
Toxic Releases	3.07577
Traffic	64.5625
Effect Indicators	—
CleanUp Sites	0.00000
Groundwater	0.00000
Haz Waste Facilities/Generators	43.2958
Impaired Water Bodies	0.00000
Solid Waste	0.00000
Sensitive Population	—
Asthma	20.9247
Cardio-vascular	16.5254
Low Birth Weights	20.2720
Socioeconomic Factor Indicators	—

Education	25.8922
Housing	86.7934
Linguistic	7.37583
Poverty	21.5075
Unemployment	4.22957

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	47.56833055
Employed	15.56525087
Median HI	74.56691903
Education	—
Bachelor's or higher	65.96945977
High school enrollment	100
Preschool enrollment	48.45374054
Transportation	—
Auto Access	37.4566919
Active commuting	25.81804183
Social	—
2-parent households	97.56191454
Voting	86.88566662
Neighborhood	—
Alcohol availability	82.80508148
Park access	2.194276915
Retail density	35.17259079
Supermarket access	45.92583087

Tree canopy	17.8108559
Housing	—
Homeownership	83.62633132
Housing habitability	22.35339407
Low-inc homeowner severe housing cost burden	25.38175286
Low-inc renter severe housing cost burden	6.274862056
Uncrowded housing	70.21686129
Health Outcomes	—
Insured adults	97.45925831
Arthritis	0.0
Asthma ER Admissions	80.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	94.6
Cognitively Disabled	39.7
Physically Disabled	49.3
Heart Attack ER Admissions	64.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	79.8
Elderly	0.9
English Speaking	70.5
Foreign-born	10.7
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	47.2
Traffic Density	47.5
Traffic Access	23.0
Other Indices	—
Hardship	34.9
Other Decision Support	—
2016 Voting	92.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	7.00000
Healthy Places Index Score for Project Location (b)	56.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	The proposed project entails the development of a new mixed-use campus on the vacant approximately 7.92-acre parcel
Construction: Construction Phases	Based on the construction questionnaire.
Operations: Vehicle Data	Based on the Riverside Sheriff's Association Project - Transportation Study Scoping Agreement, by MBI dated February 12, 2026. It should be noted that trips rates have been adjusted to include internal trip capture reduction.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.22658	5.02200
Landscape Area	sq. ft	—	4,000.00
Lot Area	acre	0.22658	0.00000
Landscape Area	sq. ft	—	4,000.00
Lot Area	acre	0.68620	0.00000
Landscape Area	sq. ft	—	4,000.00
Lot Area	acre	0.26072	0.00000

Landscape Area	sq. ft	—	4,000.00
Lot Area	acre	0.17601	0.00000
Landscape Area	sq. ft	—	4,000.00

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Grading	Grading	Start Date	10/15/2026	9/1/2026
Grading	Grading	End Date	11/12/2026	10/31/2026
Grading	Grading	Work Days per Phase	20.0000	44.0000
Building Construction	Building Construction	Start Date	11/13/2026	11/1/2026
Building Construction	Building Construction	End Date	10/1/2027	2/29/2028
Building Construction	Building Construction	Work Days per Phase	230.000	347.000
Paving	Paving	Start Date	10/2/2027	1/1/2027
Paving	Paving	End Date	10/30/2027	1/31/2027
Paving	Paving	Work Days per Phase	20.0000	21.0000
Architectural Coating	Architectural Coating	Start Date	10/31/2027	10/1/2027
Architectural Coating	Architectural Coating	End Date	11/28/2027	3/31/2028
Architectural Coating	Architectural Coating	Work Days per Phase	20.0000	131.000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Strip Mall	Weekday Trip Rate	size/day	44.3200	31.0000

Strip Mall	Saturday Trip Rate	size/day	42.0400	31.0000
Strip Mall	Sunday Trip Rate	size/day	20.4300	31.0000
Fast Food Restaurant w/o Drive Thru	Weekday Trip Rate	size/day	346.230	193.111
Fast Food Restaurant w/o Drive Thru	Saturday Trip Rate	size/day	696.000	193.111
Fast Food Restaurant w/o Drive Thru	Sunday Trip Rate	size/day	500.000	193.111
General Office Building	Weekday Trip Rate	size/day	9.74000	11.1410
General Office Building	Saturday Trip Rate	size/day	2.21000	11.1410
General Office Building	Sunday Trip Rate	size/day	0.70000	11.1410
Medical Office Building	Weekday Trip Rate	size/day	34.8000	7.92500
Medical Office Building	Saturday Trip Rate	size/day	8.57000	7.92500
Medical Office Building	Sunday Trip Rate	size/day	1.42000	7.92500
Health Club	Weekday Trip Rate	size/day	32.9300	23.4800
Health Club	Saturday Trip Rate	size/day	20.8700	23.4800
Health Club	Sunday Trip Rate	size/day	26.7300	23.4800

Appendix B –

Biological Resources Assessment

Michael Baker INTERNATIONAL

We Make a Difference

April 3, 2026 JN 208116

PVG ARCHITECTS
Nicole Williams, Architect
44530 San Pablo Avenue, Suite 200
Palm Desert, California 92260

SUBJECT: Biological Resources Assessment for the Riverside Sheriffs' Association Benefit Trust Project in Rancho Mirage, Riverside County, California

Dear Nicole Williams,

Michael Baker International, Inc. is pleased to submit this technical letter report documenting the results of a biological resources assessment for the proposed Riverside Sheriffs' Association Benefit Trust Project (Project) located in Rancho Mirage, Riverside County, California. The Project proposes to construct office facilities for the Riverside Sheriff's Department. This report is intended to satisfy the requirements of the California Environmental Quality Act (CEQA).

1.0 PROJECT LOCATION

The approximately 7.92-acre Project site is located in City of Rancho Mirage, California, 92270 (Attachment A, Figure 1, *Regional Vicinity*). The Project site is along Dinah Shore Drive at the southeastern intersection of Key Largo Avenue and is within Section 30, Township 04 South, Range 06 East of the *Cathedral City*, *California* 7.5-minute United States Geological Survey (USGS) topographic quadrangle map (Attachment A, Figure 2, *Project Vicinity*). The Project site is within the boundary of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) but is not within or adjacent to a Conservation Area.

2.0 PROJECT DESCRIPTION

The proposed Project would develop office facilities and commercial uses totaling approximately 67,592 square feet. The Project includes the development of eight buildings, surface parking, on-site circulation, two water quality basins, and landscaping.

The northern portion of the site would contain three one-story commercial buildings (Buildings 1 through 3) and associated parking. The southern portion of the site would comprise the Riverside Sheriffs' Association Benefit Trust campus and would include five one-story buildings (Buildings 4 through 8). The campus would be closed to the public and include a central mixed-use plaza, multipurpose field, and associated parking (Attachment A, Figure 3, *Project Site*).

3.0 EXISTING SITE CONDITIONS

The Project site is located within a partially developed portion of the Coachella Valley. The Project site is surrounded by commercial development to the east, residential to the west, recreational to the south, and disturbed natural habitat to the north. Elevations on-site range from approximately 267 feet in the southeast corner to 293 feet in the southwest corner of the Project site. The site has not been developed and consists of disturbed creosote bush scrub very similar to the surrounding natural communities. Vegetation on-site consists of a mix of native and non-native species. Refer to Attachment B for representative photographs taken throughout the Project site. On-site soils are shown in Attachment A, Figure 4, *USDA Soils*.

Soils on-site consist of the following type (NRCS 2026):

- MaD: Myoma fine sand, 5 to 15 percent slopes

4.0 METHODS

4.1 Literature Review

Prior to conducting the field survey, Michael Baker conducted a thorough literature review and records search to characterize existing site conditions and assess the potential for special-status biological resources to occur that might pose a constraint to Project implementation.[1] A query of the California Natural Diversity Database (CNDDB; CNDDB 2026) and California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2026) was conducted to obtain a list of special-status plant and wildlife species occurrence records within the U.S. Geological Survey (USGS) *Cathedral City, Seven Palms Valley, Desert Hot Springs, East Deception Canyon, Palm Springs, Myoma, La Quinta, Rancho Mirage, and Palm View Peak, California* 7.5-minute quadrangle maps. The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) online database was also reviewed to identify federally listed special-status species and other resources, such as Critical Habitat, known or expected to occur in the Project region (USFWS 2026a). Due to the results listed in the IPaC report, the USFWS Critical Habitat for Threatened & Endangered Species mapping tool (USFWS 2026c) was accessed to determine the location of designated Critical Habitat in relation to the Project site. Other sources of information about the Project site and surrounding area include the Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2026) and the USFWS National Wetlands Inventory (USFWS 2026b). All the information obtained informed our understanding of the Project site and assisted with the field survey and subsequent analysis. The results presented in this report provide a detailed assessment of the suitability of the habitat on-site to support special-status plant and wildlife species and other sensitive natural resources.

1 Special-status refers to plant and wildlife species that are federal or state-listed, proposed, or candidates; plant species that have been designated a California Rare Plant Rank 1, 2, or 4 by the California Native Plant Society; wildlife species that are designated by the California Department of Fish and Wildlife as Fully Protected, or Species of Special Concern; and other state or locally rare vegetation communities.

4.2 Habitat Assessment/Field Survey

Classification of the on-site vegetation communities and other land uses is based on the descriptions of terrestrial vegetation classification systems described in *A Manual of California Vegetation* (Sawyer et al. 2009). In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site vegetation communities, and the presence of potentially regulated jurisdictional features were noted. A formal aquatic resources delineation was not conducted. Michael Baker used geographic information systems (GIS) software to digitize the mapped vegetation communities and overlaid the data onto an aerial photograph to further analyze existing conditions and quantify the acreages of each vegetation community on-site.

All plant and wildlife species observed during the field survey were recorded in a field notebook. Plant species observed were identified by visual characteristics and morphology in the field while unusual and less familiar plant species were photographed and later identified using taxonomic guides. Plant species nomenclature and taxonomy follows *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) and scientific names are provided immediately following common names of plant species (first reference only). Wildlife detections were made through aural and visual detection, as well as observation of sign including scat, trails, tracks, burrows, and nests. Field guides used to assist with identification of species during the field survey included *The Sibley Guide to Birds* (Sibley 2014) for birds, *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003) for herpetofauna, and *A Field Guide to Mammals of North America* (Reid 2006) for mammals. Wildlife species taxonomy follows the North American Butterfly Association (n.d.) for butterflies, the Society for the Study of Amphibians and Reptiles (Nicholson 2025) for herpetofauna, the American Ornithological Society for birds (Chesser et al. 2023), and Wilson and Reeder (2005) for mammals. Scientific names are provided immediately following common names of wildlife species (first reference only).

The potential for special-status species to occur in the biological survey area was evaluated based on each species' known geographic distribution and elevation range; species-specific habitat requirements (e.g., vegetation communities/land covers, soils, hydrology, slope/aspect, and other requirements); life history traits (e.g., disturbance tolerance); and Michael Baker biologists' expertise, knowledge, and best professional judgement. Current and historical records of species identified during the literature review were also considered during the analysis; however, a species' potential to occur determination was not solely based on the age or location of these previously documented records. The potential to occur categories used in this analysis are defined as follows:

- **Present**: The species was observed or detected within the survey area during the field survey.
- **Expected**: The survey area is within the known geographic distribution and elevation range of the species, there is high quality suitable habitat (considering vegetation, soils, and other factors) present, and there is viable landscape connectivity to a local, known extant population(s) or sighting(s) within the survey area.
- **Moderate**: The survey area is within the known geographic distribution and elevation range of the species, there is moderate to low quality suitable habitat (considering

vegetation, soils, and other factors), and there is limited or no landscape connectivity to a local, known, extant population.

- **Not Expected**: The survey area is outside the known geographic distribution and elevation range of the species, there is marginal to no suitable habitat, and there is no connectivity to known, extant populations.
- **Absent**: The species was not detected during the field survey.

5.0 RESULTS

Michael Baker biologists Stephen Anderson and Luke Willet conducted a general biological resources survey and habitat assessment on January 21, 2026, between 0800 and 0930 hours to document existing conditions, conduct a habitat assessment for special-status plant and wildlife species and sensitive natural communities, and determine the presence of aquatic resources within the Project site and survey area (300-foot buffer around Project site). Weather conditions were generally sunny with minor cloud cover and temperatures ranging from 57 to 64 degrees Fahrenheit with wind speeds ranging from 1 to 2 miles per hour. A total of 30.69 acres was covered during the survey.

5.1 Vegetation Communities and Land Covers

The survey area supports the following vegetation communities and land cover types: disturbed creosote bush scrub, ornamental land, disturbed land, and developed land as summarized in Table 1, Vegetation Communities and Land Cover Types, and depicted in Attachment A, Figure 5 *Vegetation Communities and Land Cover Types*. The surrounding area consists of mixed-use suburban and commercial development, and undeveloped land. A total of 19 species of plants, 11 native (58 percent) and 8 non-native (42 percent), were recorded on-site. Attachment C, Species Compendiums, contains a list of observed plant species.

TABLE 1. VEGETATION COMMUNITIES AND LAND COVER TYPES

Vegetation Community/Land Cover	Project Site (Acres)	Survey Area (Acres)	Total (Acres)
Disturbed Creosote Bush Scrub	7.51	5.93	13.44
Ornamental	--	1.80	1.80
Disturbed	--	3.77	3.77
Developed	--	11.68	11.68
TOTAL	**7.51**	**23.18**	**30.69**

Disturbed Creosote Bush Scrub

The majority of the Project site consists of disturbed creosote bush scrub. This community consists of creosote bush (*Larrea tridentata*) sparsely throughout the Project site with Mojave indigo bush (*Psorothamnus arborescens*) occurring in lesser quantities. In addition, Saharan mustard (*Brassica tournefortii*) is interspersed throughout this community. The western portion of this community has a higher concentration of fourwing saltbush (*Atriplex canescens*) present. This community is subject to human visitation and disturbance, evident by the presence of trash and tire tracks within the soil. No trees are present within this vegetation community.

Ornamental

Within the survey buffer area, but not on the project site, the ornamental land cover mapping unit consists of areas of landscaped vegetation associated with the urban development located at the west end of the survey area and the dog park within the southern portion of the survey area. This land cover type is planted with vegetation that is typical of Southern California ornamental plantings, such as Texas barometer bush (*Leucophyllum frutescens*), coral plant (*Russelia equisetiformis*), and silver senna (*Senna artemisioides*).

Disturbed

Within the survey buffer area, but not on the project site, the disturbed land cover mapping unit includes an area north of Dinah Shore Drive and an area just south of the Project site that is currently under construction. These areas consist of barren ground entirely devoid of any vegetation.

Developed

Within the survey buffer area, but not on the project site the developed land cover mapping unit consists of paved roadways, commercial and residential development, and the dog park within the survey area.

5.2 General Floral Inventory

A total of 19 plant species were observed during the field survey, 11 native (58 percent) and 8 non-native (42 percent). The most commonly occurring plants included creosote bush, Mojave indigo bush, and Saharan mustard. Attachment C contains a full list of plant species detected on the Project site.

5.3 General Wildlife Inventory

A total of 12 wildlife species, all birds, were observed during the field survey, 10 native (83 percent) and 2 non-native (17 percent). The most commonly occurring birds included yellow-rumped warbler (*Setophaga coronata*), white-crowned sparrow (*Zonotrichia leucophrys*), house finch

(*Haemorhous mexicanus*), and common raven (*Corus corax*). Attachment C contains a full list of wildlife species detected on the Project site.

5.4 Special-Status Biological Resources

Sensitive Natural Communities

Three natural communities considered sensitive by the CDFW were reported in the CNDDB from the nine USGS 7.5-minute quadrangle map region surrounding and including the *Cathedral City, California* map. These are:

- Desert Fan Palm Oasis Woodland
- Mesquite Bosque
- Southern Riparian Forest

The site consists of disturbed creosote bush scrub, ornamental, disturbed, and developed land cover types. It does not support native vegetation communities; therefore, there are no sensitive natural communities present.

Special-Status Plant Species

A total of 73 special-status plant species were reported in the CNDDB, CNPS, and IPaC Online Inventory of Rare and Endangered Plants of California from the nine USGS 7.5-minute quadrangle map region surrounding and including the *Cathedral City, California* map. No special-status plant species were observed during the field survey. After a review of specific habitat preferences, known distributions, and elevation ranges, one special-status plant species was determined to have a high potential to occur, Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*; Federally Endangered, California Rare Plant Rank 1B.2). This species has been recently documented to occur just outside of the survey area. Although sand verbena was present on-site, it was determined after using the Jepson key to be the common variety, hairy sand verbena (*Abronia villosa* var. *villosa*). Attachment D contains a summary of special-status species with their potential to occur on the Project site.

Special-Status Wildlife Species

A total of 44 special-status wildlife species were reported in the CNDDB from the nine USGS 7.5-minute quadrangle map region surrounding and including the *Cathedral City, California* map and from the Project region by IPaC. No special-status wildlife species were observed during the field survey. After a review of specific habitat preferences, known distributions, and elevation ranges, two special-status wildlife species were determined to have a moderate potential to occur within the Project site, burrowing owl (*Athene cunicularia*; State Candidate Endangered), and loggerhead shrike (*Lanius ludovicianus*; CDFW Species of Special Concern). Attachment D contains a summary of the special-status species with their potential to occur on the Project site.

Critical Habitat

Under the U.S. Endangered Species Act (ESA), Critical Habitat may be established for species listed as threatened or endangered. Critical Habitat refers to specific areas within the geographical range of a species that were occupied at the time it was listed that contain the physical or biological features that are essential to the survival and eventual recovery of that species and that may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated Critical Habitat if they contain one or more of the physical or biological features that are essential to that species' conservation and if the other areas that are occupied are inadequate to ensure the species' recovery.

In the event that a project may result in take or adverse modification to a listed species' designated Critical Habitat, a project proponent may be required to engage in suitable mitigation. However, consultation for impacts to Critical Habitat is only required when a project has a federal nexus. This may include projects that occur on federal lands, require federal permits (e.g., Clean Water Act [CWA] Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS under the ESA.

No Critical Habitat is present within the Project site. The nearest Critical Habitat is approximately 1.5 miles east of the Project site for Coachella Valley fringe-toed lizard (*Uma inornata*; Federally Threatened, State Endangered).

State and Federal Jurisdictional Aquatic Features

Three key agencies regulate activities within inland lakes, streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (USACE) Regulatory Branch regulates activities that result in the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. Of the state agencies, the Regional Water Quality Control Board (RWQCB) regulates discharges to waters of the State, including wetlands, pursuant to Section 401 of the CWA, Section 13263 of the California Porter-Cologne Water Quality Control Act, State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, and the CDFW regulates alterations to lakes, streambeds, and associated riparian habitat pursuant to Section 1600 et seq. of the California Fish and Game Code (CFGC).

Based on a review of aerial photographs, USGS 7.5-minute quadrangle maps, USFWS National Wetland Inventory maps, and observations made during the field survey, there are no aquatic features present within the Project site. A formal aquatic resources delineation is not recommended.

5.5 Wildlife Corridors and Habitat Linkages

Wildlife corridors link areas of suitable habitat that are otherwise separated by areas of non-suitable habitat such as rugged terrain, changes in vegetation, or human disturbance. Wildlife corridors are essential to the regional ecology of a species because they provide avenues of

genetic exchange and allow animals to access alternative territories as dictated by fluctuating population densities. Fragmentation of open space areas by urbanization creates “islands” of wildlife habitat that are more or less isolated from each other. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) that could lead to local extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and shelter. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat or landscape linkages”) can provide both transitory and resident habitat for a variety of species. Although it is commonly used as a synonym for wildlife corridor, a habitat linkage refers to a more substantial, or wider, land connection between two habitat areas. Habitat linkages allow for the periodic exchange of animals between habitat areas, which is essential to maintain adequate gene pools.

The Project site is within the Coachella Valley. The Project site is surrounded by development to the west, east and south, with an area of undeveloped land to the north. Because the Project site is within an area mostly surrounded by development, it does not serve as a habitat linkage or wildlife corridor.

5.6 Coachella Valley Multiple Species Habitat Conservation Plan

The CVMSHCP was prepared for the entire Coachella Valley and surrounding mountains to address current and potential future state and federal ESA issues in the CVMSHCP (or Plan) Area. A Memorandum of Understanding was developed to govern the preparation of the Plan. In late 1995 and early 1996, under the auspices of the Coachella Valley Association of Governments, the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage; County of Riverside (County); USFWS; CDFW; Bureau of Land Management (BLM); U.S. Forest Service; and National Park Service signed the Memorandum of Understanding to initiate the planning effort. Subsequently, the California Department of Transportation, Coachella Valley Water District, Imperial Irrigation District, Riverside County Flood Control and Water Conservation District, Riverside County Regional Park and Open Space District, Riverside County Waste Resources Management District, California Department of Parks and Recreation, and Coachella Valley Mountain Conservancy decided to participate in the Plan.

The CVMSHCP balances environmental protection and economic development objectives in the Plan Area and simplifies compliance with endangered species related laws. The Plan is intended to satisfy the legal requirements for the issuance of permits that will allow the take of species covered by the Plan in the course of otherwise lawful activities. The Plan will, to the maximum extent practicable, minimize and mitigate the impacts of the taking and provide for conservation of the covered species.

The CVMSHCP includes the establishment of a Reserve System, setting conservation objectives to ensure the conservation of the covered species and conserved natural communities in the CVMSHCP Reserve System, provisions for management of the CVMSHCP Reserve System, and a monitoring program, and adaptive management. The CVMSHCP Reserve System will be established from lands within 21 Conservation Areas. Because some take authorization is provided under the Plan for development in Conservation Areas, the actual CVMSHCP Reserve System will be somewhat smaller than the total acres in the Conservation Areas. When assembled, the Reserve System will provide for the conservation of the covered species in the Plan Area.

The Project site is located within the CVMSHCP Plan Area, but not within a Conservation Area. The proposed Project is considered a Covered Activity under the Plan.

6.0 IMPACT ANALYSIS

The following discussion examines the impacts to biological resources that may occur as a result of the proposed Project. The determination of impacts is based on both the features of the proposed Project and the biological values of the habitat and sensitivity of plant and wildlife species potentially affected. A Project description was supplied by the PVG Architects. Michael Baker interpreted the Project description and hand-digitized the survey area into GIS.

Impacts to biological resources are assessed using impact significance threshold criteria, which mirror the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. The questions below model those included in the checklist of questions listed in Appendix G of the CEQA guidelines and that are considered to determine if the Project would have significant impacts to biological resources.

6.1 Impacts to Special-Status Species

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

Less than significant with mitigation incorporated. After a review of specific habitat preferences, known distributions, and elevation ranges, one special-status plant species, Coachella Valley milk-vetch, was determined to have a high potential to occur within the Project site. In addition, burrowing owl and loggerhead shrike were determined to have a moderate potential to occur within the Project site. Mitigation Measures BIO-1 through BIO-3 provided below would reduce this impact to a less than significant level.

6.2 Impacts to Sensitive Natural Communities

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

No impact. The Project site supports disturbed creosote bush scrub. There are no riparian habitats or other sensitive natural communities present within the Project site boundaries. Therefore, the Project would have no impact on riparian habitats or other sensitive natural communities.

6.3 Impacts to State or Federal Wetlands

c) Would the project 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. The Project site does not contain any state or federally protected wetlands or other regulated aquatic features. Therefore, there would be no impact to state or federally protected wetlands or other aquatic features.

6.4 Impacts to Wildlife Movement or Wildlife Corridors

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than significant with mitigation incorporated. The Project site is an area of undeveloped land surrounded mostly by existing development and disturbance. The undeveloped land to the north may support wildlife movement, but the Project site is mostly surrounded by developed land. There would be no impact to native wildlife movement or wildlife corridors.

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the CFGC.[2] To maintain compliance with the MBTA and CFGC, clearance surveys are typically required during the breeding season (generally February 1 to August 31 but as early as January 1 for raptors) prior to any ground disturbance or vegetation removal activities to avoid direct and indirect impacts to active bird nests and/or nesting birds. Consequently, if an active bird nest is destroyed or if Project activities result in indirect impacts to nesting birds (e.g., nest abandonment, loss of reproductive effort), it is considered take and is potentially punishable by fines and/or imprisonment. The vegetation within and adjacent to the Project site provides suitable nesting opportunities for a variety of bird species. However, no nests were observed during the survey.

The Project site has the potential to support nesting songbirds and raptors within the disturbed creosote bush scrub. Nesting activity typically occurs from February to August. Disturbing or destroying active nests is a violation of the MBTA. In addition, nests and eggs are protected under CFGC Section 3503. The removal of vegetation during the breeding season is considered a

[2] Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the CFGC or any regulation made pursuant thereto; Section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey); and Section 3513 makes it unlawful to take or possess any migratory non-game bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA, as amended (16 U.S.C. § 703 et seq).

potentially significant impact. Mitigation Measure BIO-3 provided below would reduce this impact to a less than significant level.

6.5 Conflicts with Local Policies or Ordinances

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

No impact. The proposed Project does not conflict with any local policies or ordinances protecting biological resources. Therefore, there would be no impact.

6.6 Conflicts with Adopted Habitat Conservation Plan

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than significant with mitigation incorporated. The Project site is within the CVMSHCP; however, it is not within a Conservation Area. The County of Riverside is a participating landowner of the CVMSHCP and is required to comply with the requirements set forth in the Plan. The proposed Project is recognized as a Covered Activity under the CVMSHCP. As a Covered Activity located outside designated Conservation Areas, construction of the proposed Project is expected to be consistent with the applicable avoidance, minimization, and mitigation measures set forth in Section 4.4 of the CVMSHCP (Attachment E, CVMSHCP Avoidance, Minimization, and Mitigation Measures). Therefore, the Project is expected to be consistent with the CVMSHCP.

7.0 MITIGATION MEASURES

BIO-1: Prior to Project implementation and during the appropriate blooming periods for special-status plant species with the potential to occur within the Project site, a qualified botanist shall conduct rare plant surveys, with a focus on Coachella Valley milk-vetch, to determine presence or absence of any special-status plant species on-site. The surveys shall be inclusive of, at a minimum, areas proposed for disturbance and shall follow the U.S. Fish and Wildlife Service's (USFWS) *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (2000) and/or California Department of Fish and Wildlife's (CDFW) *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plan Populations and Sensitive Natural Communities* (2018). A report summarizing the methods and results of rare plant surveys shall be submitted to the City of Rancho Mirage. If individual or populations of special-status plant species are found within the areas proposed for disturbance, measures to avoid and minimize impacts shall be recommended.

If state- and/or federally-listed plant species are present and avoidance is infeasible, consultation with the CDFW and/or USFWS would be required and an Incidental Take

Permit(s) (ITP) from the CDFW and/or USFWS shall be obtained prior to the commencement of Project activities. Mitigation measures identified in the ITP shall be implemented to comply with requirements of the take authorization. If non-listed special-status species are present and unavoidable, consultation with the CDFW shall occur regarding the need for preparation and implementation of a Habitat Mitigation and Monitoring Plan.

BIO-2: Prior to construction, two preconstruction burrowing owl clearance surveys will be conducted, with the first survey occurring 14–30 days prior to any vegetation removal or ground-disturbing activities occurring and the second survey occurring 24 hours prior to disturbance. A report summarizing methods and results of burrowing owl surveys shall be submitted to the City of Rancho Mirage. If an occupied burrow is found outside, but within 500 feet, of the development footprint, the qualified biologist shall establish a "no-disturbance" buffer around the burrow location(s). The burrow(s) will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Project activities will be permitted within the buffer until the young are no longer dependent on the burrow.

If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on-site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the Wildlife Agencies.

BIO-3: Within 30 days of ground-disturbing activities associated with Project implementation that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February through August in the Project region, or as determined by a qualified biologist), the applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present on the Project site. The surveys shall continue on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground-disturbing activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground-disturbing activities. A report summarizing methods and results of nesting bird surveys shall be submitted to the City of Rancho Mirage.

If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with the CDFW, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. A report summarizing methods and results of rare plant surveys shall be submitted to the City.

8.0 CONCLUSIONS

The proposed Project, inclusive of the three mitigation measures outlined above, will mitigate potentially significant adverse impacts to biological resources. Please feel free to contact me at (949) 330-4147 or at stephen.anderson@mbakerintl.com with any questions you may have regarding the results and/or conclusions of this report.

Sincerely,

Stephen Anderson

Stephen Anderson
Senior Biologist

Attachments

A. *Figures*
B. *Site Photographs*
C. *Species Compendium*
D. *Special-Status Species Potential to Occur Tables*
E. *CVMSHCP Avoidance, Minimization, and Mitigation Measures*

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ATTACHMENT A

Figures



Source: ArcGIS Online, 2018

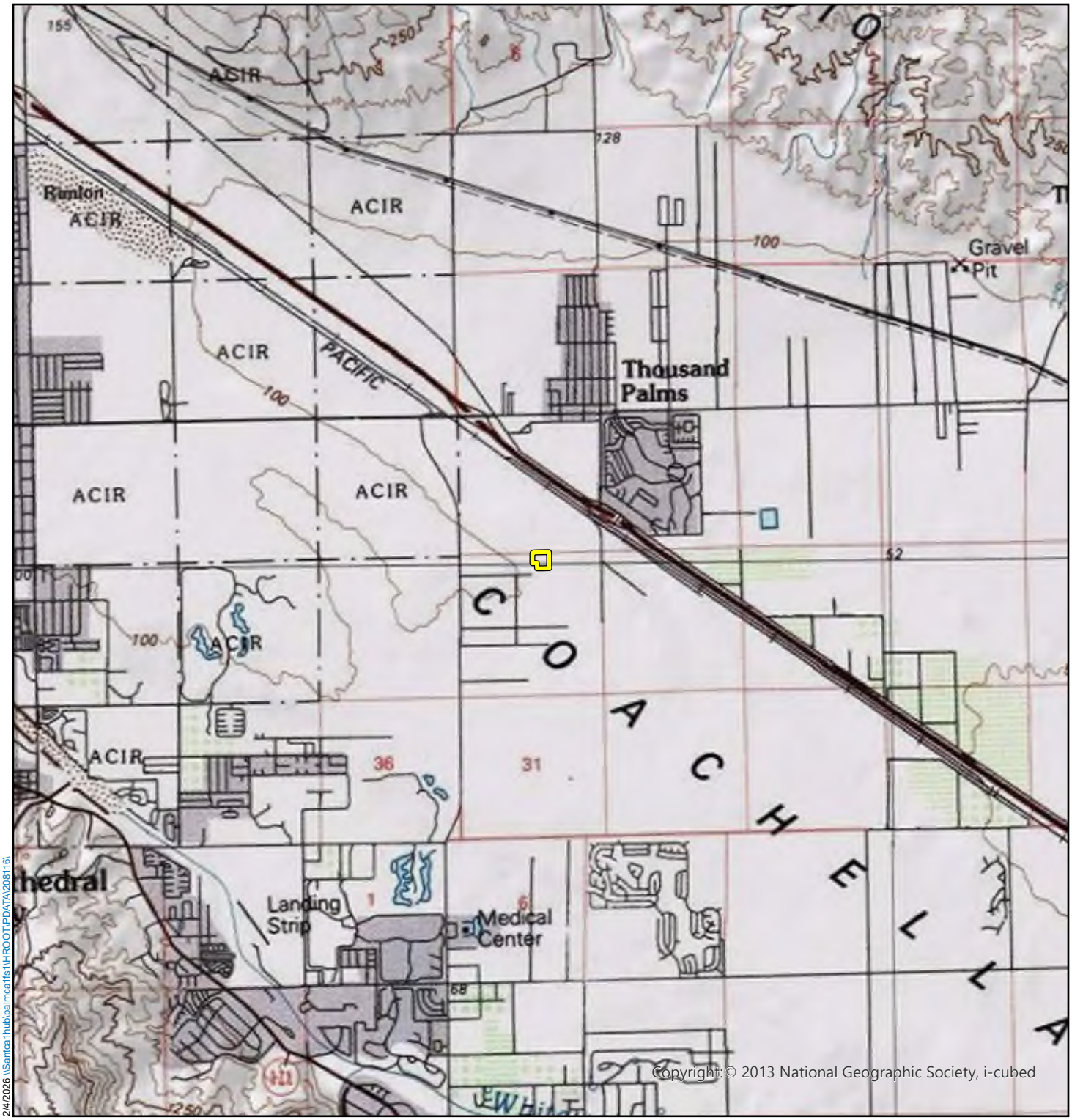
Michael Baker INTERNATIONAL

RIVERSIDE SHERIFFS' ASSOCIATION BENEFIT TRUST PROJECT
BIOLOGICAL RESOURCES TECHNICAL REPORT

Regional Vicinity

Figure 1

2/4/2026 \\Santca1\hub\palmca1fs1\HROOT\PDATA\208116\



2/4/2026 \\Santca1\hubipalmca1fs1\HROOT\PDATA\208116\

Legend

Project Site

Michael Baker INTERNATIONAL

0 0.5 1 Mile

Source: USGS 7.5-Minute topographic quadrangle maps: *Harrison Mountain, Lake Arrowhead, San Bernardino North, and Silverwood Lake, California (2021)*

RIVERSIDE SHERIFFS' ASSOCIATION BENEFIT TRUST PROJECT
BIOLOGICAL RESOURCES TECHNICAL REPORT

Project Vicinity

Figure 2



Legend

- Project Site
- Biological Survey Area

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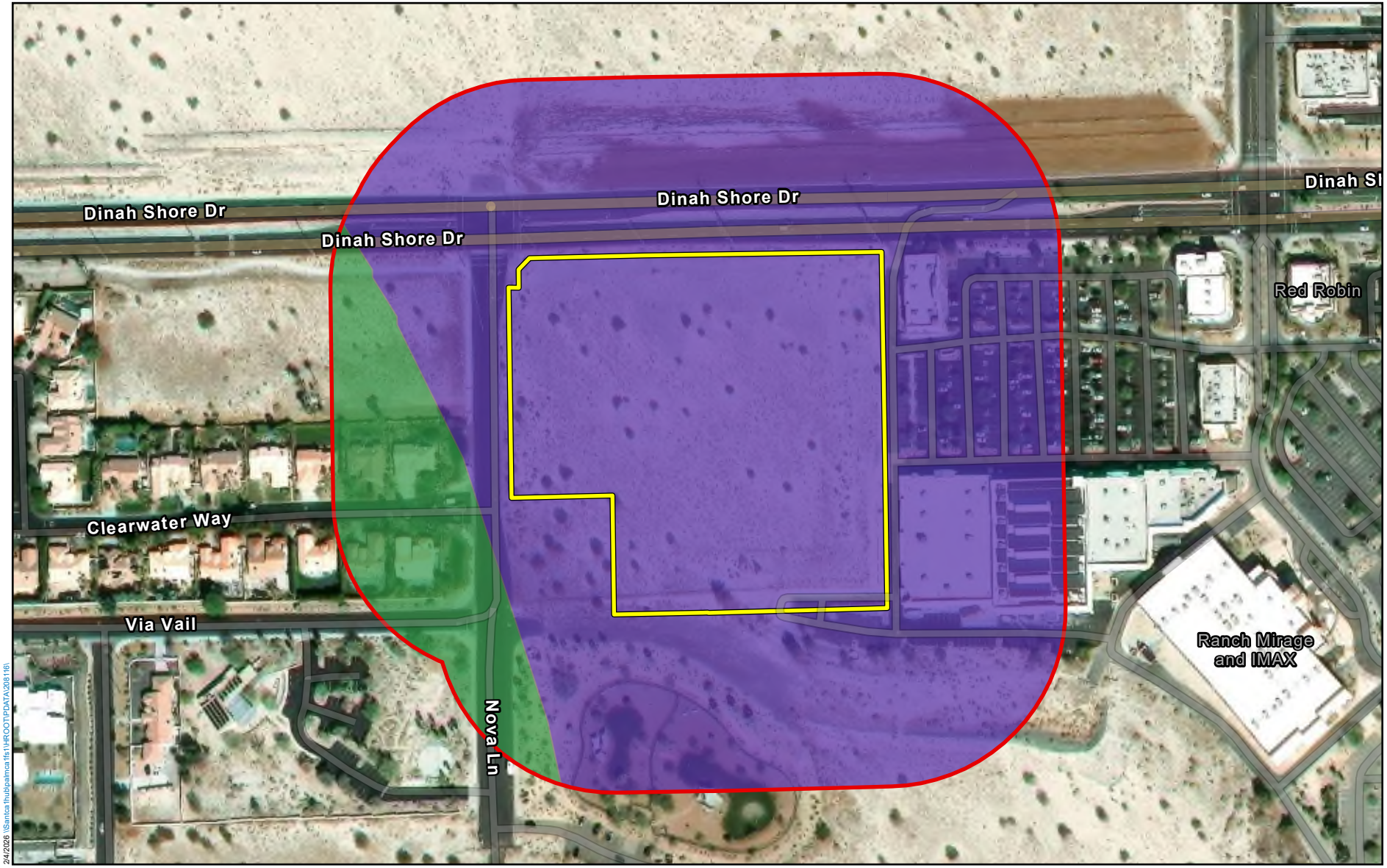
0 100 200 Feet

Source: Nearmap (09/2023)

RIVERSIDE SHERIFFS' ASSOCIATION BENEFIT TRUST PROJECT
BIOLOGICAL RESOURCES TECHNICAL REPORT

Project Site

Figure 3



Legend

- Project Site
- Biological Survey Area
- Myoma fine sand, 0 to 5 percent slopes
- Myoma fine sand, 5 to 15 percent slopes

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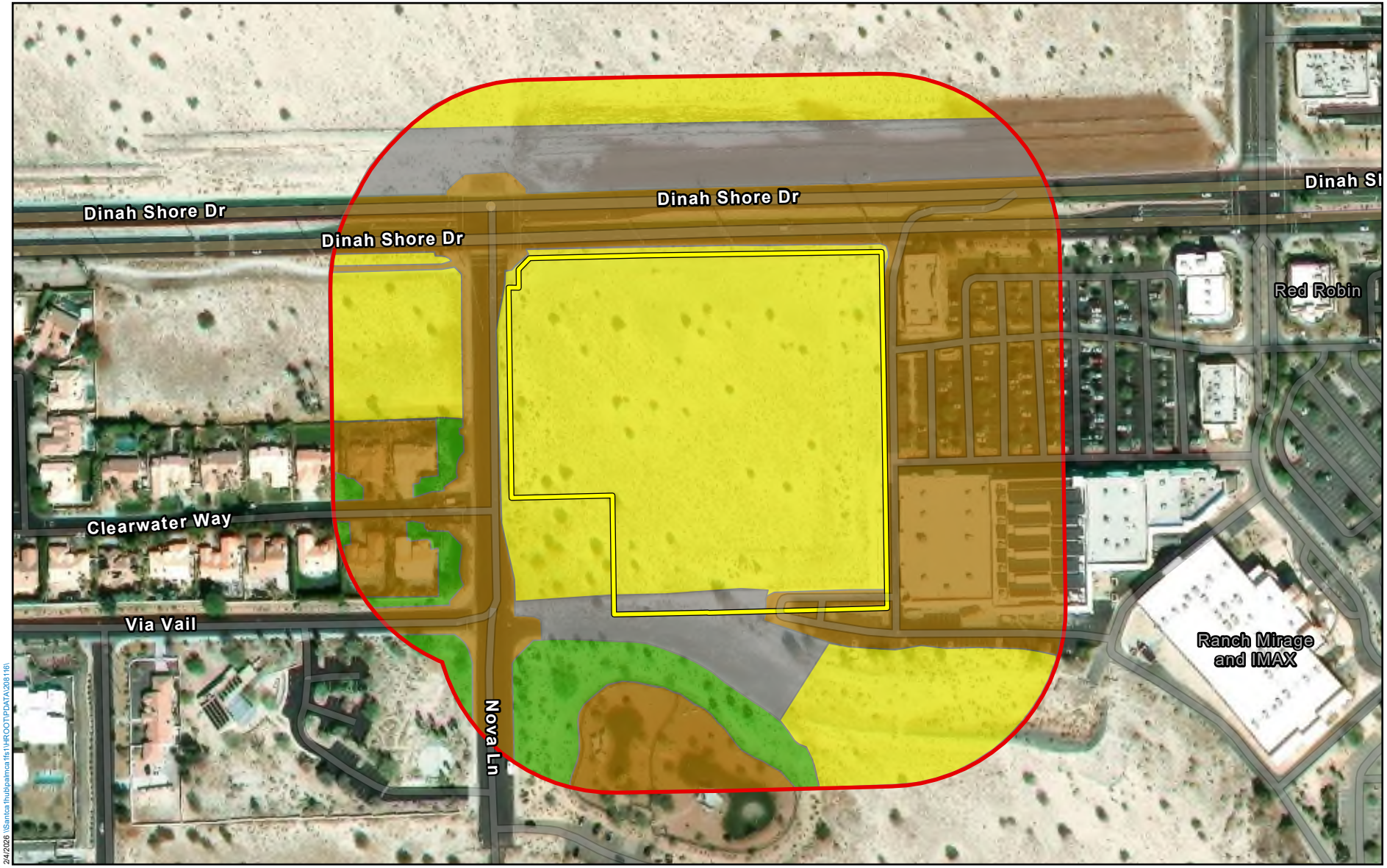
0 100 200 Feet

Source: Nearmap (09/2023)

RIVERSIDE SHERIFFS' ASSOCIATION BENEFIT TRUST PROJECT
BIOLOGICAL RESOURCES TECHNICAL REPORT

USDA Soils

Figure 4



Legend

- Project Site
- Biological Survey Area
- Developed
- Disturbed
- Disturbed Creosote Bush Scrub
- Ornamental

Michael Baker INTERNATIONAL

0 100 200 Feet

Source: Nearmap (09/2023)

RIVERSIDE SHERIFFS' ASSOCIATION BENEFIT TRUST PROJECT
BIOLOGICAL RESOURCES TECHNICAL REPORT

Vegetation Communities and Land Cover Types

Figure 5

ATTACHMENT B

Site Photographs



Photograph 1. West-facing view of the disturbed creosote bush scrub from the east end of the project site (33.800715°, -116.394633°).



Photograph 2. East- facing view of the disturbed land cover and disturbed creosote bush scrub within the survey area north of the project site (33.802138°, -116.397124°).



Photograph 3. North-facing view of the disturbed creosote bush scrub in the survey area east of the project site (33.801107°, -116.396994°).



Photograph 4. East-facing view of the disturbed creosote bush scrub from the west end of the project site (33.800967°°, -116.396680°).



Photograph 5. South-facing view of the developed and ornamental land cover within the southwest portion of the survey area (33.799833°°, -116.396764°)



Photograph 6. East-facing view of the ornamental vegetation associated with the dog park in the southern portion of the survey area (33.799714°, 33.799714°).

ATTACHMENT C

Species Compendiums

PLANTS

Scientific Name	Common Name
VASCULAR SPECIES	
EUDICOTS	
ANACARDIACEAE	**SUMAC OR CASHEW FAMILY**
Schinus molle	Peruvian peppertree*
ASTERACEAE	**SUNFLOWER FAMILY**
Chaenactis fremontii	pincushion flower
Palafoxia arida	desert palafox
BORAGINACEAE	**BORAGE FAMILY**
Tiquilia plicata	fanleaf crinklemat
Johnstonella angustifolia	narrow-leaved johnstonella
BRASSICACEAE	**MUSTARD FAMILY**
Brassica tournefortii	Saharan mustard*
Hirschfeldia incana	Short podded mustard*
CHENOPODIACEAE	**GOOSEFOOT FAMILY**
Atriplex canescens	fourwing saltbush
EUPHORBIACEAE	**SPURGE FAMILY**
Croton californicus	California croton
FABACEAE	**LEGUME FAMILY**
Lupinus odoratus	Mojave lupine
Psorothamnus arborescen	Mojave indigo bush
Senna artemisioides	silver senna*
NYCTAGINACEAE	**FOUR O'CLOCK FAMILY**
Abronia villosa var. villosa	desert sand verbena
ONAGRACEAE	**EVENING PRIMROSE FAMILY**
Chylismia claviformis	browneyes
PLANTAGINACEAE	**PLANTAIN FAMILY**
Russelia equisetiformis	coral plant*
SCROPHULARIACEAE	**FIGWORT FAMILY**
Leucophyllum frutescens	Texas barometer bush *
ZYGOPHYLLACEAE	**CALTROP FAMILY**
Larrea tridentata	creosote bush
MONOCOTS	
POACEAE	**GRASS FAMILY**
Cynodon dactylon	Bermuda grass*
Pennisetum setaceum	fountain grass*

*non-native species

WILDLIFE

Scientific Name	Common Name
BIRDS	
PASSERELLIDAE	**NEW WORLD SPARROWS**
Aimophila ruficeps	rufous-crowned sparrow
Melospiza melodia	song sparrow
Zonotrichia leocuphrys	white-crowned sparrow
CORVIDAE	**CROWS & JAYS**
Corvus corax	common raven
TROCHILIDAE	**HUMMINGBIRDS**
Calypte costae	Costa's hummingbird
PARULIDAE	**WOOD-WARBLERS**
Setophaga coronata	yellow-rumped warbler
FRINGILLIDAE	**FRINGILLINE & CARDUELINE FINCHES & ALLIES**
Haemorhous mexicanus	house finch
Spinus psaltria	lesser goldfinch
COLUMBIDAE	**PIGEONS & DOVES**
Columba livia	rock pigeon (rock dove)*
Zenaida macroura	mourning dove
TYRANNIDAE	**TYRANT FLYCATCHERS**
Sayornis nigricans	black phoebe
STURNIDAE	**STARLINGS**
Sturnus vulgaris	European starling*

*non-native species

ATTACHMENT D

Special-Status Species Potential to Occur Tables

SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN STUDY AREA

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Abronia villosa var. aurita	chaparral sand-verbena	None/None/1B.1/BLM-S, USFS-S	None	Chaparral, Coastal scrub, Desert dunes; Sandy/annual herb/(Jan)Mar–Sep/245–5250	Not expected to occur. Abronia villosa was present on site, however, it is the common variety (*Abronia villosa* var. *villosa*).
Acmispon haydonii	pygmy lotus	None/None/1B.3/BLM-S	None	Pinyon and juniper woodland, Sonoran desert scrub; Rocky/perennial herb/Jan–June/1705–3935	Not expected to occur. The study area is outside of the species' known elevation range.
Allium atrorubens var. cristatum	Inyo onion	None/None/4.3/None	None	Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland; Rocky (sometimes), Sandy (sometimes)/perennial bulbiferous herb/Apr–June/3935–8400	Not expected to occur. The study area is outside of the species' known elevation range.
Almutaster pauciflorus	alkali marsh aster	None/None/2B.2/None	None	Meadows and seeps; Alkaline/perennial herb/June–Oct/785–2625	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Aloysia wrightii	Wright's beebrush	None/None/4.3/None	None	Joshua tree "woodland", Pinyon and juniper woodland; Carbonate (often), Rocky/perennial evergreen shrub/Apr–Oct/2955–5250	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Ambrosia monogyra	singlewhorl burrobrush	None/None/2B.2/None	None	Chaparral, Sonoran desert scrub; Sandy/perennial shrub/Aug–Nov/35–1640	Not expected to occur. The only known occurrence record is 10 miles west of the project site and was last seen in 1922.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Androsace elongata ssp. acuta	California androsace	None/None/4.2/None	None	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland/annual herb/Mar–June/490–4280	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Astragalus bernardinus	San Bernardino milk-vetch	None/None/1B.2/BLM -S, USFS-S	None	Joshua tree "woodland", Pinyon and juniper woodland; Carbonate (often), Granitic (often)/perennial herb/Apr–June/2955–6560	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Astragalus hornii var. hornii	Horn's milk-vetch	None/None/1B.1/BLM -S	None	Meadows and seeps, Playas; Alkaline, Lake Margins/annual herb/May–Oct/195–2790	Not expected to occur. No suitable habitat is present.
Astragalus lentiginosus var. borreganus	Borrego milk-vetch	None/None/4.3/None	None	Mojavean desert scrub, Sonoran desert scrub; Sandy/annual herb/Feb–May/100–2935	Not expected to occur. There are no known recent occurrence records near the project site.
Astragalus lentiginosus var. coachellae	Coachella Valley milk-vetch	FE/None/1B.2/None	Covered	Desert dunes, Sonoran desert scrub (sandy)/annual/perennial herb/Feb–May/130–2150	High potential to occur. There are recent extant occurrence records just outside of the western boundary of the survey area.
Astragalus preussii var. laxiflorus	Lancaster milk-vetch	None/None/1B.1/Non e	None	Chenopod scrub/perennial herb/Mar–May/2295–2295	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Astragalus tricarinatus	triple-ribbed milk-vetch	FE/None/1B.2/None	Covered	Joshua tree "woodland", Sonoran desert scrub; Gravelly (sometimes), Sandy (sometimes)/perennial herb/Feb–May/1475–3905	Not expected to occur. The study area is outside of the species' known elevation range.
Atriplex parishii	Parish's brittlescale	None/None/1B.1/USF S-S	None	Chenopod scrub, Playas, Vernal pools; Alkaline/annual herb/June–Oct/80–6235	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Ayenia compacta	California ayenia	None/None/2B.3/None	None	Mojavean desert scrub, Sonoran desert scrub; Rocky/perennial herb/Mar–Apr/490–3595	Not expected to occur. The study area is outside of the species' known elevation range.
Boechera johnstonii	Johnston's rockcress	None/None/1B.2/USFS-S	None	Chaparral, Lower montane coniferous forest; Clay/perennial herb/Feb–June/4430–7055	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Calochortus palmeri var. munzii	San Jacinto mariposa-lily	None/None/1B.2/BLM-S, USFS-S	None	Chaparral, Lower montane coniferous forest, Meadows and seeps/perennial bulbiferous herb/Apr–July/2805–7220	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Caulanthus simulans	Payson's jewelflower	None/None/4.2/USFS-S	None	Chaparral, Coastal scrub; Granitic, Sandy/annual herb/(Feb)Mar–May(June)/295–7220	Not expected to occur. No suitable habitat is present.
Chaenactis parishii	Parish's chaenactis	None/None/1B.3/BLM-S	None	Chaparral (rocky)/perennial herb/May–July/4265–8205	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Chorizanthe leptotheca	Peninsular spineflower	None/None/4.2/None	None	Chaparral, Coastal scrub, Lower montane coniferous forest; Granitic/annual herb/May–Aug/985–6235	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Chorizanthe parryi var. parryi	Parry's spineflower	None/None/1B.1/BLM-S, USFS-S	None	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Openings, Rocky (sometimes), Sandy (sometimes)/annual herb/Apr–June/900–4005	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Chorizanthe polygonoides var. longispina	long-spined spineflower	None/None/1B.2/BLM-S	None	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; Clay (often)/annual herb/Apr–July/100–5020	Not expected to occur. No suitable habitat is present.
Chorizanthe xanti var. leucotheca	white-bracted spineflower	None/None/1B.2/BLM-S, USFS-S	None	Coastal scrub (alluvial fans), Mojavean desert scrub, Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–June/985–3935	Not expected to occur. The study area is outside of the species' known elevation range.
Cuscuta californica var. apiculata	pointed dodder	None/None/3/None	None	Mojavean desert scrub, Sonoran desert scrub; Sandy/annual vine (parasitic)/Feb–Aug/0–1640	Not expected to occur. There are no known recent occurrence records near the project site.
Deinandra mohavensis	Mojave tarplant	None/SE/1B.3/BLM-S, USFS-S	None	Chaparral, Coastal scrub, Riparian scrub; Mesic/annual herb/(Jan–May)June–Oct/2100–5250	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Ditaxis claryana	glandular ditaxis	None/None/2B.2/None	None	Mojavean desert scrub, Sonoran desert scrub; Sandy/perennial herb/Oct–Mar/0–1525	Not expected to occur. The only recent extant occurrence record is over 5 miles southwest of the project site.
Ditaxis serrata var. californica	California ditaxis	None/None/3.2/None	None	Sonoran desert scrub/perennial herb/Mar–Dec/100–3280	Not expected to occur. There are no recent extant occurrence records near the project site.
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1/None	None	Chaparral, Cismontane woodland, Coastal scrub (alluvial fans); Sandy/annual herb/Apr–June/655–2495	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Eremothera boothii ssp. boothii	Booth's evening-primrose	None/None/2B.3/None	None	Joshua tree "woodland", Pinyon and juniper woodland/annual herb/Apr–Sep/2675–7875	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Eriastrum harwoodii	Harwood's eriastrum	None/None/1B.2/BLM-S	None	Desert dunes/annual herb/Mar–June/410–3000	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Erigeron parishii	Parish's daisy	FT/None/1B.1/None	None	Mojavean desert scrub, Pinyon and juniper woodland; Carbonate (usually), Granitic (sometimes)/perennial herb/May–Aug/2625–6560	Not expected to occur. The study area is outside of the species' known elevation range.
Erythranthe diffusa	Palomar monkeyflower	None/None/4.3/None	None	Chaparral, Lower montane coniferous forest; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–June/4005–6005	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Eschscholzia androuxii	Joshua Tree poppy	None/None/4.3/None	None	Joshua tree "woodland", Mojavean desert scrub; Flats, Gravelly, Rocky, Sandy, Slopes, Washes/annual herb/Feb–May(June)/1920–5530	Not expected to occur. The study area is outside of the species' known elevation range.
Euphorbia abramsiana	Abrams' spurge	None/None/2B.2/None	None	Mojavean desert scrub, Sonoran desert scrub; Sandy/annual herb/(Aug)Sep–Nov/-15–4300	Not expected to occur. There are no recent extant occurrence records near the project site.
Euphorbia arizonica	Arizona spurge	None/None/2B.3/None	None	Sonoran desert scrub (sandy)/perennial herb/Mar–Apr/165–985	Not expected to occur. There are no recent extant occurrence records near the project site.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Euphorbia misera	cliff spurge	None/None/2B.2/None	None	Coastal bluff scrub, Coastal scrub, Mojavean desert scrub; Rocky/perennial shrub/(Oct)Dec–Aug/35–1640	Not expected to occur. There are no recent extant occurrence records near the project site.
Euphorbia platysperma	flat-seeded spurge	None/None/1B.2/None	None	Desert dunes, Sonoran desert scrub (sandy)/annual herb/Feb–Sep/215–330	Not expected to occur. The study area is outside of the species' known elevation range.
Galium angustifolium ssp. gracillimum	slender bedstraw	None/None/4.2/None	None	Joshua tree "woodland", Sonoran desert scrub; Granitic, Rocky/perennial herb/Apr–June(July)/425–5085	Not expected to occur. The study area is outside of the species' known elevation range.
Galium johnstonii	Johnston's bedstraw	None/None/4.3/None	None	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Riparian woodland/perennial herb/June–July/4005–7545	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Heuchera hirsutissima	shaggy-haired alumroot	None/None/1B.3/USFS-S	None	Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Rocky/perennial rhizomatous herb/(May)June–July/4985–11485	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Horsfordia alata	pink velvet-mallow	None/None/4.3/None	None	Sonoran desert scrub (rocky)/perennial shrub/Feb–Dec/330–1640	Not expected to occur. There are no recent extant occurrence records near the project site.
Horsfordia newberryi	Newberry's velvet-mallow	None/None/4.3/None	None	Sonoran desert scrub (rocky)/perennial shrub/Feb–Dec/10–2625	Not expected to occur. There are no recent extant occurrence records near the project site.
Hulsea vestita ssp. callicarpha	beautiful hulsea	None/None/4.2/None	None	Chaparral, Lower montane coniferous forest; Granitic, Gravelly (sometimes), Rocky (sometimes)/perennial herb/May–Oct/3000–10005	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Imperata brevifolia	California satintail	None/None/2B.1/USFS-S	None	Chaparral, Coastal scrub, Meadows and seeps (often alkali), Mojavean desert scrub, Riparian scrub; Mesic/perennial rhizomatous herb/Sep–May/0–3985	Not expected to occur. There are no recent extant occurrence records near the project site.
Johnstonella costata	ribbed cryptantha	None/None/4.3/None	None	Desert dunes, Mojavean desert scrub, Sonoran desert scrub; Sandy/annual herb/Feb–May/-195–1640	Not expected to occur. There are no recent extant occurrence records near the project site.
Johnstonella holoptera	winged cryptantha	None/None/4.3/None	None	Mojavean desert scrub, Sonoran desert scrub/annual herb/Mar–Apr/330–5545	Not expected to occur. There are no recent extant occurrence records near the project site.
Juncus acutus ssp. leopoldii	southwestern spiny rush	None/None/4.2/None	None	Coastal dunes (mesic), Coastal scrub, Marshes and swamps (coastal salt), Meadows and seeps (alkaline seeps)/perennial rhizomatous herb/(Mar)May–June/10–2955	Not expected to occur. No suitable habitat is present.
Juncus cooperi	Cooper's rush	None/None/4.3/None	None	Meadows and seeps (mesic, alkaline or saline)/perennial herb/Apr–May(Aug)/-259–2759	Not expected to occur. No suitable habitat is present.
Lilium parryi	lemon lily	None/None/1B.2/USFS-S	None	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; Mesic/perennial bulbiferous herb/July–Aug/4005–9005	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Linanthus jaegeri	San Jacinto linanthus	None/None/1B.2/USFS-S	None	Subalpine coniferous forest, Upper montane coniferous forest; Granitic, Rocky/perennial herb/July–Sep/7200–10005	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Linanthus maculatus ssp. maculatus	Little San Bernardino Mtns. linanthus	None/None/1B.2/BLM -S	Covered	Desert dunes, Joshua tree "woodland", Mojavean desert scrub, Sonoran desert scrub; Sandy/annual herb/Mar–May/460–4005	Not expected to occur. The study area is outside of the species' known elevation range.
Lycium torreyi	Torrey's box-thorn	None/None/4.2/None	None	Mojavean desert scrub, Sonoran desert scrub; Rocky, Sandy, Streambanks, Washes/perennial shrub/(Jan–Feb)Mar–June(Sep–Nov)/-165–4005	Not expected to occur. There are no recent extant occurrence records near the project site.
Marina orcuttii var. orcuttii	California marina	None/None/1B.3/USF S-S	None	Chaparral, Pinyon and juniper woodland, Sonoran desert scrub; Rocky/perennial herb/May–Oct/3445–3805	Not expected to occur. The study area is outside of the species' known elevation range.
Matelea parvifolia	spear-leaf matelea	None/None/2B.3/USF S-S	None	Mojavean desert scrub, Sonoran desert scrub; Rocky/perennial herb/Mar–May(July)/1445–3595	Not expected to occur. The study area is outside of the species' known elevation range.
Mentzelia tricuspis	spiny-hair blazing star	None/None/2B.1/Non e	None	Mojavean desert scrub; Gravelly, Sandy, Slopes, Washes/annual herb/Mar–May/490–4200	Not expected to occur. The study area is outside of the species' known elevation range.
Nemacaulis denudata var. gracilis	slender cottonheads	None/None/2B.2/Non e	None	Coastal dunes, Desert dunes, Sonoran desert scrub/annual herb/(Mar)Apr–May/-165–1310	Not expected to occur. There are no recent extant occurrence records near the project site.
Pelazoneuron puberulum var. sonorense	Sonoran maiden fern	None/None/2B.2/USF S-S	None	Meadows and seeps (seeps, streams)/perennial rhizomatous herb/Jan–Sep/165–2000	Not expected to occur. No suitable habitat is present.
Penstemon californicus	California beardtongue	None/None/1B.2/USF S-S	None	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; Sandy/perennial herb/May–June(Aug)/3840–7545	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Penstemon clevelandii var. connatus	San Jacinto beardtongue	None/None/4.3/None	None	Chaparral, Pinyon and juniper woodland, Sonoran desert scrub; Rocky/perennial herb/Mar–May/1310–4920	Not expected to occur. The study area is outside of the species' known elevation range.
Pentachaeta aurea ssp. aurea	golden-rayed pentachaeta	None/None/4.2/None	None	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland, Valley and foothill grassland/annual herb/Mar–July/260–6070	Not expected to occur. No suitable habitat is present.
Petalonyx linearis	narrow-leaf sandpaper-plant	None/None/2B.3/None	None	Mojavean desert scrub, Sonoran desert scrub; Rocky (sometimes), Sandy (sometimes)/perennial shrub/(Jan–Feb)Mar–May(June–Dec)/-80–3660	Not expected to occur. There are no recent extant occurrence records near the project site.
Pseudorontium cyathiferum	Deep Canyon snapdragon	None/None/2B.3/None	None	Sonoran desert scrub (rocky)/annual herb/Feb–Apr/0–2625	Not expected to occur. There are no recent extant occurrence records near the project site.
Saltugilia latimeri	Latimer's woodland-gilia	None/None/1B.2/BLM-S, USFS-S	None	Chaparral, Mojavean desert scrub, Pinyon and juniper woodland; Granitic (often), Rocky (sometimes), Sandy (sometimes), Washes (sometimes)/annual herb/Mar–June/1310–6235	Not expected to occur. The study area is outside of the species' known elevation range.
Selaginella eremophila	desert spike-moss	None/None/2B.2/None	None	Chaparral, Sonoran desert scrub (gravelly, rocky)/perennial rhizomatous herb/(May)June(July)/655–4250	Not expected to occur. The study area is outside of the species' known elevation range.
Senna covesii	Cove's cassia	None/None/2B.2/None	None	Sonoran desert scrub; Dry, Sandy, Slopes, Washes/perennial herb/Mar–June(Aug)/740–4250	Not expected to occur. The study area is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR/ Other)	HCP/NCCP Protection	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in BSA
Sidotheca caryophylloides	chickweed oxytheca	None/None/4.3/USFS-S	None	Lower montane coniferous forest (sandy)/annual herb/July–Sep(Oct)/3655–8530	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Sidotheca emarginata	white-margined oxytheca	None/None/1B.3/USFS-S	None	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland/annual herb/(Feb)Apr–July(Aug)/3935–8205	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Stemodia durantifolia	purple stemodia	None/None/2B.1/None	None	Sonoran desert scrub (often mesic, sandy)/perennial herb/(Jan)Apr–Dec/590–985	Not expected to occur. The study area is outside of the species' known elevation range.
Streptanthus campestris	southern jewelflower	None/None/1B.3/BLM-S, USFS-S	None	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; Rocky/perennial herb/(Apr)May–July/2955–7545	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Syntrichopappus lemmonii	Lemmon's syntrichopappus	None/None/4.3/None	None	Chaparral, Joshua tree "woodland", Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–May(June)/1640–6005	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Thysanocarpus rigidus	rigid fringepod	None/None/1B.2/BLM-S, USFS-S	None	Pinyon and juniper woodland; Dry, Rocky, Slopes/annual herb/Feb–May/1970–7220	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Xylorhiza cognata	Mecca-aster	None/None/1B.2/BLM-S	Covered	Sonoran desert scrub/perennial herb/Jan–June/65–1310	Not expected to occur. There are no recent extant occurrence records near the project site.

Status Legend:	**Other**
Federal	California Rare Plant Rank (CRPR)
FE: Federally listed as endangered	CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
FT: Federally listed as threatened	CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
FPE: Federally proposed for listing as endangered	CRPR 2A: Plants presumed extirpated in California but common elsewhere
FPT: Federally proposed for listing as threatened	CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
FC: Federal candidate species (former Category 1 candidates)	CRPR 3: Review List: Plants about which more information is needed
None: No federal listing	CRPR 4: Watch List: Plants of limited distribution
FDL: Delisted	.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
State	.2 Moderately threatened in California (20–80% occurrences threatened / moderate degree and immediacy of threat)
SE: State listed as endangered	.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)
ST: State listed as threatened	
SR: State rare	
SCE: State candidate for listing as endangered	
SCT: State candidate for listing as threatened	**HCP/NCCP Designations:**
None: No state listing	Covered: Species afforded incidental take coverage
SDL: State delisting	None: Species not afforded incidental take coverage

SPECIAL-STATUS ANIMAL SPECIES WITH POTENTIAL TO OCCUR IN STUDY AREA

Scientific Name	Common Name	Status Federal/State/Other	HCP/NCCP Protection	Habitats	Potential to Occur in BSA
Amphibians					
Rana draytonii	California red-legged frog	FT / None / CDFW-SSC	None	Aquatic | Artificial flowing waters | Artificial standing waters | Freshwater marsh | Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flow; Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Not expected to occur. No suitable habitat is present.
Rana muscosa	southern mountain yellow-legged frog	FE / SE / USFS-S	None	Aquatic; Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mtns (southern DPS). Found at 1,000 to 12,000 ft in lakes and creeks that stem from springs and snowmelt. May overwinter under frozen lakes.	Not expected to occur. No suitable habitat is present.
Birds					
Accipiter cooperii	Cooper's hawk	None / None / None	None	Cismontane woodland | Riparian forest | Riparian woodland | Upper montane coniferous forest; Woodland, chiefly of open, interrupted or marginal type.	Not expected to occur. Although this species may forage within the project site, nesting habitat is absent.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None / None / None	None	Chaparral | Coastal scrub; Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status Federal/State/Other	HCP/NCCP Protection	Habitats	Potential to Occur in BSA
Aquila chrysaetos	golden eagle	None / None / BLM-S, CDFW-FP	None	Broadleaved upland forest | Cismontane woodland | Coastal prairie | Great Basin grassland | Great Basin scrub | Lower montane coniferous forest | Pinon & juniper woodlands | Upper montane coniferous forest | Valley & foothill grassland; Rolling foothills, mountain areas, sage-juniper flats, and desert.	Not expected to occur. No suitable habitat is present.
Athene cunicularia	burrowing owl	None / SCE / BLM-S, CDFW-SSC	Covered	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland; Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Moderate potential to occur. Suitable habitat is present on site, and there are multiple occurrence records within 3 miles of the project site.
Cypseloides niger	black swift	None / None / CDFW-SSC	None	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats; Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains.	Not expected to occur. No suitable habitat is present.
Empidonax traillii extimus	southwestern willow flycatcher	FE / SE / None	Covered	Riparian woodland; Riparian woodlands in Southern California.	Not expected to occur. No suitable habitat is present.
Falco mexicanus	prairie falcon	None / None / None	None	Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland; Inhabits dry, open terrain, either level or hilly.	Not expected to occur. Although this species may forage within the project site, nesting habitat is absent.

Scientific Name	Common Name	Status Federal/State/Other	HCP/NCCP Protection	Habitats	Potential to Occur in BSA
Lanius ludovicianus	loggerhead shrike	None / None / CDFW-SSC	None	Broadleaved upland forest | Desert wash | Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands | Riparian woodland | Sonoran desert scrub; Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes.	Moderate potential to occur. This species is known to occur through the Coachella Valley. Suitable foraging and nesting habitat is present within the project site.
Polioptila californica californica	coastal California gnatcatcher	FT / None / CDFW-SSC	None	Coastal bluff scrub | Coastal scrub; Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Not expected to occur. No suitable habitat is present.
Polioptila melanura	black-tailed gnatcatcher	None / None / None	None	Mojavean desert scrub | Sonoran desert scrub; Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter.	Not expected to occur. There are no known extant occurrence records near the project site.
Progne subis	purple martin	None / None / CDFW-SSC	None	Broadleaved upland forest | Lower montane coniferous forest; Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine.	Not expected to occur. No suitable habitat is present.
Pyrocephalus rubinus	vermilion flycatcher	None / None / CDFW-SSC	None	Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Wetland; During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas.	Not expected to occur. No suitable habitat is present.
Toxostoma crissale	Crissal thrasher	None / None / BLM-S, CDFW-SSC	Covered	Riparian woodland; Resident of southeastern deserts in desert riparian and desert wash habitats.	Not expected to occur. No suitable habitat is present.
Toxostoma lecontei	Le Conte's thrasher	None / None / BLM-S, CDFW-SSC	Covered	Desert wash | Mojavean desert scrub | Sonoran desert scrub; Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats.	Not expected to occur. There are no known extant occurrence records near the project site.

Scientific Name	Common Name	Status Federal/State/Other	HCP/NCCP Protection	Habitats	Potential to Occur in BSA
Vireo bellii pusillus	least Bell's vireo	FE / SE / None	Covered	Riparian forest | Riparian scrub | Riparian woodland; Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Not expected to occur. No suitable habitat is present.
Fishes					
Cyprinodon macularius	desert pupfish	FE / SE / None	Covered	Aquatic | Artificial flowing waters | Artificial standing waters | Colorado River basin flowing waters | Colorado River basin standing waters; Desert ponds, springs, marshes and streams in Southern California.	Not expected to occur. No suitable habitat is present.
Invertebrates					
Bombus crotchii	Crotch's bumble bee	None / SCE / None	None	Open grassland and scrub communities supporting suitable floral resources. ; Coastal California east to the Sierra-Cascade crest and south into Mexico.	Not expected to occur. No suitable habitat is present and there are no known extant occurrence records near the project site.
Bombus pensylvanicus	American bumble bee	None / None / None	None	Coastal prairie | Great Basin grassland | Valley & foothill grassland	Not expected to occur. No suitable habitat is present.
Calileptoneta oasa	Andreas Canyon leptonetid spider	None / None / None	None	Mojavean desert scrub; Known only from the type locality, Andreas Canyon, Palm Springs, Riverside County.	Not expected to occur. There are no known extant occurrence records near the project site.
Danaus plexippus plexippus	monarch - California overwintering population	FPT / None / USFS-S	None	Closed-cone coniferous forest; Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Not expected to occur. No suitable habitat is present.
Dinacoma caseyi	Casey's June beetle	FE / None / None	None	Desert wash | Mojavean desert scrub; Found only in two populations in a small area of southern Palm Springs.	Not expected to occur. The project site is over 5 miles from any known populations.
Macrobaenetes valgum	Coachella giant sand treader cricket	None / None / None	Covered	Desert dunes; Known from the sand dune ridges in the vicinity of Coachella Valley.	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status Federal/State/Other	HCP/NCCP Protection	Habitats	Potential to Occur in BSA
Oliarces clara	cheeseweed owlfly (cheeseweed moth lacewing)	None / None / None	None	Sonoran desert scrub; Inhabits the lower Colorado River drainage.	Not expected to occur. There are no known extant occurrence records near the project site.
Stenopelmatus cahuilaensis	Coachella Valley jerusalem cricket	None / None / None	Covered	Desert dunes; Inhabits a small segment of the sand and dune areas of the Coachella Valley, in the vicinity of Palm Springs.	Not expected to occur. No suitable habitat is present.
Mammals					
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None / None / CDFW-SSC	None	Desert wash | Pinon & juniper woodlands | Sonoran desert scrub; Desert border areas of San Diego, Riverside, San Bernardino, and Los Angeles counties in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc.	Not expected to occur. There are no known extant occurrence records near the project site.
Corynorhinus townsendii	Townsend's big-eared bat	None / None / BLM-S, CDFW-SSC, USFS-S	None	Broadleaved upland forest | Chaparral | Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scr; Throughout California in a wide variety of habitats. Most common in mesic sites.	Not expected to occur. Although this species may forage within the project site, suitable roosting habitat is absent.
Dipodomys merriami collinus	Earthquake Merriam's kangaroo rat	None / None / None	None	Chaparral | Coastal scrub; Known only from San Diego and Riverside counties. Associated with riversidean sage scrub, chaparral, and non-native grassland.	Not expected to occur. No suitable habitat is present.
Lasiurus xanthinus	western yellow bat	None / None / CDFW-SSC	None	Desert wash; Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status Federal/State/Other	HCP/NCCP Protection	Habitats	Potential to Occur in BSA
Neotoma albigula venusta	Colorado Valley woodrat	None / None / None	None	Sonoran desert scrub; Low-lying desert areas in southeastern California. Closely associated with beaver-tail cactus and mesquite.	Not expected to occur. There are no known extant occurrence records near the project site.
Neotoma lepida intermedia	San Diego desert woodrat	None / None / CDFW-SSC	None	Coastal scrub; Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Not expected to occur. There are no known extant occurrence records near the project site.
Nyctinomops femorosaccus	pocketed free-tailed bat	None / None / CDFW-SSC	None	Joshua tree woodland | Pinon & juniper woodlands | Riparian scrub | Sonoran desert scrub; Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Not expected to occur. Although this species may forage within the project site, suitable roosting habitat is absent.
Nyctinomops macrotis	big free-tailed bat	None / None / CDFW-SSC	None	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water ; Low-lying arid areas in Southern California.	Not expected to occur. No suitable habitat is present.
Ovis canadensis nelsoni	desert bighorn sheep	None / None / BLM-S, CDFW-FP, USFS-S	None	Alpine | Alpine dwarf scrub | Chaparral | Chenopod scrub | Great Basin scrub | Mojavean desert scrub | Montane dwarf scrub | Pinon & juniper woodlands | Riparian woodland | Sonoran desert scrub; Widely distributed from the White Mtns in Mono Co. to the Chocolate Mts in Imperial Co.	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status Federal/State/Other	HCP/NCCP Protection	Habitats	Potential to Occur in BSA
Ovis canadensis nelsoni pop. 2	Peninsular bighorn sheep DPS	FE / ST / CDFW-FP	Covered	Alpine | Alpine dwarf scrub | Chaparral | Chenopod scrub | Great Basin scrub | Mojavean desert scrub | Montane dwarf scrub | Pinon & juniper woodlands | Riparian woodland | Sonoran desert scrub; Eastern slopes of the Peninsular Ranges below 4,600 ft elevation. This DPS of the subspecies inhabits the Peninsular Ranges in southern California from the San Jacinto Mountains south to the US-Mexico International Border.	Not expected to occur. No suitable habitat is present.
Perognathus longimembris bangsi	Palm Springs pocket mouse	None / None / BLM-S, CDFW-SSC	Covered	Desert wash | Sonoran desert scrub; Desert riparian, desert scrub, desert wash and sagebrush habitats. Most common in creosote-dominated desert scrub.	Not expected to occur. There are no known extant occurrence records near the project site.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None / None / CDFW-SSC	None	Coastal scrub; Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	Not expected to occur. No suitable habitat is present.
Xerospermophilus tereticaudus chlorus	Palm Springs round-tailed ground squirrel	None / None / BLM-S, CDFW-SSC	Covered	Chenopod scrub | Sonoran desert scrub; Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees.	Not expected to occur. There are no known extant occurrence records near the project site.
Reptiles					
Crotalus ruber	red-diamond rattlesnake	None / None / CDFW-SSC, USFS-S	None	Chaparral | Mojavean desert scrub | Sonoran desert scrub; Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains.	Not expected to occur. There are no known extant occurrence records near the project site.

Scientific Name	Common Name	Status Federal/State/Other	HCP/NCCP Protection	Habitats	Potential to Occur in BSA
Gopherus agassizii	desert tortoise	FT / ST / None	Covered	Joshua tree woodland | Mojavean desert scrub | Sonoran desert scrub; Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat.	Not expected to occur. There are no known extant occurrence records near the project site.
Phrynosoma blainvillii	coast horned lizard	None / None / BLM-S, CDFW-SSC	None	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland; Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Not expected to occur. No suitable habitat is present.
Phrynosoma mcallii	flat-tailed horned lizard	None / None / BLM-S, CDFW-SSC	Covered	Desert dunes | Mojavean desert scrub | Sonoran desert scrub; Restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties.	Not expected to occur. There are no known extant occurrence records near the project site.
Uma inornata	Coachella Valley fringe-toed lizard	FT / SE / None	Covered	Desert dunes | Desert wash; Limited to sandy areas in the Coachella Valley, Riverside County.	Not expected to occur. No suitable habitat is present. The sandy soils required by this species is not present within the project site.

Status Legend:

Federal	**State**	**Other**
FE: Federally listed as endangered	SE: State listed as endangered	BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
FT: Federally listed as threatened	ST: State listed as threatened	BLM-S: Bureau of Land Management Sensitive Species
FPE: Federally proposed for listing as endangered	SR: State rare	CDFW-FP: California Fully Protected Species
FPT: Federally proposed for listing as threatened	SCE: State candidate for listing as endangered	CDFW-SSC: California Species of Special Concern
FC: Federal candidate species (former Category 1 candidates)	SCT: State candidate for listing as threatened	USFS-S: U.S. Forest Service Sensitive Species
None: No federal listing	None: No state listing	
FDL: Delisted	SDL: State delisting	

ATTACHMENT E

CVMSHCP Avoidance, Minimization, and Mitigation Measures

4.4 Required Avoidance, Minimization, and Mitigation Measures

This section describes certain avoidance, minimization, and mitigation requirements for Covered Activities within the Conservation Area, in addition to Conservation Area specific measures described in the Conservation Area subsections in Section 4.3. The measures described in this section do not apply to single-family homes, emergency response activities, and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot. To assist Permittees with implementation of these measures, CVCC will maintain maps of modeled Habitat and a natural communities map and will provide them to each of the Permittees. CVCC will also maintain a list of Acceptable Biologists who may be used to conduct surveys for specified Covered Species identified in this section. Any Permittee may submit the names of biologists for inclusion in the initial list of Acceptable Biologists. The list shall be updated at least annually. CVCC will develop procedures for individual biologists to submit their name for inclusion on the list. Individuals conducting survey activities for listed endangered or threatened species or species for which a state or federal protocol exists must have the appropriate permit (i.e., in accordance with the federal Endangered Species Act, Section 10(a)(1)(A), or state Endangered Species Act, California Fish and Game Code, Section 2081(a)) to conduct such surveys. Annually, or whenever the list is revised, CVCC shall submit the list to the Wildlife Agencies for review. The Wildlife Agencies shall have thirty (30) days to provide input on the qualifications of any biologists on the list. If the Wildlife Agencies have not responded within thirty days (30) of receipt of the list from CVCC, the biologists on the list shall be deemed acceptable.

In the event that a survey of a parcel is required pursuant to the MSHCP, it will be conducted by an Acceptable Biologist. The survey shall be conducted in the appropriate season, in accordance with established accepted protocols if they exist. Within one (1) year of Permit issuance, the Wildlife Agencies and the MPA, in consultation with CVCC, shall develop survey protocols for those species for which a protocol is required. CVCC will maintain a list of accepted survey protocols. For those species for which protocols do not exist at the time surveys are needed, the Acceptable Biologist shall use a survey protocol generally accepted by biologists familiar with the species. Survey results shall be documented in both mapped and text form and shall be presented for review by the appropriate Permittee and CVCC. Wildlife Agencies' concurrence or acceptance of the surveys and/or the results contained therein is not required by the MSHCP.

Biological Corridors. Specific roads in Conservation Areas, where culverts or undercrossings are required to maintain Biological Corridors, are delineated in the Section 4.3 subsections on individual Conservation Areas.

Burrowing Owl. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities other than levees, berms, dikes, and similar features that are known to contain burrowing owl burrows. O&M of

roads is not subject to this requirement. For other projects that are subject to CEQA, the Permittees will require burrowing owl surveys in the Conservation Areas using an accepted protocol (as determined by the CVCC in coordination with the Permittees and the Wildlife Agencies). Prior to Development, the construction area and adjacent areas within 500 feet of the Development site, or to the edge of the property if less than 500 feet, will be surveyed by an Acceptable Biologist for burrows that could be used by burrowing owl. If a burrow is located, the biologist will determine if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow will be flagged and a 160-foot buffer during the non-breeding season and a 250-foot buffer during the breeding season, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the burrow. The buffer will be staked and flagged. No Development or O&M activities will be permitted within the buffer until the young are no longer dependent on the burrow.

If the burrow is unoccupied, the burrow will be made inaccessible to owls, and the Covered Activity may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on site during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the Wildlife Agencies. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the Wildlife Agencies.

Within one (1) year of Permit issuance, CVCC will cooperate with County Flood Control, CVWD and IID to conduct an inventory of levees, berms, dikes, and similar features in the Plan Area maintained by those Permittees. Burrowing owl burrow locations will be mapped and each of these Permittees will incorporate the information into its O&M practices to avoid impacts to the burrowing owl to the maximum extent Feasible. CVCC in cooperation with County Flood Control, CVWD, and IID will prepare a manual for maintenance staff, educating them about the burrowing owl and appropriate actions to take when owls are encountered to avoid impacts to the maximum extent Feasible. The manual will be submitted to the Wildlife Agencies for review and comment within two (2) years of Permit issuance. In conjunction with the Monitoring Program, the maps of the burrowing owl locations along the above-described levees, berms, dikes, and similar features will be periodically updated.

Covered Riparian Bird Species. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot. Riparian Habitat here refers to the following natural communities: southern arroyo willow riparian forest, Sonoran cottonwood-willow riparian forest, desert fan palm oasis woodland, and southern sycamore-alder riparian woodland in the Cabazon, Stubbe and Cottonwood Canyons,

Whitewater Canyon, Upper Mission Creek/Big Morongo Canyon, Thousand Palms, Indio Hills Palms, Joshua Tree National Park, Mecca Hills and Orocopia Mountains, Dos Palmas, Coachella Valley Stormwater Channel and Delta, and Santa Rosa and San Jacinto Mountains Conservation Areas. Covered Activities, including O&M of facilities and construction of permitted new projects, in riparian Habitat will be conducted to the maximum extent Feasible outside of the March 15 – September 15 nesting season for least Bell's vireo, and the May 1 – September 15 nesting season for southwestern willow flycatcher, summer tanager, yellow warbler, and yellow-breasted chat. If Covered Activities must occur during the nesting season, surveys shall be conducted to determine if any active nests are present. If active nests are identified, the Covered Activity shall not be conducted within 200 feet of an active nest. If surveys conducted during the nesting season document that Covered nesting riparian bird Species are not present, the Covered Activity may proceed.

Crissal Thrasher. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. In modeled crissal thrasher Habitat in the Willow Hole, Thousand Palms, Indio Hills Palms, East Indio Hills, Dos Palmas, and Coachella Valley Stormwater Channel and Delta Conservation Areas, surveys will be conducted by an Acceptable Biologist prior to the start of construction activities during the nesting season, January 15 – June 15, to determine if active nest sites for this species occur on the construction site and/or within 500 feet of the construction site, or to the edge of the property boundary if less than 500 feet. If nesting crissal thrashers are found, a 500-foot buffer, or a buffer to the edge of the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction activities will be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged.

Desert tortoise. This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities for Permittee infrastructure facilities. Within Conservation Areas, the Permittees will require surveys for desert tortoise for Development in modeled desert tortoise Habitat. Prior to Development, an Acceptable Biologist will conduct a presence/absence survey of the Development area and adjacent areas within 200 feet of the Development area, or to the property boundary if less than 200 feet and permission from the adjacent landowner cannot be obtained, for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells. The presence/absence survey must be conducted during the window between February 15 and October 31. Presence/absence surveys require 100% coverage of the survey area. If no sign is found, a clearance survey is not required. A presence/absence survey is valid for 90 days or indefinitely if tortoise-proof fencing is installed around the Development site.

If fresh sign is located, the Development area must be fenced with tortoise-proof fencing and a clearance survey conducted during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to

June 15 and September 1 to October 31 or in accordance with the most recent Wildlife Agency protocols. Clearance surveys must cover 100% of the Development area. A clearance survey must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered will be moved from the Development site to a specified location. Prior to issuance of the Permits, CVCC will either use the *Permit Statement Pertaining to High Temperatures for Handling Desert Tortoises* and *Guidelines for Handling Desert Tortoises During Construction Projects*, revised July 1999, or develop a similar protocol for relocation and monitoring of desert tortoise, to be reviewed and approved by the Wildlife Agencies. Thereafter, the protocol will be revised as needed based on the results of monitoring and other information that becomes available.

For O&M activities in the Conservation Areas, the Permittees shall ensure that personnel conducting such activities are instructed to be alert for the presence of desert tortoise. If a tortoise is spotted, activities adjacent to the tortoise's location will be halted and the tortoise will be allowed to move away from the activity area. If the tortoise is not moving, it will be relocated by an Acceptable Biologist to nearby suitable Habitat and placed in the shade of a shrub. To the maximum extent Feasible, O&M activities will avoid the period from February 15 and October 31.

Utility development protocols have been developed to avoid or minimize potential adverse impacts to the desert tortoise in the Conservation Areas from utility and road right-of-way projects, such as the installation and maintenance of water, sewer, and electric lines and roadway maintenance. The objectives of these protocols are to provide reliable and consistent direction on utility development within the Conservation Areas. Two utility development protocols, inactive and active season, provide specific direction on site preparation and construction phases of utility projects in the Conservation Areas. The protocols include steps to be followed during the desert tortoise active and/or inactive season. The inactive season protocol must be used for utility maintenance or development within the November 1 to February 14 time frame; the active season protocol must be used for utility maintenance or development within the February 15 to October 31 time frame. Deviations from these time frames must be presented to the RMOC.

Inactive Season Protocol. This protocol is applicable to pre-construction and construction phases of utility Covered Activity projects occurring between November 1 and February 14. These protocols apply only to the site preparation and construction phases of projects. The project proponent must follow the eight pre-construction protocol requirements listed below.

1. A person from the entity contracting the construction shall act as the contact person with the representative of the appropriate RMUC. He/she will be responsible for overseeing compliance with the protective stipulations as stated in this protocol.
2. Prior to any construction activity within the Conservation Areas, the contact person will meet with the representative of the appropriate RMUC to review the

plans for the project. The representative of the appropriate RMUC will review alignment, pole spacing, clearing limits, burrow locations, and other specific project plans which have the potential to affect the desert tortoise. He or she may recommend modifications to the contact person to further avoid or minimize potential impacts to desert tortoise.

3. The construction area shall be clearly fenced, marked, or flagged at the outer boundaries to define the limits of construction activities. The construction right-of-way shall normally not exceed 50 feet in width for standard pipeline corridors, access roads and transmission corridors, and shall be minimized to the maximum extent Feasible. Existing access roads shall be used when available, and rights-of-way for new and existing access roads shall not exceed 20 feet in width unless topographic obstacles require greater road width. Other construction areas including well sites, storage tank sites, substation sites, turnarounds, and laydown/staging sites which require larger areas will be determined in the pre-construction phase. All construction workers shall be instructed that their activities shall be confined to locations within the fenced, flagged, or marked areas.

4. An Acceptable Biologist shall conduct pre-construction clearance surveys of all areas potentially disturbed by the proposed project. Any winter burrows discovered in the Conservation Areas during the pre-construction survey shall be avoided or mitigated. The survey shall be submitted to the representative of the appropriate RMUC as part of plan review.

5. All site mitigation criteria shall be determined in the pre-construction phase, including but not limited to seeding, barrier fences, leveling, and laydown/staging areas, and will be reviewed by the representative of the appropriate RMUC prior to implementation.

6. A worker education program shall be implemented prior to the onset of each construction project. All construction employees shall be required to read an educational brochure prepared by the representative of the appropriate RMUC and/or the RMOC and attend a tortoise education class prior to the onset of construction or site entry. The class will describe the sensitive species which may be found in the area, the purpose of the MSHCP Reserve System, and the appropriate measures to take upon discovery of a sensitive species. It will also cover construction techniques to minimize potential adverse impacts.

7. All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the supervision of an Acceptable Biologist.

8. If there are unresolvable conflicts between the representative of the appropriate RMUC and the contact person, then the matter will be arbitrated by the RMOC and, if necessary, by CVCC.

The following terms are established to protect the desert tortoise during utility-related construction activities in the Conservation Areas and are to be conducted by an Acceptable Biologist.

- An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for the desert tortoise.
- Desert tortoises found above ground inside the project area during construction shall be moved by an Acceptable Biologist out of harm's way and placed in a winter den (at a distance no greater than 250 feet). If a winter den cannot be located, the USFWS or CDFG shall determine appropriate action with respect to the tortoise. Tortoises found above ground shall be turned over to the Acceptable Biologist
- No handling of tortoises will occur when the air temperature at 15 centimeters above ground exceeds 90 degrees Fahrenheit.
- Desert tortoise burrows shall be avoided to the maximum extent Feasible. An Acceptable Biologist shall excavate any burrows which cannot be avoided and will be disturbed by construction. Burrow excavation shall be conducted with the use of hand tools only, unless the Acceptable Biologist determines that the burrow is unoccupied immediately prior to burrow destruction.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- For electrical transmission line and road construction projects, only burrows within the right-of-way shall be excavated. Burrows outside the right-of-way, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the right-of-way. Installation and removal of such barrier fencing shall be under the direction and supervision of an Acceptable Biologist.
- Tortoises in the Conservation Areas are not to be removed from burrows until appropriate action is determined by USFWS or CDFG with respect to the tortoise. The response shall be carried out within 72 hours.
- Blasting is not permissible within 100 feet of an occupied tortoise burrow.

During construction, contractors will comply with the mitigation and minimization measures contained within this protocol. These measures are:

- All trenches, pits, or other excavations shall be inspected for tortoises by an Acceptable Biologist prior to filling.
- All pipes and culverts stored within desert tortoise Habitat shall have both ends capped to prevent entry by desert tortoises. During construction, all open ended pipeline segments that are welded in place shall be capped during periods of

construction inactivity to prevent entry by desert tortoises.

- Topsoil removed during trenching shall be re-spread on the pipeline construction area following compaction of the backfill. The area shall be restored as determined during the environmental review.
- All test pump water will be routed to the nearest wash or natural drainage. The route will be surveyed by an Acceptable Biologist. If tortoises are found in the drainage area the Acceptable Biologist will remove the tortoises.
- Powerlines associated with water development, such as to provide power for pumps, should be buried underground adjacent to the pipe. All above ground structures deemed to be necessary shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds, and shall adhere to the electrical distribution protocol which follows.
- In order to perform routine O&M of the water systems such as wells, pumps, water lines and storage tanks, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by an Acceptable Biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the reserve.
- All disturbance areas around poles or concrete pads will be reduced to a size just large enough for the construction activity.
- Areas disturbed around poles or construction pads will be restored as determined during the pre-construction process.
- Poles or other above ground structures necessary for electrical distribution development shall be minimized as much as possible. All above ground structures shall be equipped with functional anti-perching devices that would prevent their use by ravens and other predatory birds.
- In order to perform routine O&M of the electrical distribution systems such as transmission lines and poles, substations, etc., employees are to be trained in the area of desert tortoise education. This training will be performed on a regular basis by a qualified biologist for those personnel not previously trained. The training will include at a minimum the following: identification of tortoises, burrows, and other sign; and instructions on installing tortoise barrier fencing. During the course of basic O&M, desert tortoise will be avoided. Untrained employees shall not perform maintenance operations within the non-Take areas.
- All trash and food items shall be promptly contained and removed daily from the project site to reduce the attractiveness of the area to common ravens and other desert tortoise predators.
- Construction activities which occur between dusk and dawn shall be limited to areas which have already been cleared of desert tortoises by the Acceptable Biologist and graded or located in a fenced right-of-way. Construction activities

shall not be permitted between dusk and dawn in areas not previously graded.

Active Season Protocol. This protocol is applicable to pre-construction and construction phases of utility development projects occurring between February 15 and November 1. It is identical to the Inactive Season Protocol with the following additions:

- Work areas shall be inspected for desert tortoises within 24 hours of the onset of construction. To facilitate implementation of this condition, burrow inspection and excavation may begin no more than seven (7) days in advance of construction activities, as long as a final check for desert tortoises is conducted at the time of construction.
- All pre-construction activities which could Take tortoises in any manner (e.g., driving off an established road, clearing vegetation, etc.) shall occur under the overall supervision of an Acceptable Biologist. Any hazards to tortoises created by this activity, such as drill holes, open trenches, pits, other excavations, or any steep-sided depressions, shall be checked three times a day for desert tortoises. These hazards shall be eliminated each day prior to the work crew leaving the site, which may include installing a barrier that will preclude entry by tortoises. Open trenches, pits or other excavations will be backfilled within 72 hours, whenever possible. A 3:1 slope shall be left at the end of every open trench to allow trapped desert tortoises to escape. Trenches not backfilled within 72 hours shall have a barrier installed around them to preclude entry by desert tortoises. All trenches, pits, or other excavations shall be inspected for tortoises by a biological monitor trained and approved by the Acceptable Biologist prior to filling.
- If a desert tortoise is found, the biological monitor shall notify the Acceptable Biologist who will remove the animal as soon as possible.
- Only burrows within the limits of clearing and surface disturbance shall be excavated. Burrows outside these limits, but at risk from accidental crushing, shall be protected by the placement of deterrent barrier fencing between the burrow and the construction area. The barrier fence shall be at least 20 feet long and shall be installed to direct the tortoise leaving the burrow away from the construction area. Installation and removal of such barrier fencing shall be under the direction and supervision of the biological monitor.
- If blasting is necessary for construction, all tortoises shall be removed from burrows within 100 feet of the blast area.

Disposition of Sick, Injured, or Dead Specimens. Upon locating dead, injured, or sick desert tortoises under any utility or road project, initial notification by the contact representative or Acceptable Biologist must be made to the USFWS or CDFG within three (3) working days of its finding. Written notification must be made within five (5) calendar days with the following information: date; time; location of the carcass; photograph of the carcass; and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care. Injured animals shall be taken care of by the Acceptable Biologist or an appropriately trained

veterinarian. Should any treated tortoises survive, USFWS or CDFG should be contacted regarding the final disposition of the animals.

Fluvial Sand Transport. Activities, including O&M of facilities and construction of permitted new projects, in fluvial sand transport areas in the Cabazon, Stubbe and Cottonwood Canyons, Snow Creek/Windy Point, Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, Mission Creek/Morongo Wash, Willow Hole, Long Canyon, Edom Hill, Thousand Palms, West Deception Canyon, and Indio Hills/Joshua Tree National Park Linkage Conservation Areas will be conducted in a manner to maintain the fluvial sand transport capacity of the system.

Le Conte's Thrasher. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. In modeled Le Conte's thrasher Habitat in all the Conservation Areas, during the nesting season, January 15 - June 15, prior to the start of construction activities, surveys will be conducted by an Acceptable Biologist on the construction site and within 500 feet of the construction site, or to the property boundary if less than 500 feet. If nesting Le Conte's thrashers are found, a 500 foot buffer, or to the property boundary if less than 500 feet, will be established around the nest site. The buffer will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15 - June 15 or until the young have fledged.

Mesquite Hummocks and Mesquite Bosque Natural Communities. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. Construction activities in the Cabazon, Willow Hole, Thousand Palms, Indio Hills Palms, East Indio Hills, Dos Palmas, Coachella Valley Stormwater Channel and Delta, and Santa Rosa and San Jacinto Mountains Conservation Areas will avoid mesquite hummocks and mesquite bosque to the maximum extent Feasible.

Peninsular Bighorn Sheep Habitat. Completion of Covered Activities in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas will be conducted outside of the January 1 - June 30 lambing season unless otherwise authorized through a Minor Amendment to the Plan with concurrence from the Wildlife Agencies. O&M of Covered Activities, including but not limited to refinishing the inside of water storage tanks, shall be scheduled to avoid the lambing season, but may extend into the January 1 – June 30 period if necessary to complete the activity, upon concurrence with the Wildlife Agencies.

For new projects in the above listed Conservation Areas, no toxic or invasive plant species may be used for landscaping. For existing public infrastructure facilities which have landscaping in Peninsular bighorn sheep Habitat in the Cabazon, Snow Creek/Windy Point, and Santa Rosa and San Jacinto Mountains Conservation Areas, the

Permittees who have such facilities will, with respect to those facilities, develop and implement a plan and schedule to remove or prevent access to oleander and any other plants known to be toxic to Peninsular bighorn sheep. The plan and schedule will be prepared within one (1) year of Permit issuance.

Triple-ribbed milkvetch. This measure does not apply to single-family residences and any non-commercial accessory uses and structures including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. It is understood that O&M for infrastructure developed as part of a private development approved in compliance with the MSHCP that is later transferred to a public entity is included as a Covered Activity. For Covered Activities within modeled triple-ribbed milkvetch Habitat in the Whitewater Canyon, Whitewater Floodplain, Upper Mission Creek/Big Morongo Canyon, and Santa Rosa and San Jacinto Mountains Conservation Areas, surveys by an Acceptable Biologist will be required for activities during the growing and flowering period from February 1 - May 15. Any occurrences of the species will be flagged and public infrastructure projects shall avoid impacts to the plants to the maximum extent Feasible. In particular, known occurrences on a map maintained by CVCC shall not be disturbed.

Palm Springs Pocket Mouse. To avoid impacts to the Palm Springs pocket mouse and its habitat in the Upper Mission Creek/Big Morongo Canyon and Willow Hole Conservation Areas, Flood Control-related construction activities will comply with the following avoidance and minimization measures.

- **Clearing**: For construction that would involve disturbance to Palm Springs pocket mouse habitat, activity should be phased to the extent feasible and practicable so that suitable habitat islands are no farther than 300 feet apart at any given time to allow pocket mice to disperse between habitat patches across non-suitable habitat (i.e., unvegetated and/or compacted soils). Prior to project construction, a biological monitor familiar with this species should assist construction crews in planning access routes to avoid impacts to occupied habitat as much as feasible (i.e., placement of preferred routes on project plans and incorporation of methods to avoid as much suitable habitat/soil disturbance as possible). Furthermore, during construction activities, the biological monitor will ensure that connected, naturally vegetated areas with sandy soils and typical native vegetation remain intact to the extent feasible and practicable. Finally, construction that involves clearing of habitat should be avoided during the peak breeding season (approximately March to May), and activity should be limited as much as possible during the rest of the breeding season (January to February and June to August).
- **Revegetation**: Clearing of native vegetation (e.g., creosote, rabbitbrush, burrobush, cheesebush) should be followed by revegetation, including natural reestablishment and other means, resulting in habitat types of equal or superior biological value for Palm Springs pocket mouse.
- **Trapping/Holding**: All trapping activity should be conducted in accordance with accepted protocols and by a qualified biologist who possesses a Memorandum of

Understanding with CDFG for live-trapping of heteromyid species in Southern California.

- **Translocation**: Should translocation between distinct population groups be necessary, as determined through the Adaptive Management and Monitoring Program, activity should be conducted by a qualified biologist who possesses a Memorandum of Understanding with CDFG for live-trapping of heteromyid species in Southern California. Trapping and subsequent translocation activity should be conducted in accordance with accepted protocols. Translocation programs should be coordinated by or conducted by the CVCC and/or RMOC to determine the appropriate trapping, holding, marking, and handling methods and potential translocation sites.

Little San Bernardino Mountains Linanthus. This measure does not apply to single-family residences and any non-commercial accessory uses and structures, including but not limited to second units on an existing legal lot, or to O&M of Covered Activities. To avoid and minimize impacts to this species as much as possible, the following avoidance and minimization effort shall occur:

- **Salvage**: Salvage of top soil and/or seeds should occur prior to ground disturbance in accordance with Section 6.6.1. Salvage should be conducted by or in cooperation with the CVCC.

Appendix C –

Cultural Resources Assessment

CULTURAL RESOURCES ASSESSMENT

Rancho Mirage Sheriff Facility Project
Rancho Mirage, Riverside County, California

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Project No. MBI2502

National Archaeological Data Base Information:
Type of Study: Cultural Resources Assessment
Resources Recorded: None
Keywords: Rancho Mirage
USGS Quadrangle: 7.5-minute *Cathedral City, California* (1981)

BCRCONSULTING LLC

March 17, 2026

MANAGEMENT SUMMARY

BCR Consulting LLC (BCR Consulting) is under contract to Michael Baker International to conduct a Cultural Resources Assessment of the Rancho Mirage Sheriff Facility (project) in the City of Rancho Mirage (City), Riverside County, California. The work is being performed pursuant to the California Environmental Quality Act (CEQA). A cultural resources records search, pedestrian field survey, Sacred Lands File search with the Native American Heritage Commission (NAHC), and paleontological overview were conducted for the project.

The records search revealed that 33 cultural resource studies have taken place resulting in 15 cultural resources identified within one mile of the project site. Two of the previous studies have assessed a portion of the project site resulting in no cultural resources previously identified within its boundaries. During the field survey, BCR Consulting archaeologists did not identify any cultural resources (including prehistoric or historic-period archaeological sites or historic-period buildings) within the project boundaries.

The current study attempted to determine whether significant archaeological deposits were present on the proposed project site. Although no prehistoric archaeological resources were identified on the surface during the field survey, many others with significant buried components have been recorded nearby and ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. Therefore, BCR Consulting recommends that a qualified archaeological monitor be present during all earthmoving activities related to the proposed project. The monitor would work under the direct supervision of a cultural resources professional who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. Prior to ground disturbance work, the qualified archaeological monitor shall present construction personnel with a Worker Environmental Awareness Program (WEAP) Training. The monitor would be empowered to temporarily halt or redirect construction work in the vicinity of any find until the project archaeologist can evaluate it. In the event of a new find, salvage excavation and reporting will be required.

If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks.

Findings were negative during the Sacred Lands File search with the NAHC. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the lead agency will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff is available to answer questions and address concerns as necessary.

According to CEQA Guidelines, projects subject to CEQA must determine whether the project would "directly or indirectly destroy a unique paleontological resource". The Paleontological Overview provided in Appendix C has recommended that:

> The geologic units underlying this project are mapped as loose fine sand from the Holocene epoch (Dibblee and Minch 2008). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius.
>
> While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

TABLE OF CONTENTS

MANAGEMENT SUMMARY ii

INTRODUCTION 1

NATURAL SETTING 1

CULTURAL SETTING 1
PREHISTORY 1
ETHNOGRAPHY 4
HISTORY 4

PERSONNEL 5

METHODS 5
RESEARCH 5
FIELD SURVEY 6

RESULTS 6
RESEARCH 6
FIELD SURVEY 6

RECOMMENDATIONS 6

REFERENCES 9

APPENDICES

A: RECORDS SEARCH BIBLIOGRAPHY
B: PROJECT PHOTOGRAPHS
C: PALEONTOLOGICAL OVERVIEW
D: NAHC SACRED LANDS FILE SEARCH

FIGURES

1: Project Location Map 2

TABLES

A: Cultural Resources and Reports Located within One Mile of the Project Site 6

INTRODUCTION

BCR Consulting LLC (BCR Consulting) is under contract to Michael Baker International to conduct a Cultural Resources Assessment of the Rancho Mirage Sheriff Facility Project (project) in the City of Rancho Mirage (City), Riverside County, California. The work is being performed pursuant to the California Environmental Quality Act (CEQA). A cultural resources records search, pedestrian field survey, Sacred Lands File search with the Native American Heritage Commission (NAHC), and paleontological overview were conducted for the project. The project site is located in Section 30 of Township 4 South, Range 6 East, San Bernardino Baseline and Meridian. It is depicted on the United States Geological Survey (USGS) *Cathedral City, California* (1981) 7.5-minute topographic quadrangle (Figure 1).

NATURAL SETTING

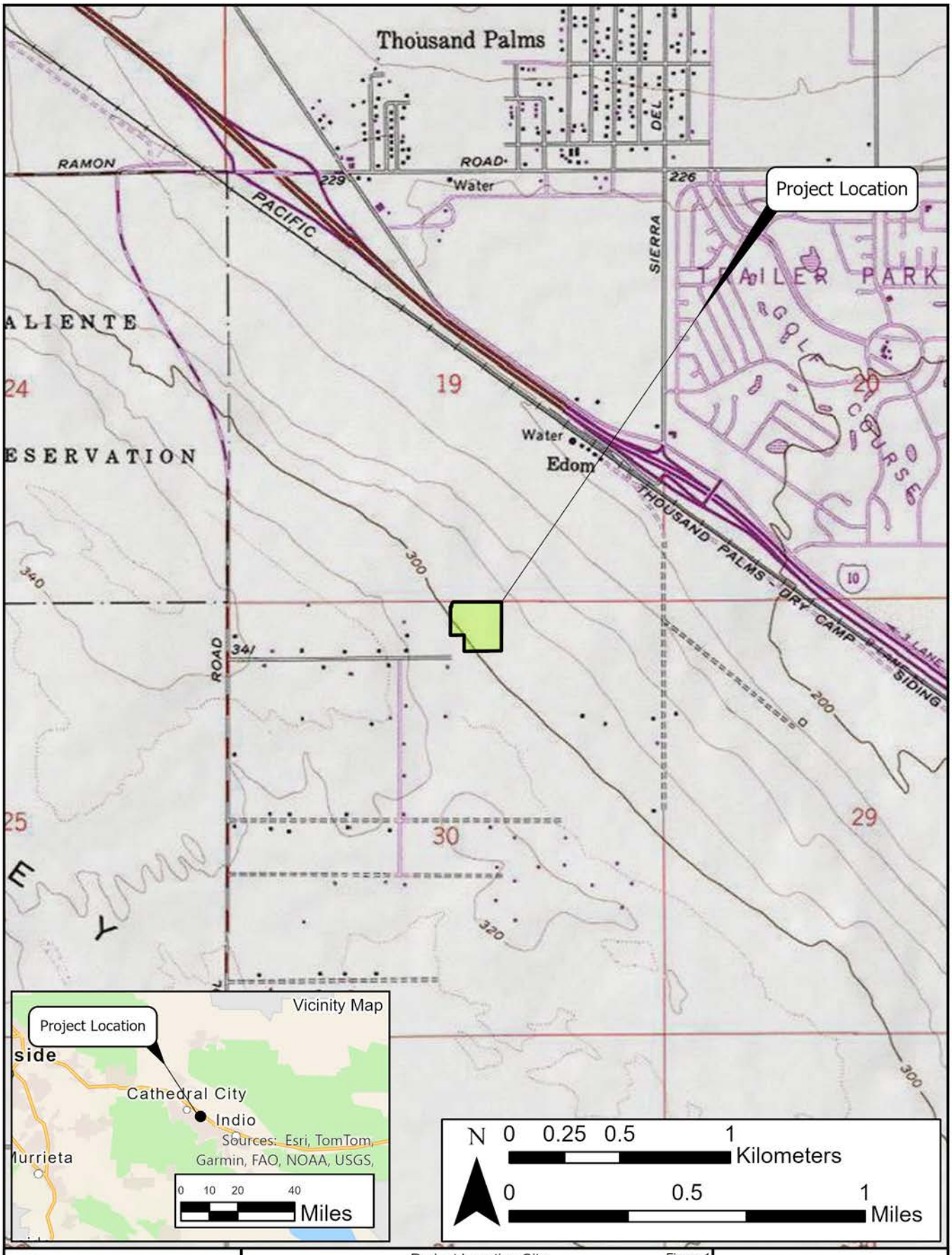
The elevation of the project site is 275 to 295 feet above mean sea level (AMSL). The region is characterized by an arid climate with dry, hot summers and mild winters. Annual rainfall averages 2-5 inches (Jaeger and Smith 1971), and usually occurs as winter rain and monsoonal summer showers. The project site conveys water in a north-easterly direction. It is approximately 3.13 miles northwest of the Whitewater River. Local sediments retain a high water-holding capacity and contained the huge lake between circa A.D. 900 and 1500 during its most recent stand (Wilke 1978). The oldest local rocks are Precambrian and are derived from the San Gorgonio complex. They are intruded by Cactus Granite, quartz monzonite, breccia, diorite porphyry, and plutonic rocks (Proctor 1968:9). Many lakes (now dry) in the Colorado Desert are thought to have supported small human populations during the terminal Pleistocene (22,000-11,000 years before present) and early Holocene (11,000-8,000 years before present). Since the desiccation of California's deserts during the later Holocene, local lakes have dried up and significant sand dunes have formed. Common local flora includes cacti, desert agave, cheesebush, catclaw acacia, creosote, and seasonal grasses. Common animals include coyotes, foxes, rabbits, rodents, ravens, and raptors (see Lightfoot and Parrish 2009:341-363).

CULTURAL SETTING

Prehistory

Various regional syntheses have been utilized in the archaeological literature for southern California. The following framework derives information from local studies to provide a useful overview for the project site.

Paleoindian (12,000 to 10,000 BP) and Lake Mojave (10,000 to 7,000 BP) Periods. Climatic warming characterizes the transition from the Paleoindian Period to the Lake Mojave Period. This transition also marks the end of Pleistocene Epoch and ushers in the Holocene. The Paleoindian Period has been loosely defined by isolated fluted (such as Clovis) projectile points, dated by their association with similar artifacts discovered in-situ in the Great Plains (Sutton 1996:227-228). Some fluted bifaces have been associated with fossil remains of Rancholabrean mammals approximately dated to ca. 13,300-10,800 BP near China Lake in the Mojave Desert. The Lake Mojave Period has been associated with



BCRCONSULTING LLC

Project Location Site
Rancho Mirage Sheriff Facility

Figure 1

Reference: ESRI; USGS Quad: Cathedral City, California (1981)

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cultural adaptations to moist conditions, and resource allocation pointing to more lacustrine environments than previously (Bedwell 1973). Artifacts that characterize this period include stemmed points, flake and core scrapers, choppers, hammerstones, and crescentics (Warren and Crabtree 1986:184). Projectile points associated with the period include the Silver Lake and Lake Mojave styles. Lake Mojave sites commonly occur on shorelines of Pleistocene lakes and streams, where geological surfaces of that epoch have been identified (Basgall and Hall 1994:69).

Pinto Period (7,000 to 4,000 BP). The Pinto Period has been largely characterized by desiccation of southern California. As formerly rich lacustrine environments began to disappear, the artifact record reveals more sporadic occupation of the drier regions, indicating occupants' recession into the cooler fringes (Warren 1984). Pinto Period sites are rare, and are characterized by surface manifestations that usually lack significant in-situ remains. Artifacts from this era include Pinto projectile points and a flake industry similar to the Lake Mojave tool complex (Warren 1984), though use of Pinto projectile points as an index artifact for the era has been disputed (see Schroth 1994). Milling stones have also occasionally been associated with sites of this period (Warren 1984).

Gypsum Period. (4,000 to 1,500 BP). A temporary return to moister conditions during the Gypsum Period is postulated to have encouraged technological diversification afforded by the relative abundance of available resources (Warren 1984:419-420; Warren and Crabtree 1986:189). Lacustrine environments reappear and begin to be exploited during this era (Shutler 1961, 1968). Concurrently a more diverse artifact assemblage reflects intensified reliance on plant resources. The new artifacts include milling stones, mortars, pestles, and a proliferation of Humboldt Concave Base, Gypsum Cave, Elko Eared, and Elko Corner-notched dart points (Warren 1984; Warren and Crabtree 1986). Other artifacts include leaf-shaped projectile points, rectangular-based knives, drills, large scraper planes, choppers, hammer stones, shaft straighteners, incised stone pendants, and drilled slate tubes. The bow and arrow appears around 2,000 BP, evidenced by the presence of a smaller type of projectile point, the Rose Spring point (Rogers 1939; Schroeder 1953, 1961; Shutler 1961; Yohe 1992).

Saratoga Springs Period (1,500 to 800 BP). During the Saratoga Springs Period regional cultural diversifications of Gypsum Period developments are evident. Influences from Patayan/Yuman assemblages are apparent in the southern inland areas, and include buff and brown wares often associated with Cottonwood and Desert Side-notched projectile points (Warren 1984:423). Obsidian becomes more commonly used throughout southern California and characteristic artifacts of the period include milling stones, mortars, pestles, ceramics, and ornamental and ritual objects. Large villages evidence more structured settlement patterns, and three types of identifiable archaeological sites (major habitation, temporary camps, and processing stations) emerge (McGuire and Hall 1988). Diversity of resource exploitation continues to expand, indicating a much more generalized, somewhat less mobile subsistence strategy.

Shoshonean Period (800 BP to Contact). The Shoshonean period is the first to benefit from contact-era ethnography –and is subject to its inherent biases. Interviews of living informants allowed anthropologists to match artifact assemblages and particular traditions

with linguistic groups, and plot them geographically (see Kroeber 1925; Gifford 1918). During the Shoshonean Period, continued diversification of site assemblages and reduced Anasazi and Yuman influence both coincide with the expansion of Numic (Uto-Aztecan language family) speakers across the Great Basin, Takic (also Uto-Aztecan) speakers into southern California, and the Hopi across the Southwest (Sutton 1996). Hunting and gathering continued to diversify, and the diagnostic arrow points include desert side-notch and cottonwood triangular, which have been locally recorded. Ceramics continue to proliferate, though are more common in the desert during this period (Warren and Crabtree 1986). Trade routes have become well established between coastal and inland groups during this period.

Ethnography

The project site is situated in an area occupied by the Cahuilla. The Cahuilla were semi-nomadic hunter-gatherers who spoke a Cupan variation of the Takic language subfamily. Spanish missionaries first encountered the Cahuilla in the late 18th century. Early written accounts of the Cahuilla are attributed to mission fathers; later documentation was by Strong (1972), Bright (1998), and others. The territory of the Cahuilla ranges from the area near the Salton Sea up into the San Bernardino Mountains and San Gorgonio Pass (Bean and Smith 1978; Kroeber 1925). The Cahuilla are generally divided into three groups: Desert Cahuilla, Mountain Cahuilla, and Western (or Pass) Cahuilla (Kroeber 1925). The term Western Cahuilla is preferred over Pass Cahuilla because this group is not confined to the San Gorgonio Pass area (Bean and Smith 1978). The distinctions are believed to be primarily geographic, although linguistic and cultural differences may have existed to varying degrees (Strong 1972). Cahuilla territory lies within the geographic center of Southern California and the Cocopa-Maricopa Trail, a major prehistoric trade route, ran through it. The Cahuilla share a common tradition with Gabrielino, Serrano, and Luiseño, with whom they shared tribal boundaries to the west, north, and southwest respectively (Bean and Smith 1978:575). The Cahuilla situated their villages in close proximity to reliable water sources. Subsistence was based on a combination of hunting, gathering, and a sort of proto-agriculture that produced corn, beans, squash, and melons. The diverse habitat of the Cahuilla allowed significant yields of their most important staples, which included acorns from six varieties of oak, piñon nuts, screw bean mesquite, and various cacti (Bean and Smith 1978:578; see also Lightfoot and Parrish 2009).

History

In southern California, the historic era is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present). These periods are each represented in the history of the San Gorgonio pass, summarized below.

Spanish Period. The first European to pass through the vicinity is thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up quarters at the Mission San Gabriel in 1771 near what today is Pasadena (Beck and Haase 1974). Garces was followed by Alta California Governor Pedro Fages, who briefly explored the region in 1772. Searching for

San Diego Presidio deserters, Fages had traveled through Riverside to San Bernardino, crossed over the mountains into the Mojave Desert, and then journeyed westward to the San Joaquin Valley (Beck and Haase 1974).

Mexican Period. In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes (Beattie and Beattie 1974).

American Period. The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by a significant drought diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that have continued to proliferate to this day (Beattie and Beattie 1974; Cleland 1941).

PERSONNEL

David Brunzell, M.A., RPA acted as the Principal Investigator for the current study. Joseph Orozco, M.A., RPA, acted as the Project Manager and compiled the technical report with contributions by BCR Consulting Staff Archaeologist George Brentner, B.A. BCR Consulting Field Director Timothy Blood, M.S., completed the cultural resources records search at the South Coastal Information Center (SCIC) at San Diego State University. Mr. Brentner and BCR Consulting Staff Archaeologist Eduardo Gutierrez B.S., completed the cultural resources field survey.

METHODS

Research

The records search was completed at the SCIC. This records search included a review of all recorded historic and prehistoric cultural resources, as well as a review of known cultural resources, and survey and excavation reports generated from projects located within one mile of the project site. In addition, a review was conducted of the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and documents and inventories from the California Office of Historic Preservation including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

Field Survey

An archaeological pedestrian field survey of the project site was conducted on December 17, 2025. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across 100 percent of the proposed project site. Soil exposures, including natural and artificial clearings were carefully inspected for evidence of cultural resources.

RESULTS

Research

Data from the SCIC revealed that 33 cultural resource studies have taken place resulting in 15 cultural resources identified within one mile of the project site. Two of the previous studies have assessed portions of the project site resulting in no cultural resources previously identified within its boundaries. The records search results are summarized in Table A and the records search bibliography is provided in Appendix A.

Table A. Cultural Resources and Reports Located Within One Mile of the Project Site

USGS Quad	Cultural Resources	Cultural Resource Reports
Cathedral City (1981), California	P-33-3440: Historic-Period Dump/Road (0.5 Mile NE) P-33-5625: Historic-Period Old Kubic Ranch (0.40 Mile NE) P-33-9498: Historic-Period Railroad Segment (0.30 Mile N) P-33-9748: Historic-Period Site (1 Mile NW) P-33-10953: Historic-Period Site (0.80 Mile W) P-33-10954: Historic-Period Site (0.60 Mile NW) P-33-10955: Historic-Period Site (0.80 Mile NW) P-33-10956: Historic-Period Site (0.75 NW) P-33-17005: Historic-Period Railroad Site (0.60 Mile N) P-33-17007: Prehistoric Ground Stone (0.80 Mile NW) P-33-17009: Prehistoric Cremation Site (0.60 Mile NW) P-33-17010: Prehistoric Burial Site (0.5 Mile N) P-33-17011: Prehistoric Multicomponent Site (0.5 Mile N) P-33-17012: Prehistoric Multicomponent Site (0.5 Mile NW) P-33-26824: Historic-Period Site (0.40 Mile N)	RI-1122*, 1271, 1351, 1403, 1749, 1871, 2210, 3284, 4117, 4547*, 5374, 5904, 6258, 6854, 6991, 7004, 7187, 7304, 7344, 7720, 7756, 9016, 9151, 9250, 9366, 9870, 9874, 10249, 10299, 10389, 10550, 10551, 11067

*Previously assessed a portion of the project site

Field Survey

During the field survey, BCR Consulting personnel carefully inspected the project site, and identified no cultural resources within project site boundaries. Surface visibility was 98 percent. Vegetation is characterized by creosote scrubland. No cultural resources (including prehistoric or historic-period archaeological sites or historic-period buildings) were identified during the field survey. The project site has been subjected to sheetwashing, modern dumping, and minor off-road vehicle traffic.

RECOMMENDATIONS

The current study attempted to determine whether significant archaeological deposits were present on the proposed project site. Although no prehistoric archaeological resources were identified on the surface during the field survey, many others with significant buried components have been recorded nearby and ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. Therefore, BCR Consulting recommends that a qualified archaeological monitor be present during all earthmoving

activities related to the proposed project. The monitor would work under the direct supervision of a cultural resources professional who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. Prior to ground disturbance work, the qualified archaeological monitor shall present construction personnel with a Worker Environmental Awareness Program (WEAP) Training. The monitor would be empowered to temporarily halt or redirect construction work in the vicinity of any find until the project archaeologist can evaluate it. In the event of a new find, salvage excavation and reporting will be required.

If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks.

Findings were negative during the Sacred Lands File search with the NAHC. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the lead agency will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff is available to answer questions and address concerns as necessary.

According to CEQA Guidelines, projects subject to CEQA must determine whether the project would "directly or indirectly destroy a unique paleontological resource". The Paleontological Overview provided in Appendix C has recommended that:

The geologic units underlying this project are mapped as loose fine sand from the Holocene epoch (Dibblee and Minch 2008). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius.

While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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APPENDIX A

RECORDS SEARCH BIBLIOGRAPHY

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-01122	NADB-R - 1081222; Voided - MF-1063	1981	Christopher E. Drover	Environmental Impact Evalaution: Archaeological Assessment of the Proposed Extenstions of the Monterey and 34th Avenues Near Thousand Palms, California	Consulting Archaeologist	
RI-01271	NADB-R - 1081436; Voided - MF-1268	1981	James D. Swenson	Environmental Impact Evaluation: An Archaeological Assessment of a Portion of the N 1/2 of Section 29, T4S, R6E, SBBM, Coachella Valley, Riverside County, California	Archaeological Research Unit, U.C. Riverside	
RI-01351	NADB-R - 1081529; Voided - MF-1356	1981	James D. Swenson	Environmental Impact Evalution: An Archaeological Assessment of the Proposed Sunline Maintenance Facility Site Near Thousand Palms, Riverside County, California.	Archaeological Research Unit, U.C. Riverside.	
RI-01403	NADB-R - 1081645; Voided - MF-1467	1982	DAVIS, ALAN	AN ARCHAEOLOGICAL ASSESSMENT OF A PORTION OF THE AGUA CALIENTE INDIAN RESERVATION, RIVERSIDE COUNTY, CALIFORNIA	ARCHAEOLOGICAL RESEARCH UNIT, U.C. RIVERSIDE	
RI-01749	NADB-R - 1082095; Voided - MF-1893	1984	COTTRELL, MARIE	CULTURAL RESOURCE ASSESSMENT OF THE THOUSAND PALMS INDUSTRIAL TRACT WATER SYSTEM IMPROVEMENTS	ARCHAEOLOGICAL RESOURCE MANAGEMENT CORPORATION, Garden Grove, CA	
RI-01871	NADB-R - 1082246; Voided - MF-2031	1984	PADON, BETH	ARCHAEOLOGICAL RESOURCE ASSESMENT - 130 ACRE PARCEL ALONG BOB HOPE DRIVE, RIVERSIDE COUNTY, CALIFORNIA	LSA, INC.	
RI-02210	NADB-R - 1082640; Voided - MF-2396	1986	UNDERWOOD, J., J. CLELAND, C.M. WOOD, and R. APPLE	Preliminary Cultural Resources Survey Report for the Us Telecom Fiber Optic Cable Project, From San Timoteo Canyon to Socorro, Texas: The California Segment	DAMES AND MOORE	33-000053, 33-000159, 33-000893, 33-001634, 33-001767, 33-001768, 33-003075, 33-003076, 33-003077, 33-012818, 33-012819, 33-012820, 33-012821
RI-03284	NADB-R - 1083880; Submitter - 1146; Voided - MF-3517	1991	TORRES, JOHN, JOAN SCHNEIDER, and BRUCE LOVE	CULTURAL RESOURCES ASSESSMENT, TENTATIVE TRACT 26763 (APN 619-540-014, -015)	ARCHAEOLOGICAL RESEARCH UNIT, U.C. RIVERSIDE	
RI-04117	NADB-R - 1085305; Voided - MF-4592	1998	MASON, ROGER, PHILIPPE LAPIN, and BRANT A. BRECHBIEL	CULTURAL RESOURCES RECORDS SEARCH AND SURVEY FOR A PACIFIC BELL MOBILE SERVICES TELECOMMUNICATIONS FACILITY: CM 202-02	CHAMBER GROUP, INC.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-04547	NADB-R - 1085908; Submitter - 00-1738	2001	BROWN, JOAN C.	A CULTURAL RESOURCES RECONNAISSANCE FOR THE WIDENING OF BOB HOPE AND DINAH SHORE DRIVES, LOCATED IN RIVERSIDE COUNTY, CALIFORNIA	RMW PALEO ASSOCIATES, INC.	
RI-05374	NADB-R - 1086737; Submitter - CRM TECH Contract #732	2001	LOVE, BRUCE, BAI TOM TANG, MICHAEL HOGAN, and DANIEL BALLESTER	IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES, RELOCATION OF FIVE OUTDOOR ADVERTISING SIGNBOARDS, ON BOB HOPE DRIVE, CITY OF RANCHO MIRAGE, RIVERSIDE COUNTY, CA	CRM TECH, Riverside, CA	
RI-05904	NADB-R - 1087267; Submitter - CRM TECH Contract #846	2002	HOGAN, MICHAEL, BAI TANG, DANIEL BALLESTER, and MARIAM DAHDUL	HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT, MONTEREY PALMS PROJECT, NEAR THE COMMUNITY OF THOUSAND PALMS, RIVERSIDE COUNTY, CA	CRM TECH, Riverside, CA	
RI-06258	NADB-R - 1087621	2006	Chambers Group, Inc., Irvine, CA	Cultural Resources Survey Report: Union Pacific Railroad, Fingal-Thermal Phase II Expansion, Riverside County, California	Chambers Group, Inc., Irvine, CA	33-000178, 33-003441, 33-009498, 33-010815
RI-06854	Submitter - RMW Project Number 00-1738	2000	Brown, Joan C.	A Cultural Resources Reconnaissance for the Widening of Bob Hope Drive, Located in Riverside County, California	RMW Paleo Associates, Incorporated, Mission Viejo, CA	
RI-06991	Caltrans - EA 0F0500	2005	Shepard, Richard S.	Historic and Archaeological Property Survey Report (Improvements to the Interstate 10/Monterey Avenue Interchange in the Palm Desert/Thousand Palms Area of Riverside County)	BonTerra Consulting, Costa Mesa, CA	
RI-07004		2001	Wahoff, Tanya and Rebecca Apple	Cultural Resource Survey for the Proposed Golden Ridge Resort and Spa Project, Riverside County, California	EDAW, Inc.	33-010953, 33-010954, 33-010955, 33-010956, 33-010957
RI-07187	Submitter - GTI130	2002	Duke, Curt	Cultural Resource Assessment: AT&T Wireless Services, Facility No. D401B, Riverside County, California	LSA Associates	
RI-07304		2006	Wayne H. Bonner and Marnie Aislin-Kay	Cultural Resource Records Search and Site Visit Results for Sprint Nextel Telecommunications Facility Candidate CA5319B (U.U.), 72425 Via Vail, Rancho Mirage, Riverside County, California	Michael Brandman Associates	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-07344		2007	Schneeberger, Sandra L.	Phase I Cultural Resources Assessment of 5.45 +- Acres Tentative Commercial Parcel Map No. 34755 Thousand Palms, Riverside County, California APN 653-020-060 and a portion of APN 653-020-070	Golden State Environmental, Inc.	
RI-07720		2007	Padon, Beth	CULTURAL RESOURCES ASSESSMENT FOR THE SECTION 19 SPECIFIC PLAN AREA (268 ACRES), CITY OF RANCHO MIRAGE, RIVERSIDE COUNTY, CALIFORNIA	Discovery Works, Inc.	33-009747, 33-009748, 33-017005, 33-017006, 33-017007, 33-017008, 33-017009, 33-017010, 33-017011, 33-017012
RI-07756		2008	George, Joan	PHASE-I CULTURAL RESOURCES SURVEY WELL 4615-1 PROJECT, RANCHO MIRAGE, CALIFORNIA	Applied EarthWorks, Inc.	
RI-09016	Other - Federal Project o. STPL 5412 (011); Submitter - CRM TECH Contract No. 2681	2013	Michael Hogan	ARCHAEOLOGICAL SURVEY REPORT, SOUTHBOUND MONTEREY AVENUE WIDENING PROJECT, Dinah Shore Drive to Gerald Ford Drive, City of Rancho Mirage, Riverside County, California	CRM Tech	
RI-09151		2014	Josh Smallwood, Joan George, and Nicholas F. Hearth	Class III Cultural Resources Survey for the Mission Hills Reservior Project, Near Thousand Palms, Riverside County, California.	Applied Earthworks, Inc.	33-008408, 33-009498, 33-009547, 33-015035, 33-023886, 33-023916, 33-023934, 33-023935
RI-09250		2013	Monica Strauss	Cultural Resources Monitoring Conducted for the Sunline Administration Building Project, June 12, 2013 through September 27, 2013	ESA	
RI-09366		2015	Bai "Tom" Tang and Michael Hogan	Phase I Historical Resources Survey Rancho Mirage Dog Park Project City of Rancho Mirage, Riverside County, California	CRM TECH	
RI-09870	Other - CRM TECH Contract No. 3075	2016	Bai "Tom" Tang	Phase 1 Historical/Archaeological Resources Survey Assessor's Parcel Numbers 694-130-016-021	CRM Tech	
RI-09874		2016	Bai "Tom" Tang, Jesse Yorck, Daniel Ballester, and Nina Gallardo	Phase I Historical/ Archaeological Resources Survey Monterey Medical Center Project Tentative Tract Map No. 37003, City of Rancho Mirage Riverside County, California	CRM Tech	
RI-10249	Other - HSIPL-5412 (014)	2017	Nicholas F. Hearth	Archaeological Survey Report Rancho Mirage Resignalization Project Highway 111/Bob Hope Drive/ Country Club Drive	DUKE CRM	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-10299		2015	Bai "Tom" Tang, Michael Hogan, Ben Kerridge, Daniel Ballester, and Nina Gallardo	IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES CHROMIUM-6 WATER TREATMENT FACILITIES PROJECT, COACHELLA VALLEY, RIVERSIDE COUNTY, CALIFORNIA	CRM TECH	
RI-10389	Other - CZ07893; Other - GPA01133; Other - SP 392	2018	BRIAN F SMITH	CULTURAL RESOURCES ADDENDUM REPORT FOR THE EVIEY PALMS PROJECT (GPA01133; SP 392; CZ07893), THOUSAND PALMS, RIVERSIDE COUNTY, CALIFORNIA	BRIAN F SMITH AND ASSOCIATES	
RI-10550		2018	Michael Hogan, Bai "Tom" Tang, and Terri Jacquemain	Attachment B Congestion Mitigation and Sand Fence Project Ramon Road and Dinah Shore Drive City of Rancho Mirage Riverside County, California	CRM TECH	33-017008
RI-10551		2018	Michael Hogan	Attachment E Post-Review Discovery and Monitoring Plan Congestion Mitigation and Sand Fence Project Ramon Road and Dinah Shore Drive City of Rancho Mirage Riversity County, California	CRM TECH	
RI-11067		2017	Bai Tang and Michael Hogan	Phase I Historical/Archaeological Resources Survey, Key Largo Project, Assessor's Parcel Nos. 685-010-004 and -005, City pof Palm Desert, Riverside County, California	CRM Tech	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-33-003440	CA-RIV-003440	Other - CRM TECH 2953; Other - MCI Site #3; Other - Edom Station	Structure, Site	Historic	AH04; AH07	1988 (R.M. Apple, T. Wahoff and K. Norwood, Dames & Moore, San Diego, CA.); 1990 (Brooke S. Arkush, Archaeological Research Unit, UC Riverside, CA.); 1999 (S. Ashkar and E. Prendergast, n/a); 2017 (Daniel Ballester, CRM TECH)	RI-02350, RI-02765, RI-04430
P-33-005625		Other - Site of Old Kubic Ranch	Site	Historic	AH11; HP33	1982 (Anne Carpenter, Riv. Co. Historical Comm.); 2004 (Richard S. Shepard, Bon Terra Consulting)	
P-33-009498	CA-RIV-006381	Other - Union Pacific Railroad, Southern Pacific Railroad; Other - C-Los Angeles-A-1; Other - UPRR, segment near Dillon Road and Grapefruit Blvd.; Other - SRI-5670; Other - S.P., L.A. and Salt Lake Railroad; Other - CA-IMP-3424H; National Register - 2CD for the Southern Pacific east of 62nd Ave segment; National Register - 1S for the 3751 Vine ST, Riverside segment	Structure	Historic	HP39	1966 (Ashkar, S., Jones & Stokes); 2003 (Carrie Chasteen, Myra L. Frank & Associates); 2005 (Taniguchi, Christeen, Galvin & Associates); 2009 (Wilson, S. and K. Chimel, ICF Jones & Stokes); 2012 (Scott Kremkau, SRI); 2015 (T. Baurley and J.M. Sanka, L&L Environmental, Inc.); 2016 (Daneil Leonard, HDR); 2017 (P. Moloney, R. Elder, W. Blodgett, Applied EarthWorks, Inc.)	RI-04427, RI-04430, RI-04771, RI-05452, RI-06258, RI-06259, RI-06583, RI-06615, RI-06707, RI-07288, RI-07586, RI-07770, RI-07802, RI-07970, RI-08012, RI-08374, RI-08491, RI-08538, RI-08581, RI-08844, RI-08861, RI-09151, RI-09167, RI-09734, RI-10040, RI-10374, RI-10435, RI-10652, RI-10798, RI-10806, RI-11171
P-33-009748	CA-RIV-006495H			Historic		2004 (Underwood, J., EDAW, Inc.); 2007 (Padon, Beth, Discovery Works)	RI-01404, RI-07720, RI-08861
P-33-010953		Voided - 33-015929; Other - GV-i-1	Other	Historic	AH16	2000 (T. Wahoff, J. Dellert, S. Diaz, B. Fitzsimmons, KEA Environmental, Inc.)	RI-07004
P-33-010954		Voided - 33-015930	Other	Historic			RI-07004
P-33-010955		Voided - 33-015391	Other	Historic			RI-07004
P-33-010956		Voided - 33-015932	Other	Historic	AH16	2000 (T. Wahoff, J. Dellert, S. Diaz, B. Fitzsimmons, KEA Environmental, Inc.)	RI-07004

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-33-017005	CA-RIV-008852	Other - Rancho Mirage Section 19, "Historic Railroad Industrial Site"	Site	Historic	AH04	2007 (Padon, Beth, Keith Hamm, and Doug McIntosh, Discovery Works)	RI-07720, RI-08861
P-33-017007	CA-RIV-008854	Other - Rancho Mirage Section 19, "Two Metate Site"	Site	Prehistoric	AP03	2007 (Padon, Beth, Keith Hamm, and Doug McIntosh, Discovery Works)	RI-07720, RI-08861
P-33-017009	CA-RIV-008856	Other - Prehistoric Cremation Site	Site	Prehistoric	AP09	2007 (Padon, Beth, Keith Hamm, and Doug McIntosh, Discovery Works)	RI-07720, RI-08861
P-33-017010	CA-RIV-008857	Other - Rancho Mirage Section 19, Blow Out Site with human remains	Site	Prehistoric	AP09	2007 (Padon, Beth, Keith Hamm, and Doug McIntosh, Discovery Works)	RI-07720, RI-08861
P-33-017011	CA-RIV-008858	Other - Rancho Mirage Section 19, "Keith's Prehistoric Site"	Site	Prehistoric	AP01; AP04	2007 (Padon, Beth, Keith Hamm, and Doug McIntosh, Discovery Works)	RI-07720, RI-08861
P-33-017012		Other - Isolate record for a pottery sherd	Other	Prehistoric	AP01; AP03	2007 (Padon, Beth, Keith Hamm, and Doug McIntosh, Discovery Works)	RI-07720, RI-08861
P-33-026824	CA-RIV-012609	Other - CRM Tech 3221-1H	Site	Historic	AH04	2017 (Daniel Ballester and Ben Kerridge, CRM Tech)	

APPENDIX B

PROJECT PHOTOGRAPHS



Photo 1: Overview of Project Site From Southwest Corner (View ENE)



Photo 2: Overview of Project Site from Southeast Corner (View W)



Photo 3: Overview of Project Site from Northeast Corner (View WSW)



Photo 4: Overview from Northwest Corner (View S)

APPENDIX C

PALEONTOLOGICAL OVERVIEW

WESTERN SCIENCE CENTER

March 13th, 2026

BCR Consulting, LLC
John JP G. Defachelle Jr.
505 W. 8th St.
Claremont, CA 91711

Dear Mr. Defachelle,

This letter presents the results of a record search conducted for the Sheriff Facility Rancho Mirage Project located in the city of Rancho Mirage, Riverside County, CA. The project site is located south of Dinah Shore Drive and east of Key Largo Avenue on Township 4 South, Range 6 East, Section 30 on the *Cathedral City, CA* USGS 7.5 minute quadrangle.

The geologic units underlying this project are mapped as loose fine sand from the Holocene epoch (Dibblee and Minch 2008). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius.

While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If you have any questions, or would like further information, please feel free to contact me at bstoneburg@westerncentermuseum.org.

Sincerely,

Brittney Elizabeth Stoneburg, MSc
Collections Manager

Sheriff Facility Rancho Mirage Project

project area + 1 mile radius

Legend

- 1 Mile Radius
- Q: Quaternary alluvium and marine deposits (Pliocene to Holocene)
- Qs: Quaternary sand deposits, unit 2 (inland) (Quaternary)
- Sheriff Facility Rancho Mirage Project

Thousand Palms
Ramon Rd
In-N-Out Burger
EDOM
Costco Wholesale
Walmart Supercenter
Monterey Ave
Garden of Eden
Ramon Rd
Ramon Rd
Dinah Shore Dr
Mission Hills Country Club
Da Vall Dr
Gerald Ford Dr
Marriott's Shadow Ridge Golf Club
Portola Rd
Gerald Ford Dr
Classic Club
Homewood Suites by Hilton Palm Desert
SPANISH WALK
Da Vall Dr
Bob Hope Dr
Frank Sinatra Dr
Frank Sinatra Dr
Frank Sinatra Dr
Coachella Valley Nat
Willis Palms
Google Earth
1 mi
N

APPENDIX D

NAHC SACRED LANDS FILE SEARCH

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Isaac Bojorquez
Ohlone-Costanoan

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Sara Dutschke
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COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Andrew Alejandre
Paskenta Band of Nomlaki Indians

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

December 23, 2025

John JP G Defachelle Jr
BCR Consulting, LLC

Via Email to: bcrllc2008@gmail.com

Re: Sheriff Facility Project, Riverside County

To Whom It May Concern:

As requested, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on information submitted for the above referenced project. The results were negative. Be aware that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, an SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area.

Attached is a list of Native American tribes that are traditionally and culturally affiliated with the project's geographic area. Please contact all of the listed tribes as they may have information about sacred sites within the project area that is not listed with the NAHC.

If within two weeks of notification, a response has not been received, the Commission requests that you follow up with a telephone call or email to ensure that the project information was received.

If you receive notification of a change of address or phone number from a tribe, please inform the NAHC so that we can assure that our lists contain current information.

In addition to engaging in tribal consultation, you should consult the appropriate regional California Historical Research Information System (CHRIS) information center to determine whether it has information regarding the presence of recorded archaeological sites within the project area.

If you have any questions or need additional information, please contact me at Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Riverside County
12/23/2025

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Email Address	Cultural Affiliation	Last Updated
Agua Caliente Band of Cahuilla Indians	F	Lacy Padilla, Director of Historic Preservation/THPO	5401 Dinah Shore Drive Palm Springs, CA, 92264	(760) 333-5222	ACBCI-THPO@aguacaliente.net	Cahuilla	1/11/2024
Augustine Band of Cahuilla Indians	F	Tribal Operations,	84-001 Avenue 54 Coachella, CA, 92236	(760) 398-4722	info@augustinetribe-nsn.gov	Cahuilla	4/18/2024
Cabazon Band of Cahuilla Indians	F	Doug Welmas, Chairperson	84-245 Indio Springs Parkway Indio, CA, 92203	(760) 342-2593	jstapp@cabazonindians-nsn.gov	Cahuilla	
Cahuilla Band of Indians	F	BobbyRay Esparza, Cultural Director	52701 CA Highway 371 Anza, CA, 92539	(951) 763-5549	besparza@cahuilla-nsn.gov	Cahuilla	6/28/2023
Cahuilla Band of Indians	F	Erica Schenk, Chairperson	52701 CA Highway 371 Anza, CA, 92539	(951) 590-0942	chair@cahuilla-nsn.gov	Cahuilla	2/1/2024
Cahuilla Band of Indians	F	Anthony Madrigal, Tribal Historic Preservation Officer	52701 CA Highway 371 Anza, CA, 92539	(951) 763-5549	anthonymad2002@gmail.com	Cahuilla	6/28/2023
Fort Yuma Quechan Indian Tribe	F	Jill McCormick, Historic Preservation Officer	P.O. Box 1899 Yuma, AZ, 85365	(760) 919-3631	historicpreservation@quechantribe.com	Quechan	10/29/2025

Native American Heritage Commission
Native American Contact List
Riverside County
12/23/2025

Fort Yuma Quechan Indian Tribe	F	Jonathan Koteen, President	P.O.Box 1899 Yuma, AZ, 85365	(760) 919-3600	executivesecretary@quechantribe.com	Quechan	10/29/2025
Los Coyotes Band of Cahuilla and Cupeño Indians	F	Ray Chapparosa, Chairperson	P.O. Box 189 Warner Springs, CA, 92086-0189	(760) 782-0711		Cahuilla Cupeno	
Morongo Band of Mission Indians	F	Charles Martin, MBMI Chairman	12700 Pumarra Road Banning, CA, 92220	(951) 755-5110	chairman@morongo-nsn.gov	Cahuilla Serrano	11/21/2025
Morongo Band of Mission Indians	F	Lena Broderick, Executive Assistant to Tribal Chairman	12700 Pumarra Road Banning, CA, 92220	(951) 755-5110	lbroderick@morongo-nsn.gov	Cahuilla Serrano	11/21/2025
Morongo Band of Mission Indians	F	Bernadette Ann Brierty, Tribal Historic Preservation Officer	12700 Pumarra Road Banning, CA, 92220	(951) 663-2842	abrierty@morongo-nsn.gov	Cahuilla Serrano	11/21/2025
Ramona Band of Cahuilla	F	Joseph Hamilton, Chairperson	P.O. Box 391670 Anza, CA, 92539	(951) 763-4105	admin@ramona-nsn.gov	Cahuilla	
Ramona Band of Cahuilla	F	John Gomez, Environmental Coordinator	P. O. Box 391670 Anza, CA, 92539	(951) 763-4105	jgomez@ramona-nsn.gov	Cahuilla	8/16/2016
Santa Rosa Band of Cahuilla Indians	F	Steven Estrada, Tribal Chairman	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	sestrada@santarosa-nsn.gov	Cahuilla	4/8/2024
Santa Rosa Band of Cahuilla Indians	F	Vanessa Minott, Tribal Administrator	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	vminott@santarosa-nsn.gov	Cahuilla	4/8/2024
Santa Rosa Band of Cahuilla Indians	F	Mercedes Estrada, Cultural Director	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	mestrada@santarosa-nsn.gov	Cahuilla	5/21/2025

Native American Heritage Commission
Native American Contact List
Riverside County
12/23/2025

Soboba Band of Luiseno Indians	F	Joseph Ontiveros, Tribal Historic Preservation Officer	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-5279	jontiveros@soboba-nsn.gov	Cahuilla Luiseno	7/14/2023
Soboba Band of Luiseno Indians	F	Jessica Valdez, Cultural Resource Specialist	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-6261	jvaldez@soboba-nsn.gov	Cahuilla Luiseno	7/14/2023
Torres-Martinez Desert Cahuilla Indians	F	Mary Belardo, Cultural Committee Vice Chair	P.O. Box 1160 Thermal, CA, 92274	(760) 397-0300	belardom@gmail.com	Cahuilla	10/30/2023
Torres-Martinez Desert Cahuilla Indians	F	Gary Resvaloso, TM MLD	P.O. Box 1160 Thermal, CA, 92274	(760) 777-0365	grestmtm@gmail.com	Cahuilla	10/30/2023
Torres-Martinez Desert Cahuilla Indians	F	Thomas Tortez, Chairperson	P.O. Box 1160 Thermal, CA, 92274	(760) 397-0300	thomas.tortez@tmdci.org	Cahuilla	10/30/2023
Torres-Martinez Desert Cahuilla Indians	F	Abraham Becerra, Cultural Coordinator	P.O. Box 1160 Thermal, CA, 92274	(760) 397-0300	abecerra@tmdci.org	Cahuilla	10/30/2023
Torres-Martinez Desert Cahuilla Indians	F	Alesia Reed, Cultural Committee Chairwoman	P.O. Box 1160 Thermal, CA, 92274	(760) 397-0300	lisareed990@gmail.com	Cahuilla	10/30/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

Appendix D –

Geotechnical Investigation

Sladden Engineering

GEOTECHNICAL INVESTIGATION
PROPOSED COMMERCIAL DEVELOPMENT
APN 685-090-010
SEC DINAH SHORE DRIVE & KEY LARGO AVENUE
CITY OF RANCHO MIRAGE, CALIFORNIA

-Prepared By-

Sladden Engineering

45090 Golf Center Parkway, Suite F
Indio, California 92201
(760) 863-0713

Sladden Engineering

45090 Golf Center Parkway, Suite F, Indio, California 92201 (760) 863-0713 Fax (760) 863-0847
6782 Stanton Avenue, Suite C, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863
www.sladdenengineering.com

January 20, 2026

Project No. 544-26010
26-01-028

Riverside Sheriff Association
c/o Jose Santos
21810 Cactus Avenue
Riverside, California 92518

Subject: Geotechnical Investigation

Project: Proposed Commercial Development
APN 685-090-010
SEC Dinah Shore Drive & Key Largo Avenue
City of Rancho Mirage, California

Sladden Engineering is pleased to present the results of the geotechnical investigation performed for the proposed commercial development for the property located at the south east corner of Dinah Shore Drive and Key Largo Avenue in the City of Rancho Mirage, California. Our services were completed in accordance with our proposal for geotechnical engineering services revised January 8, 2026, and your authorization to proceed with the work. The purpose of our investigation was to explore the subsurface conditions at the site to provide recommendations for foundation design and the design of the various site improvements. Evaluation of environmental issues and hazardous wastes was not included within the scope of services provided. *It is our understanding that the proposed project is not subject to Division of State Architecture (DSA) or OSHPD review and approval.*

The opinions, recommendations and design criteria presented in this report are based on our field exploration program, laboratory testing and engineering analyses. Based on the results of our investigation, it is our professional opinion that the proposed project should be feasible from a geotechnical perspective provided that the recommendations presented in this report are implemented in design and carried out through construction.

We appreciate the opportunity to provide service to you on this project. If you have any questions regarding this report, please contact the undersigned.

Respectfully submitted,
SLADDEN ENGINEERING

Carolin Patino-Aguirre
Staff Geologist



Brett L. Anderson
Principal Engineer

SER/cpa

Copies: PDF/Addressee

GEOTECHNICAL INVESTIGATION
PROPOSED COMMERCIAL DEVELOPMENT
APN685-090-010
SEC DINAH SHORE DRIVE & KEY LARGO AVENUE
CITY OF RANCHO MIRAGE, CALIFORNIA

INTRODUCTION 1
PROJECT DESCRIPTION 2
SCOPE OF SERVICES 2
SITE CONDITIONS 3
GEOLOGIC SETTING 3
SUBSURFACE CONDITIONS 4
GROUNDWATER CONDITIONS 5
SEISMICITY AND FAULTING 6
GROUND MOTION PARAMETERS 7
GEOLOGIC HAZARDS 7
CONCLUSIONS 9
EARTHWORK AND GRADING 10
- Site Clearing 10
- Preparation of Building Areas 10
- Compaction 10
- Shrinkage and Subsidence 11

CONVENTIONAL SHALLOW SPREAD FOOTINGS 11
SLABS-ON-GRADE 12
RETAINING WALLS 13
CORROSION SERIES 13
UTILITY TRENCH BACKFILL 14
EXTERIOR CONCRETE FLATWORK 14
ON-SITE PAVEMENT DESIGN 15
DRAINAGE 15
LIMITATIONS 16
ADDITIONAL SERVICES 16
REFERENCES 17

PLATES - Site Location Map
Regional Geologic Map
Borehole Location Plan

APPENDIX A Field Exploration

APPENDIX B Laboratory Testing

APPENDIX C Seismic Design Map and Report

INTRODUCTION

This report presents the results of the geotechnical investigation performed by Sladden Engineering (Sladden) for the commercial development proposed for the property located at the southeast corner of Dinah Shore Drive & Key Largo Avenue in the City of Rancho Mirage, California. The site is located at approximately 33.8009 degrees north latitude and 116.3956 degrees west longitude. The approximate location of the site is indicated on the Site Location Map (Figure 1).

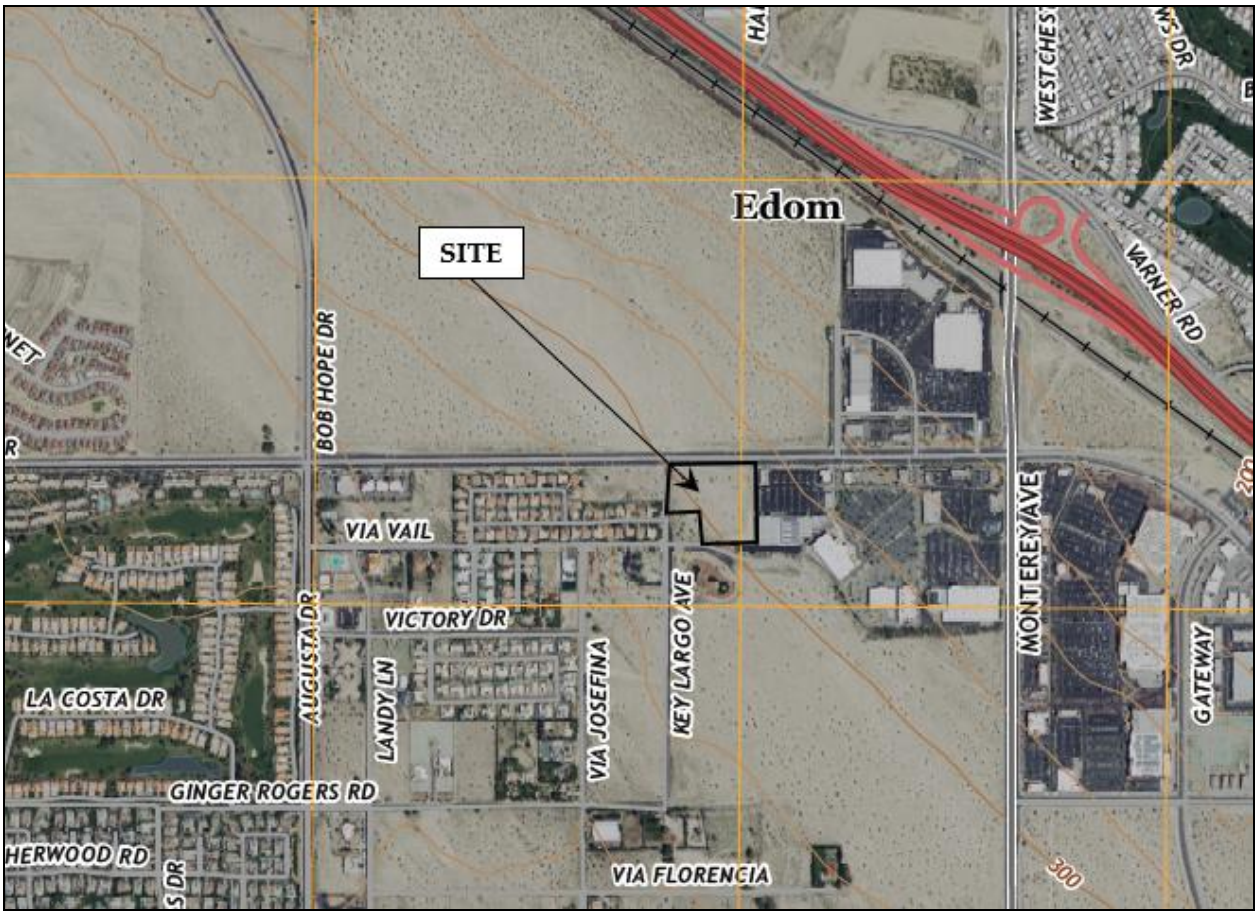


Figure 1 (USGS, 2012)

Our investigation was conducted to evaluate the engineering properties of the subsurface materials, to evaluate their *in-situ* characteristics, and to provide engineering recommendations and design criteria for site preparation, foundation design, and the design of various site improvements. This study also includes a review of published and unpublished geotechnical and geological literature regarding seismicity at and near the subject site.

PROJECT DESCRIPTION

Based on the provided plans (PVG Architects, 2026), the project will consist of constructing eight new commercial buildings. Underground utilities, paved parking, concrete flatwork, landscape areas, and various associated improvements are also anticipated. For our analyses, we expect that the new structures will consist of a relatively lightweight wood-frame or steel-frame, concrete tilt-up, or reinforced masonry structure supported on conventional shallow spread footings and concrete slabs on grade.

Based on the relatively level nature of the site, Sladden expects that grading will be limited to minor cuts and fills to accomplish the desired surface elevations and provide adequate gradients for site drainage. This does not include the removal and re-compaction of the loose surface soil and primary foundation-bearing soil within the proposed building and foundation areas. Upon completion of the precise grading plans, Sladden should be retained to verify that the recommendations presented within this report are properly incorporated into the design of the proposed project

Structural foundation loads were not available at the time of this report. Based on our experience with relatively lightweight structures, we expect that isolated column loads will be less than 50 kips and continuous wall loads will be less than 5.0 kips per linear foot. If the assumed loads vary significantly from the actual loads, we should be consulted to verify the applicability of the recommendations provided.

SCOPE OF SERVICES

The purpose of our investigation was to determine specific engineering characteristics of the surface and near-surface soil to develop foundation design criteria and recommendations for site preparation. Specifically, our site characterization consisted of the following tasks:

- Site reconnaissance to assess the existing surface conditions on and adjacent to the site.
- Drilling nine (9) exploratory boreholes/percolation test holes to depths ranging from approximately 5 and 51.5 feet bgs to characterize the subsurface soil conditions. Representative samples of the soil were classified in the field and retained for laboratory testing and engineering analyses.
- Performing laboratory testing on selected samples to evaluate their engineering characteristics.
- Reviewing geologic literature and discussing geologic hazards.
- Performing site-specific ground motion procedures for the subject property.
- Performing engineering analyses to develop recommendations for foundation design and site preparation.
- The preparation of this report summarizing our work at the site.

SITE CONDITIONS

The subject property is located at the southeast corner of Dinah Shore Drive and Key Largo Avenue in the City of Rancho Mirage, California. The subject property is formally identified by the County of Riverside as APN 685-090-010 and occupies a total area of approximately 8.02 acres. At the time of our investigation, the subject property was in a native condition, and the ground surface was covered in native low-growth desert vegetation. The subject site gradually descends in elevation to the northeast and is bounded by Dinah Shore Drive to the north, commercial development to the east, Via Vail to the south, and Key Largo to the west.

Based on our review of the Cathedral City 7.5-Minute Quadrangle Map (USGS, 2021) and (Google Earth, 2026), the site is situated at an approximate elevation between 290 and 277 feet above mean sea level (MSL).

No natural ponding of water or surface seeps were observed at or near the sites during our investigation conducted on January 15, 2026. Site drainage is controlled by sheet flow, surface infiltration and through City-maintained storm sewers located along nearby streets.

GEOLOGIC SETTING

The project site is located within the Colorado Desert Physiographic Province (also referred to as the Salton Trough) which is characterized as a northwest-southeast trending structural depression extending from the Gulf of California to the Banning Pass. The Salton Trough is dominated by several northwest-trending faults, most notably the San Andreas Fault system. The Salton Trough is bounded by the Santa Rosa-San Jacinto Mountains on the southwest, the San Bernardino Mountains on the north, the Little San Bernardino - Chocolate – Orocopia Mountains on the east, and extends through the Imperial Valley into the Gulf of California on the south.

A relatively thick sequence (20,000 feet) of sediment has been deposited in the Coachella Valley portion of the Salton Trough from Miocene to present times. These sediments are predominately terrestrial in nature with some lacustrine (lake) and minor marine deposits. The major contributor of these sediments has been the Colorado River. The mountains surrounding the Coachella Valley are composed primarily of Precambrian metamorphic and Mesozoic “granitic” rock.

The Salton Trough is an internally draining area with no readily available outlet to Gulf of California and with portions well below sea level (-253’ msl). The region is intermittently blocked from the Gulf of California by the damming effects of the Colorado River delta (current elevation +30’msl). Between about 300AD and 1600 AD (to 1700) the Salton Trough has been inundated by the River’s water, forming ancient Lake Cahuilla (max. elevation +58’ msl). Since that time the floor of the Trough has been repeatedly flooded with other “fresh” water lakes (1849, 1861, and 1891), the most recent and historically long-lived being the current Salton Sea (1905). The sole outlet for these waters is evaporation, leaving behind vast amounts of terrestrial sediment materials and evaporite minerals.

The site has been mapped by Dibblee & Minch (2008) to be immediately underlain by Quaternary-age dune sand (Qs). The regional geologic setting for the site vicinity is presented on the Regional Geologic Map (Figure 2).

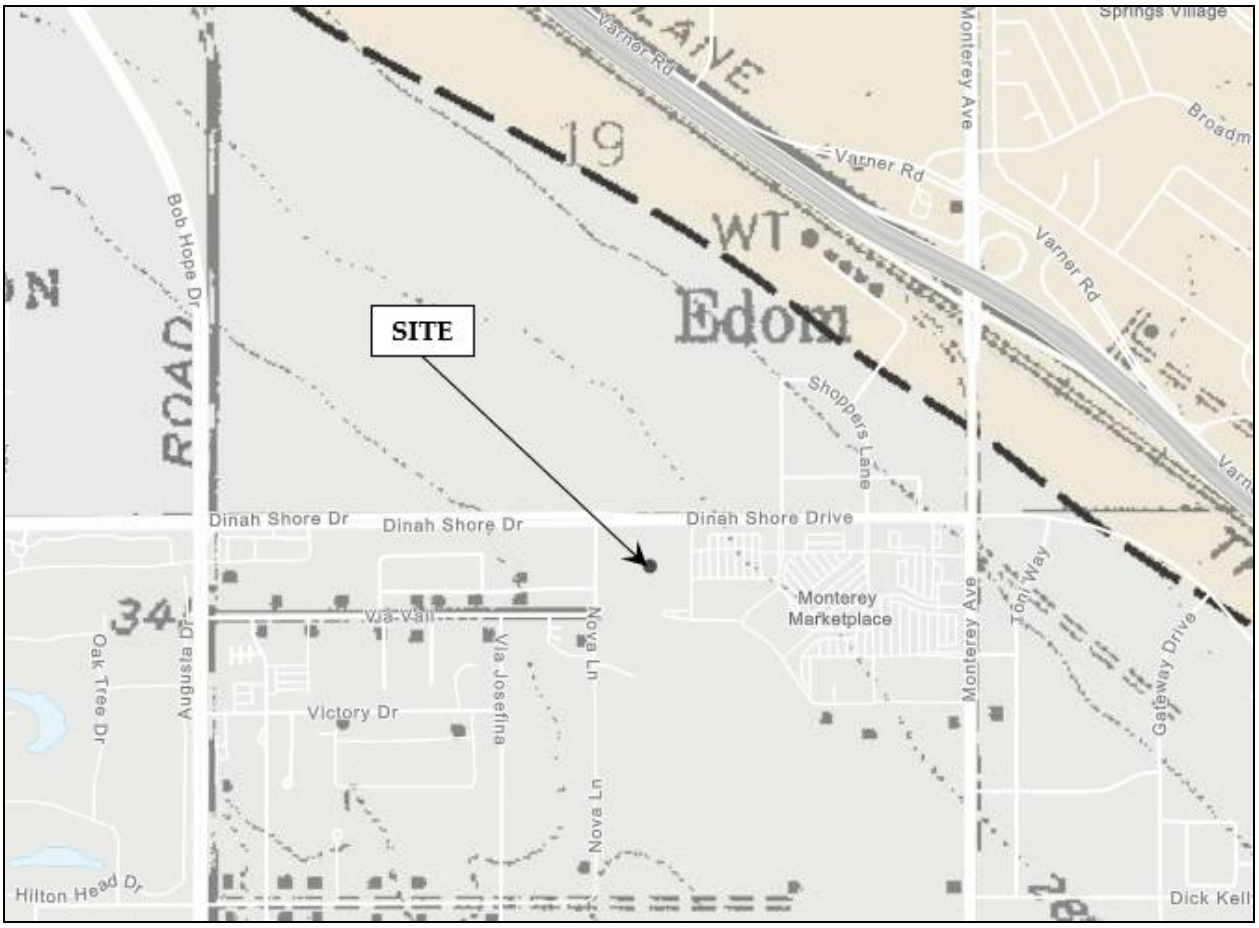


Figure 2 (Dibblee & Minch, 2008)

SUBSURFACE CONDITIONS

The subsurface conditions at the site were investigated by drilling nine (9) exploratory boreholes/percolation test holes on the property to depths ranging from approximately 5 to 51 feet bgs. The approximate locations of the boreholes are illustrated on the Exploration Location Plan (Figure 3). The boreholes were advanced using a truck-mounted Mobile B-61 drill-rig equipped with 8-inch outside diameter hollow stem augers. A representative of Sladden was on-site to log the materials encountered and retrieve samples for laboratory testing and engineering analysis.

During our field investigation, a thin mantle of disturbed material was encountered to a depth of less than one (1) foot below existing grade. Underlying the disturbed soil, native alluvium deposits were encountered. The native alluvial soil throughout the site consists primarily of sand (SP/SW) and sand with silt (SW-SM). Generally, granular soil was found to be dry, medium dense to dense, and grayish brown in in-situ color.

The final logs represent our interpretation of the contents of the field logs, and the results of the laboratory observations and tests of the field samples. The final logs are included in Appendix A of this report. The stratification lines represent the approximate boundaries between soil types although the transitions may be gradual and variable across the site.

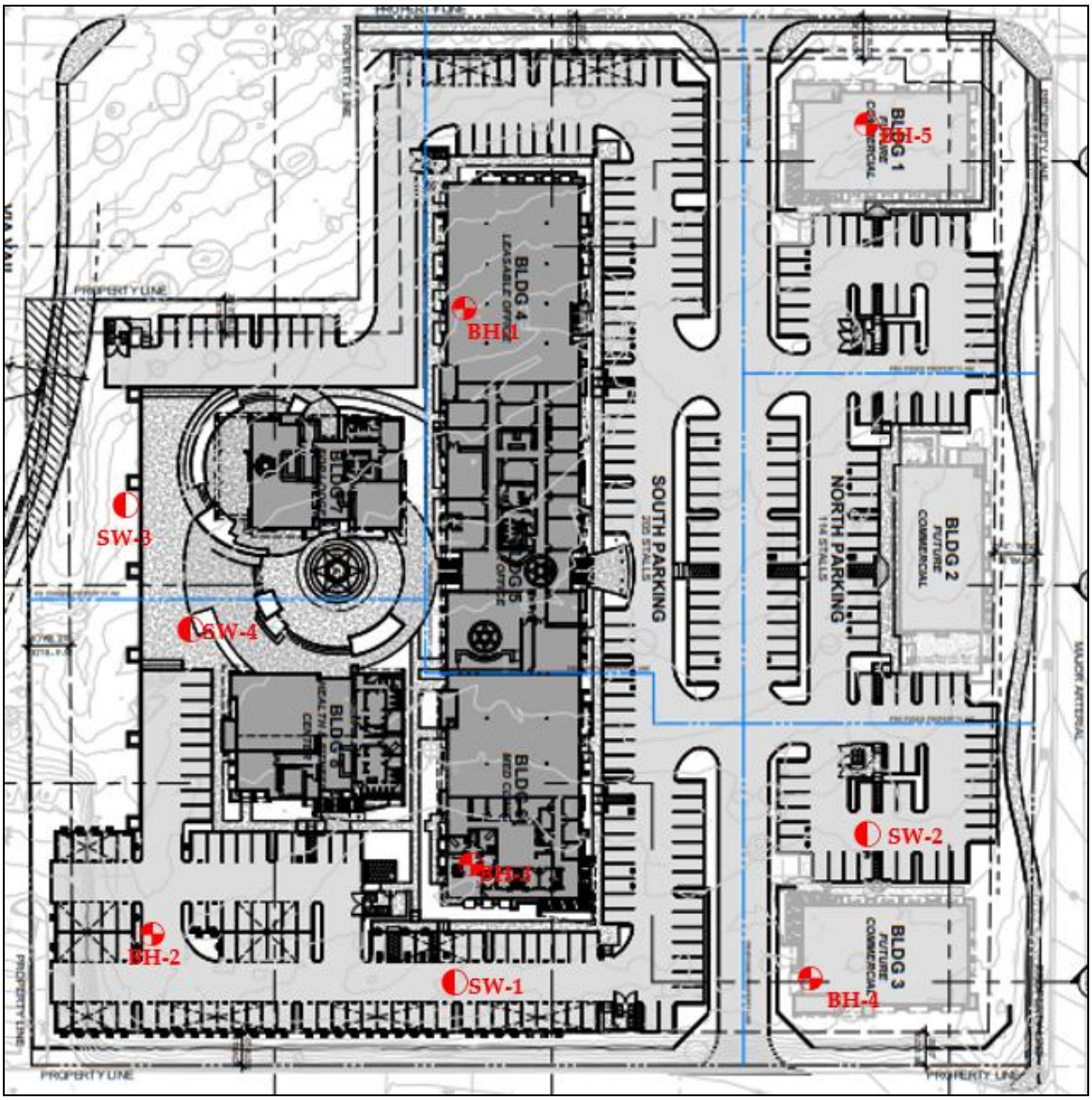


Figure 3

GROUNDWATER CONDITIONS

Groundwater was not encountered at the maximum explored depth of 51 feet bgs during our field investigation. Information regarding the approximate depth to groundwater provided by the California Department of Water Resources online database indicates that the depth to groundwater is in excess of 150 feet below the existing ground surface in the vicinity of the site (CDWR, 2026). The following table provides a summary of the recorded groundwater depths in the project vicinity. It is our opinion that groundwater should not be a factor in the design or construction of the proposed project.

TABLE 1 GROUNDWATER DEPTHS				
STATE WELL	LAT/LOG	DISTANCE (KM)	DATE	DEPTH (FT)
04S06E20M002S	33.8086/-116.3878	1.12	11/12/2025	152.3
04S06E18R001S	33.8195/-116.3903	2.12	11/10/2025	177.1
04S06E33J001S	33.7775/-116.3544	4.60	03/11/2025	174.88
04S05E35G003S	33.7816/-116.4311	3.93	10/28/2025	178.9
04S05E15R002S	33.8191/-116.4415	4.73	03/12/2025	196.1
04S05E17Q002S	33.8168/-116.4804	8.05	09/24/2025	164.2

SEISMICITY AND FAULTING

The southwestern United States is a tectonically active and structurally complex region, dominated by northwest-trending dextral faults. The faults of the region are often part of complex fault systems, composed of numerous subparallel faults that splay or step from main fault traces. Strong seismic shaking could be produced by any of these faults during the design life of the proposed project.

We consider the most significant geologic hazard to the project to be the potential for moderate to strong seismic shaking that is likely to occur during the design life of the project. The proposed project is located in the highly seismic Southern California region within the influence of several fault systems that are considered to be active or potentially active. An active fault is defined by the State of California as a "sufficiently active and well-defined fault" that has exhibited surface displacement within the Holocene epoch (about the last 11,000 years). A potentially active fault is defined by the State as a fault with a history of movement within Pleistocene time (between 11,000 and 1.6 million years ago).

As previously stated, the site has been subjected to strong seismic shaking related to active faults that traverse through the region. Some of the more significant seismic events near the subject site within recent times include: M6.0 North Palm Springs (1986), M6.1 Joshua Tree (1992), M7.3 Landers (1992), M6.2 Big Bear (1992), M7.1 Hector Mine (1999), and M7.1 Ridgecrest (2019).

Table 2 lists the closest known potentially active faults that was generated in part using fault parameters from The Revised 2002 California Probabilistic Seismic Hazard Maps (Cao et al, 2003), 2008 National Seismic Hazard Maps – Source Parameters (USGS, 2008) and the Fault and Fold Database of the United States (USGS, 2024a). This table does not identify the probability of reactivation or the on-site effects from earthquakes occurring on any faults in the region.

TABLE 2 CLOSEST KNOWN ACTIVE FAULTS		
Fault Name	Distance (Km)	Maximum Event
San Andreas	5.18	7.5
Burnt Mtn	14.87	6.5
Eureka Peak	18.40	6.4
San Jacinto	34.27	7.2
Pinto Mountain	34.73	7.2
Landers	40.82	7.3

SEISMIC GROUND MOTION PARAMETERS

SEISMIC DESIGN PARAMETERS

Seismic design parameters for the project were developed in accordance with the 2025 California Building Code (CBC), which adopts ASCE/SEI 7-22, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures*.

Site Seismicity

Mapped seismic hazard parameters were obtained using the ASCE Seismic Hazard Tool (https://ascehazardtool.org/), that implements the USGS seismic hazard data in a format consistent with ASCE 7-22. The tool was used to determine the mapped spectral response accelerations for short periods (Ss) and 1-second periods (S1), as well as the corresponding design spectral response accelerations.

Site Class Selection

No site-specific measurements of average shear wave velocity in the upper 30 meters (Vs30) were performed as part of this geotechnical investigation. In accordance with ASCE 7-22 Section 20.4, when sufficient subsurface data are not available to assign a Site Class based on measured soil properties, the use of a "Default" Site Class is permitted.

For this project, the Site Class selection within the ASCE Seismic Hazard Tool was set to "Default." The "Default" Site Class takes the most critical spectral response acceleration at each period of Site Class C, Site Class CD, and Site Class D. This method is acceptable for seismic design and is commonly used when site-specific dynamic soil properties have not been determined.

Seismic Design Category

The Seismic Design Category (SDC) was determined in accordance with ASCE 7-22 Section 11.6, based on the calculated values of SDS and SD1 and the assigned risk category of the structure per the CBC. The SDC governs the applicable seismic detailing and system requirements for the project.

The attached seismic design parameters are based on the use of the Default Site Class due to the absence of site-specific shear wave velocity or equivalent dynamic soil data. If additional subsurface exploration or geophysical testing (such as Vs30 measurements) is performed in the future, the Site Class and associated seismic parameters should be re-evaluated. A change in Site Class could result in revised seismic design criteria. The project Structural Engineer should verify the design parameters provided are applicable for the subject property.

GEOLOGIC HAZARDS

The subject site is located in an active seismic zone and will likely experience strong seismic shaking during the design life of the proposed project. In general, the intensity of ground shaking will depend on several factors including; the distance to the earthquake focus, the earthquake magnitude, the response characteristics of the underlying materials, and the quality and type of construction. Geologic hazards and their relationship to the site are discussed below.

I. Surface Rupture. Surface rupture is expected to occur along preexisting, known active fault traces. However, surface rupture could potentially splay or step from known active faults or rupture along unidentified traces. Based on our review of Rogers (1965), Jennings (1994), and CDOC (2026) known active faults are not mapped on the site. In addition, no signs of active surface faulting were observed during our review of non-stereo digitized photographs of the site and site vicinity (Google Earth, 2026). Finally, no signs of active surface fault rupture or secondary seismic effects (lateral spreading, lurching etc.) were identified during our field investigation. Therefore, it is our opinion that risks associated with primary surface ground rupture should be considered "low".

II. Ground Shaking. The site has been subjected to past ground shaking by faults that traverse through the region. Strong seismic shaking from nearby active faults is expected to produce strong seismic shaking during the design life of the proposed project. Based on ground motion parameters developed for the property (Appendix C), the site-modified peak ground acceleration (PGAm) is estimated to be 0.81g.

III. Liquefaction/Dry Sand Settlement. Liquefaction is the process in which loose, saturated granular soil loses strength as a result of cyclic loading. The strength loss is a result of a decrease in granular sand volume and a positive increase in pore pressures. Generally, liquefaction can occur if all of the following conditions apply; liquefaction-susceptible soil, groundwater within a depth of 50 feet or less, and strong seismic shaking.

The project site is situated within a County of Riverside designated "moderate" liquefaction potential zone (RCPR, 2025). Based on our review of groundwater maps of the site vicinity (>50 feet bgs), and our experience in the project vicinity, risks associated with liquefaction and liquefaction related hazards should be considered "negligible".

IV. Tsunamis and Seiches. Because the site is situated at an inland location and is not immediately adjacent to any impounded bodies of water, risks associated with tsunamis and seiches are considered "negligible".

V. Slope Failure, Landsliding, Rock Falls. Slope instability in the form of landslides and rock falls were not observed at or near the subject site. The site is situated on relatively flat ground and is not located immediately adjacent to any slopes. As such, risks associated with slope instability (landslides, mass wasting, and rock falls) are considered "negligible".

VI. Expansive Soil. Generally, the near-surface soil consists of sand (SW). Based on the results of our laboratory testing (EI=0), the materials underlying the site are considered to have a "very low" expansion potential. The recommended remedial grading will result in substantial mixing and blending of the surface soil. The expansion potential of the subsurface soil should be reevaluated after grading.

VII. Static Settlement. Static settlement resulting from the anticipated foundation loads should be tolerable provided that the recommendations included in this report are considered in foundation design and construction. The ultimate static settlement is expected to be less than 1 inch when using the recommended allowable bearing pressures. As a practical matter, differential static settlement between footings can be assumed as one-half of the total static settlement.

VIII. Subsidence. Land subsidence can occur in valleys where aquifer systems have been subjected to extensive groundwater pumping, such that groundwater pumping exceeds groundwater recharge. Generally, pore water reduction can result in a rearrangement of skeletal grains and could result in elastic (recoverable) or inelastic (unrecoverable) deformation of an aquifer system. Locally, no fissures or other surficial evidence of subsidence were observed at or near the subject site.

Although recent investigations have documented significant subsidence within the Coachella Valley area (USGS, 2007), no fissures or other surficial evidence of subsidence were observed at the subject site. With the exception of isolated tension zones typically manifested on the ground surface as fissures and/or ground cracks, subsidence related to groundwater depletion is generally areal in nature with minimal differential settlement over short distances such as across individual buildings.

The Coachella Valley Water District has publicly acknowledged regional subsidence throughout the southern portion of the Coachella Valley and has indicated a commitment to groundwater replenishment programs that are intended to limit future subsidence. At this time, subsidence is considered a regional problem requiring regional mitigation not specific to the project vicinity.

IX. Debris Flows. Debris flows are viscous flows consisting of poorly sorted mixtures of sediment and water and are generally initiated on slopes steeper than approximately six horizontal to one vertical (6H:1V) (Boggs, 2001). Based on the flat nature of the site and the composition of the surface soil, we judge that risks associated with debris flows should be considered “negligible”.

X. Flooding and Erosion. No signs of flooding or erosion were observed during our field investigation. Risks associated with flooding and erosion should be evaluated and mitigated by the project design Civil Engineer.

CONCLUSIONS

Based on the results of our investigation, it is our professional opinion that the project should be feasible from a geotechnical perspective provided that the recommendations included in this report are incorporated into design and carried out through construction. The main geotechnical concerns are the presence of the loose and potentially compressible near-surface native soil throughout the project site and the potential strong ground motion related to nearby active faults.

We recommend that remedial work within the proposed new building areas include over-excavation and re-compaction of the primary foundation-bearing soil to provide uniform foundation support and to help mitigate potential differential settlements. Specific recommendations for foundation area preparation are presented in the Earthwork and Grading section of this report.

Caving did occur to varying degrees within each of our exploratory bores and the surface soil may be susceptible to caving within deeper excavations. All excavations should be constructed in accordance with the normal CalOSHA excavation criteria. Based on our observations of the materials encountered, we anticipate that the subsoil will conform to that described by CalOSHA as Type C. Soil conditions should be verified in the field by a "Competent person" employed by the Contractor.

The following recommendations present more detailed design criteria that have been developed based on our field and laboratory investigation.

EARTHWORK AND GRADING

All earthwork including excavation, backfill, and preparation of the primary foundation and/or slab bearing soil should be performed in accordance with the geotechnical recommendations presented in this report and portions of the local regulatory requirements, as applicable. All earthwork should be performed under the observation and testing of a qualified soil engineer. The following geotechnical engineering recommendations for the proposed project are based on observations from the field investigation program, laboratory testing, and geotechnical engineering analyses.

a. Site Clearing: Areas to be graded should be cleared of vegetation, associated root systems, underground utilities, and debris. All areas scheduled to receive fill should be cleared of old fills and any irreducible matter. The strippings should be removed off-site, or stockpiled for later use in landscape areas. Voids left by obstructions should be properly backfilled in accordance with the compaction recommendations of this report.

b. Preparation of the Building Areas. To provide firm and uniform foundation-bearing conditions, we recommend over-excavation and re-compaction throughout the proposed building and foundation areas. All artificial fill soil and native low density near surface native soil should be removed to a depth of at least 4 feet below existing grade or 3 feet below the bottom of the footings, whichever is deeper. Remedial grading should extend laterally, a minimum of five feet beyond the building limits where possible. The native soil exposed by over-excavation should be scarified, moisture conditioned to near optimum moisture content, and compacted to at least 90 percent relative compaction prior to fill placement. The previously removed soil may then be replaced as compacted engineered soil in accordance with the recommendations below.

c. Compaction: Soil to be used as engineered fill should be free of organic material, debris, and other deleterious substances. All fill material should be placed in thin lifts, not exceeding six inches in a loose condition. If import fill is required, the material should be of a low to non-expansive nature and should meet the following criteria:

Plastic Index	Less than 12
Liquid Limit	Less than 35
Percent Soil Passing #200 Sieve	Between 15% and 35%
Maximum Aggregate Size	3 inches

The subgrade and all fill should be compacted with acceptable compaction equipment, to at least 90 percent relative compaction. The bottom of the exposed subgrade should be observed by a representative of Sladden Engineering prior to fill placement. Compaction testing should be performed on all lifts to ensure proper placement of the fill materials. Table 4 provides a summary of the excavation and compaction recommendations.

TABLE 4
SUMMARY OF RECOMMENDATIONS

*Remedial Grading	Over-excavation and re-compaction within the building envelope and extending laterally for 5 feet beyond the building limits where possible and to a minimum of 4 feet below existing grade or 3 feet below the bottom of the footings, whichever is deeper.
Native / Import Engineered Fill	Place in thin lifts not exceeding 6 inches in a loose condition, at near optimum moisture content and compact to a minimum of 90 percent relative compaction.
Asphalt Concrete Sections	Compact the top 12 inches to at least 95 percent compaction at near optimum moisture content.

*Actual depth may vary and should be determined by a representative of Sladden Engineering in the field during construction.

d. Shrinkage and Subsidence**:** Volumetric shrinkage of the material that is excavated and replaced as controlled compacted fill should be anticipated. We estimate that this shrinkage should be between 10 and 15 percent. Subsidence of the surfaces that are scarified and compacted should be between 1 tenth and 3 tenths of a foot. This will vary depending upon the type of equipment used, the moisture content of the soil at the time of grading and the actual degree of compaction attained.

CONVENTIONAL SHALLOW SPREAD FOOTINGS

Conventional shallow spread footings are expected to provide adequate support for the proposed commercial buildings. All footings should be founded upon properly compacted engineered fill soil and should have a minimum embedment depth of 12 inches measured from the lowest adjacent finished grade. Continuous footings and isolated pad footings should have minimum widths of 12 inches and 24 inches, respectively. Continuous footings and isolated pad footings supported upon properly compacted engineered fill soil may be designed using allowable (net) bearing pressures of 1800 and 2000 pounds per square foot (psf), respectively. Allowable increases of 200 psf for each additional 1 foot of width and 250 psf for each additional 6 inches of depth may be used, if desired. The maximum allowable bearing pressure should be 3000 psf. The allowable bearing pressures are intended for combined dead and sustained live loads. The allowable bearing pressures may be increased by one-third when considering transient live loads, including seismic and wind forces.

Based on the recommended allowable bearing pressures, the total static settlement of the shallow footings is anticipated to be less than one inch provided foundation preparations conform to the recommendations described in this report. Static differential settlement is anticipated to be approximately one-half of the total settlement for similarly loaded footings spaced up to approximately 40 feet apart.

Lateral load resistance for the conventional shallow spread footings will be developed by passive pressure against the sides of the footings below grade and by friction acting at the base of the footings. An allowable passive pressure of 250 psf per foot of depth may be used for design purposes. An allowable coefficient of friction 0.40 may be used for dead and sustained live loads to compute the frictional resistance of the footing placed directly on compacted fill. Under seismic and wind loading conditions, the passive pressure and frictional resistance may be increased by one-third.

All footing excavations should be observed by a representative of the project geotechnical consultant to verify adequate embedment depths prior to placement of forms, steel reinforcement, or concrete. The excavations should be trimmed neat, level and square. All loose, disturbed, sloughed, or moisture-softened soils and/or any construction debris should be removed prior to concrete placement. All footings should be reinforced in accordance with the project Structural Engineer's recommendations.

SLABS-ON-GRADE

To provide uniform and adequate support, concrete slabs-on-grade must be placed on properly compacted engineered fill soil as outlined in the previous sections of this report. The slab subgrade should remain near optimum moisture content and should not be permitted to dry prior to concrete placement. Slab subgrade should be firm and unyielding. Disturbed soil should be removed and replaced with engineered fill soil compacted to a minimum of 90 percent relative compaction.

Slab thickness and reinforcement should be determined by the Structural Engineer. We recommend a minimum slab thickness of 4.0 inches and minimum reinforcement of #3 bars at 18 inches on center in both directions. All slab reinforcement should be supported on concrete chairs to ensure that reinforcement is placed at slab mid-height. Final floor slab design and reinforcement should be determined by the Structural Engineer.

Slabs with moisture-sensitive surfaces should be underlain with a moisture vapor retarder consisting of a polyvinyl chloride membrane such as 10-mil visqueen, or equivalent. All laps within the membrane should be sealed and at least 2 inches of clean sand should be placed over the membrane to promote uniform curing of the concrete. To reduce the potential for punctures, the membrane should be placed on a pad surface that has been graded smooth without any sharp protrusions. If a smooth surface can not be achieved by grading, consideration should be given to placing a thin leveling course of sand across the pad surface prior to placement of the membrane.

RETAINING WALLS

Minor retaining walls may be necessary to accomplish the proposed construction. Cantilever retaining walls may be designed using "active" pressures. Active pressures may be estimated using an equivalent fluid weight of 35 pcf for level native backfill soil acting in a triangular pressure distribution with drained backfill conditions. "At Rest" pressures should be utilized for restrained walls. At rest pressures may be estimated using an equivalent fluid weight of 55 pcf for native backfill soil with level drained backfill conditions.

According to the California Building Code (CBC), seismic loads should be considered in the design of walls retaining in excess of six (6) feet of earth material. The potential seismic pressures for cantilever retaining walls with drained, level backfill conditions may be estimated using a uniform pressure distribution of 15H psf (where H is in feet). The potential seismic pressures for restrained walls with drained, level backfill conditions may be estimated using a uniform pressure distribution of 20H psf (where H is in feet). The seismic pressures should be applied as a point load acting at a height of approximately 0.6H feet from the bottom of the wall. Alternatively, the seismic loading may be determined using a coefficient of Kh= 0.27 (equivalent to ½ x 2/3 x PGAm) in accordance with the City of Los Angeles design criteria.

We recommend that a back drain system be provided behind all retaining walls or that the walls be designed for full hydrostatic pressures. The back drains should consist of a heavy walled, four-inch diameter, perforated pipe sloped to drain to outlets by gravity, and of clean, free-draining, three-quarter to one-and-a-half-inch crushed rock or gravel. The crushed rock or gravel should extend to within one foot of the surface. The upper one foot should be backfilled with compacted, fine-grained soil to exclude surface water. A Mirafi 140N (or equivalent) filter cloth should be placed between the on-site native material and the drain rock.

We recommend that the ground surface behind retaining walls be sloped to drain. Under no circumstances should the surface water be diverted into back drains. Where migration of moisture through walls would be detrimental, the walls should be waterproofed.

CORROSION SERIES

Corrosion-series testing was performed on bulk soil samples obtained from the bores to provide an initial assessment of the potential for corrosive conditions that may impact buried metal utilities, concrete structures, and other subsurface improvements. The testing provides screening level indicators through evaluation of soil pH, minimum resistivity, soluble sulfate content, and soluble chloride content.

The soluble sulfate concentrations of the surface soil were determined to be 20 parts per million (ppm) for BH-1. The soil falls within the "S0" sulfate exposure category. The use of Type V cement and special sulfate-resistant concrete mixes may not be necessary. The soluble sulfate content of the surface soil should be reevaluated after grading and appropriate concrete mix designs should be established based upon post-grading test results.

The pH level of the surface soil was determined to be 8.5 for BH-1. Based on soluble chloride concentration testing (110 ppm) the soil falls within the "C1" chloride exposure category per ACI 318-19 Table 19.3.1.1. The minimum resistivity of the surface soil was found to be 25,00 ohm-cm.

Based on the Corrosion-series test results, the majority of the site soil appears to exhibit "low" corrosion potential. While these findings are useful for early design considerations, they should be viewed strictly as screening level indicators. The interpretation of corrosion potential is highly sensitive to soil variability, localized moisture conditions, and sample disturbance, and the limited sampling during initial exploration cannot capture all subsurface variations.

The corrosion-series testing is not intended to serve as the sole basis for final corrosion-related design decisions. Soil conditions may change after site grading, utility trenching, or excavation, and additional soil horizons may become exposed that were not accessible during the initial investigation.

Post Grading Recommendations:

- Conduct additional corrosion testing after site grading and utility trenching when fresh, representative soils are accessible.

- Retain a qualified corrosion engineer or corrosion-protection specialist to review both the preliminary and post-grading results and to provide project-specific recommendations for corrosion sensitive installations.
- The corrosion specialist may advise on material selection, protective coatings, increased cover or sacrificial thickness, soil treatment, isolation methods, or the potential need for cathodic protection depending on the final confirmed soil conditions.

UTILITY TRENCH BACKFILL

All utility trench backfill should be compacted to a minimum of 90 percent relative compaction. Trench backfill materials should be placed in lifts no greater than six inches in a loose condition, moisture conditioned (or air-dried) as necessary to achieve near optimum moisture content, and mechanically compacted to a minimum of 90 percent relative compaction. A representative of the project soil engineer should test the backfill to verify adequate compaction.

EXTERIOR CONCRETE FLATWORK

To provide uniform support and minimize settlement related cracking of concrete flatwork, the subgrade soil within concrete flatwork areas should be compacted to a minimum of 90 percent relative compaction. A representative of the project geotechnical consultant should observe and verify the density and moisture content of the soil prior to concrete placement.

ON-SITE PAVEMENT DESIGN

Asphalt concrete pavements should be designed in accordance with the Caltrans Highway Design Manual based on the R-Value and Traffic Index. The R-value of the near-surface soil was determined to be 72 at equilibrium for BH-1. Because site grading will result in the significant blending of the near-surface soil, the R-value should be determined based on post-grading test results of the actual subgrade soil. For preliminary pavement design, a design R-Value of 60 and Traffic Indices (TI) of 6.0 and 7.5 were used for the light-duty and heavy-duty pavements, respectively. We assumed Asphalt Concrete (AC) over Class II Aggregate Base (AB). The preliminary flexible pavement layer thickness is as follows:

TABLE 5
RECOMMENDED ASPHALT PAVEMENT SECTION LAYER THICKNESS

Pavement Material	Recommended Thickness	
	TI = 6.0	TI = 7.5
Asphalt Concrete Surface Course	3.0 inches	4.0 inches
Class II Aggregate Base Course	4.5 inches	4.5 inches
Compacted Subgrade Soil	12.0 inches	12.0 inches

The final pavement section shall be governed by the more conservative of the structural sections determined through Caltrans-based R-Value and TI analysis, or the minimum section required by the agency having jurisdiction. The final pavement section shall conform to the applicable agency's requirements or exceed them as dictated by geotechnical design considerations presented above.

Asphalt concrete and the aggregate base material should conform to the latest edition of the Standard Specifications for Public Works Construction ("Greenbook") or CalTrans Standard Specifications. The subgrade soil and the aggregate base course should be compacted to at least 90 percent and 95 percent of the maximum dry density as determined by ASTM Method D 1557, respectively.
The pavement section thicknesses presented in this report should be considered preliminary engineering recommendations. The pavement thicknesses assume typical material properties and construction practices consistent with Caltrans Standard Specifications, including compaction requirements, aggregate quality, and asphalt concrete placement standards.

It is important to note that the recommended asphalt concrete thickness does not account for potential asphalt shrinkage, temperature-related contraction, long-term oxidation, or variability in field compaction that can occur during construction. These factors may reduce the effective thickness or alter the performance of the asphalt layer over time. Similarly, the recommendations do not incorporate contractor-specific production tolerances, mix design variability, or construction sequencing that may affect final pavement behavior.

DRAINAGE

All final grades should be provided with positive gradients away from foundations to provide rapid removal of surface water runoff to an adequate discharge point. No water should be allowed to be pond on or immediately adjacent to foundation elements. To reduce water infiltration into the subgrade soil, surface water should be directed away from building foundations to an adequate discharge point. Subgrade drainage should be evaluated upon completion of the precise grading plans and in the field during grading.

LIMITATIONS

The findings and recommendations presented in this report are based upon an interpolation of the soil conditions between the exploratory locations and extrapolation of these conditions throughout the proposed building areas. Should conditions encountered during grading appear different than those indicated in this report, this office should be notified.

The use of this report by other parties or for other projects is not authorized. The recommendations of this report are contingent upon monitoring of the grading operation by a representative of Sladden Engineering. All recommendations are considered to be tentative pending our review of the grading operation and additional testing, if indicated. If others are employed to perform any soil testing, this office should be notified prior to such testing in order to coordinate any required site visits by our representative and to assure indemnification of Sladden Engineering.

We recommend that a pre-job conference be held on the site prior to the initiation of site grading. The purpose of this meeting will be to assure a complete understanding of the recommendations presented in this report as they apply to the actual grading performed.

ADDITIONAL SERVICES

Once completed, final project plans and specifications should be reviewed by use prior to construction to confirm that the full intent of the recommendations presented herein have been applied to design and construction. Following review of plans and specifications, observation should be performed by the Soil Engineer during construction to document that foundation elements are founded on/or extend into the properly compacted soil, and that suitable backfill soil is placed upon competent materials and properly compacted at the recommended moisture content.

Tests and observations should be performed during grading by the Soil Engineer or his representative in order to verify that the grading is being performed in accordance with the project specifications. Field density testing shall be performed in accordance with acceptable ASTM test methods. The minimum acceptable degree of compaction should be 90 percent for engineered fill soil and 95 percent for Class II aggregate base as obtained by ASTM Test Method D1557. Where testing indicates insufficient density, additional compactive effort shall be applied until retesting indicates satisfactory compaction.

REFERENCES

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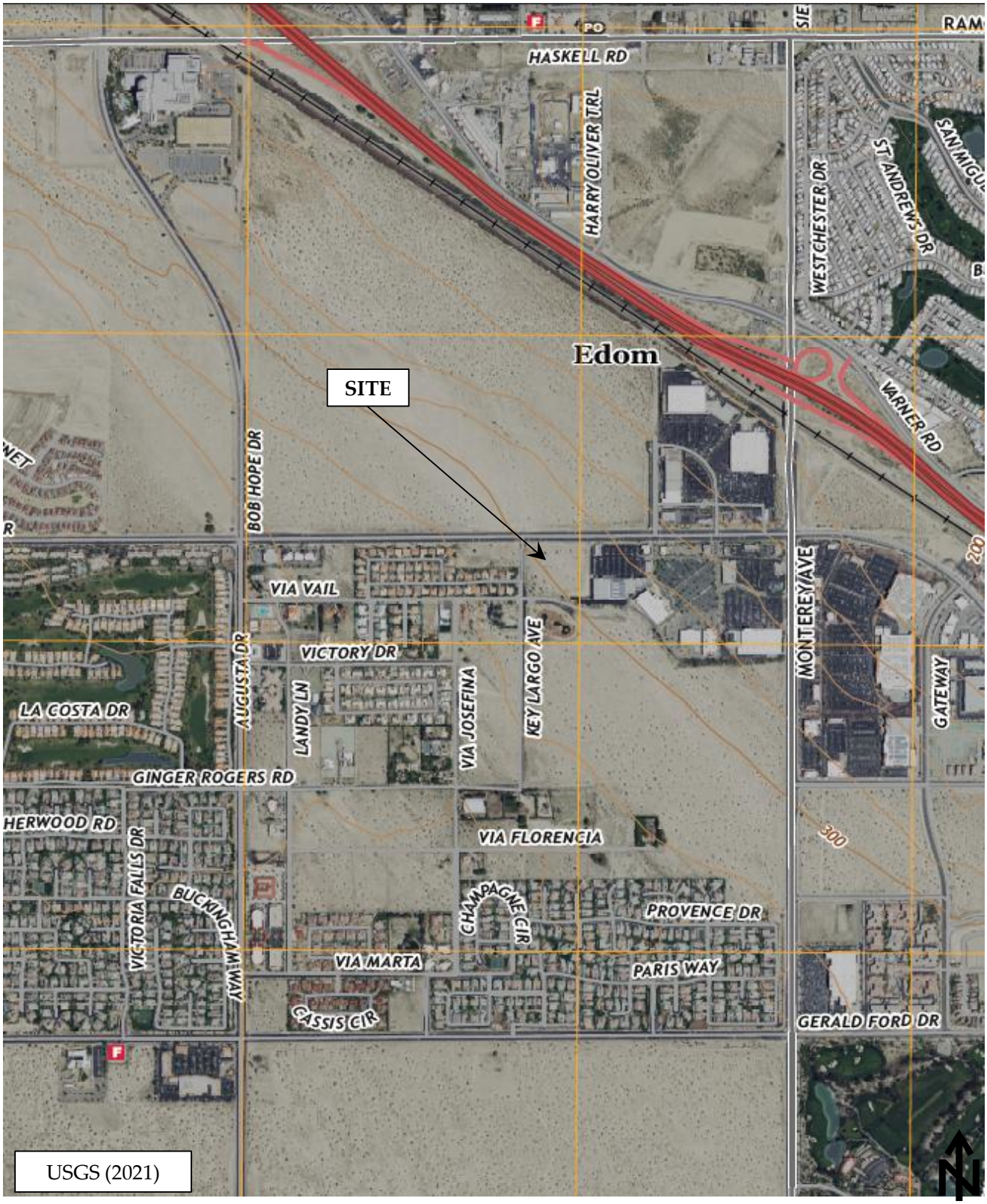
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PLATES

SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
EXPLORATION LOCATION PLAN



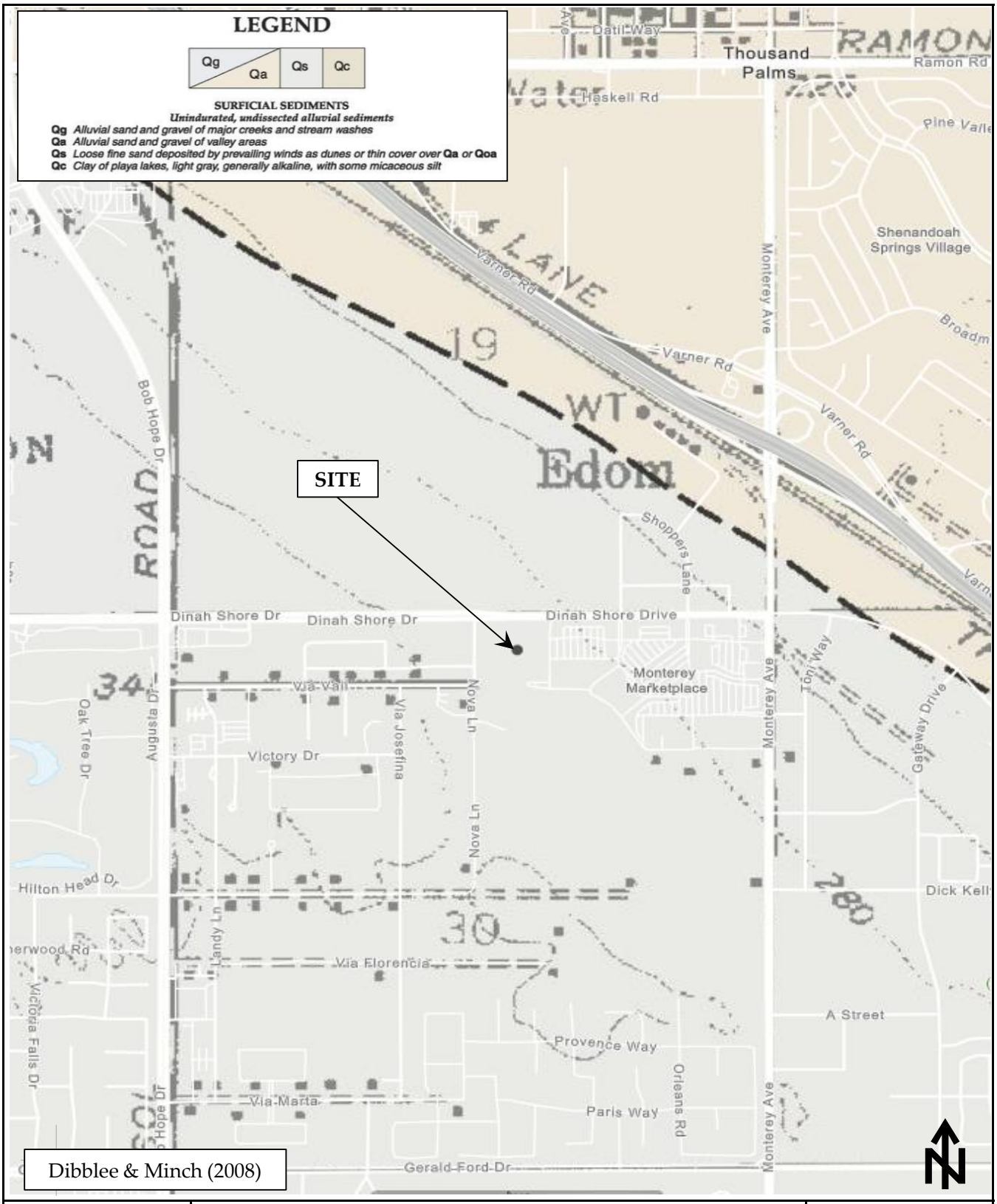
SITE LOCATION MAP

PLATE

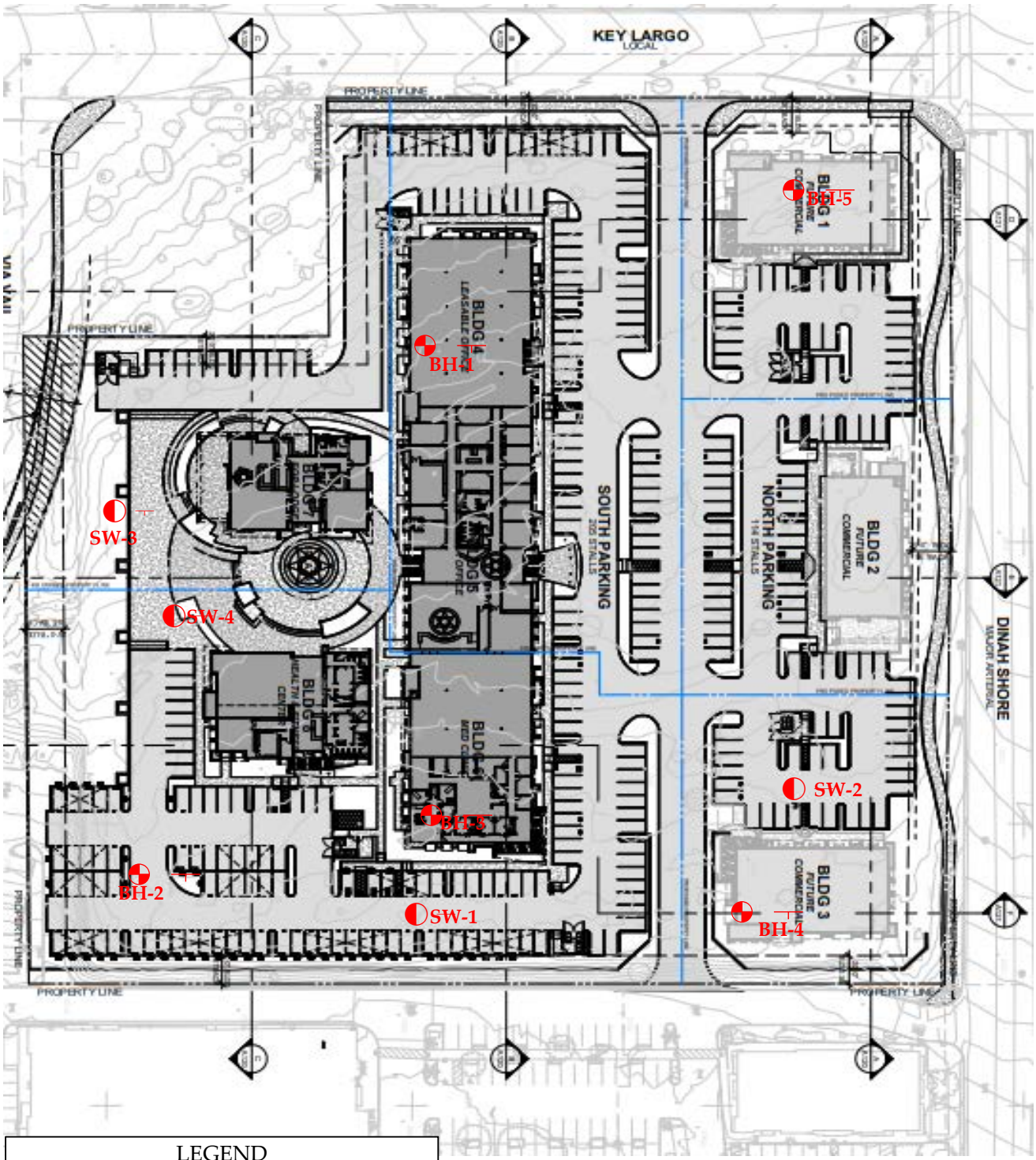
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Project Number:	544-26010
Report Number:	260-01-028
Date:	January 20, 2026

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Sladden Engineering	REGIONAL GEOLOGIC MAP	PLATE 2
	Project Number: 544-26010	
	Report Number: 260-01-028	
	Date: January 20, 2026	



LEGEND

BH-1 Borehole Location

SW-4 Percolation Test Location

N

Sladden Engineering	EXPLORATION LOCATION PLAN	PLATE 3
	Project Number: 544-26010	
	Report Number: 260-01-028	
	Date: January 20, 2026	

APPENDIX A

FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

For our field investigation, nine (9) exploratory bores/percolation test holes were excavated on the subject site. Continuous logs of the materials encountered were made by a representative of Sladden Engineering. Materials encountered in the bores were classified in accordance with the Unified Soil Classification System.

Representative undisturbed samples were obtained within our borings by driving a thin-walled steel penetration sampler (California split spoon sampler) or a Standard Penetration Test (SPT) sampler with a 140 pound automatic-trip hammer dropping approximately 30 inches (ASTM D1586). The number of blows required to drive the samplers 18 inches was recorded in 6-inch increments and blowcounts are indicated on the boring logs.

The California samplers are 3.0 inches in diameter, carrying brass sample rings having inner diameters of 2.5 inches. The standard penetration samplers are 2.0 inches in diameter with an inner diameter of 1.5 inches. Relatively undisturbed samples were removed from the sampler and placed in moisture sealed containers in order to preserve the natural soil moisture content. Bulk samples were obtained from the excavation spoils and samples were then transported to our laboratory for further observations and testing.

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BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	BH-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
X	3 7 7	1	0				2		No Recovery.
	10 16 19			5.9	0.5		6		Sand with Silt (SW-SM); light grayish brown, dry, medium dense, fine to coarse-grained (Qs).
	7 9 12			3.1	0.9		10		Sand (SP); grayish brown, dry, medium dense, fine to coarse-grained (QS).
	17 26 32			3.7	0.5		16		Sand (SW); grayish brown, dry, dense, fine to coarse-grained (Qs).
	16 17 20			5.7	0.6		20		Sand with Silt (SW-SM); grayish brown, dry, dense, fine to coarse-grained (Qs).
	17 25 37			4.3	0.5	107.3	26		Sand (SW); grayish brown, dry, dense, fine to coarse-grained (Qs).
	13 16 20			5.0	0.5		30		Sand (SW); grayish brown, dry, dense, fine to coarse-grained (Qs).
	11 25 38			3.4	0.5		36		Sand (SW); grayish brown, dry, dense, fine to coarse-grained (Qs).
	13 29 28			6.7	0.8		40		Sand with Silt (SP-SM); grayish brown, dry, dense, medium-grained (Qs).
	23 50-6"			4.9	2.9		46		Sand (SP); grayish brown, dry, dense, fine to medium-grained (Qs).
	18 27 35			4.3	4.6		50		Sand (SP); grayish brown, dry to slightly moist, very dense, fine to medium-grained (Qs).

Completion Notes:
Terminated at ~ 51.5 ft bgs.
No Bedrock Encountered.
No Groundwater or Seepage Encountered.

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	BH-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Sand with Silt (SW-SM); light grayish brown, dry, fine to coarse-grained (Qs).
							4		
	8 12 13				0.5		6		Sand with Silt (SW-SM); light grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							8		
	4 5 8				1.1		10		Sand with Silt (SW-SM); grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							12		Terminated at ~ 11.5 ft bgs.
							14		No Bedrock Encountered.
							16		No Groundwater or Seepage Encountered.
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	BH-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Sand with Silt (SW-SM); light grayish brown, dry, fine to coarse-grained (Qs).
	5 7 7				0.9		6		Sand with Silt (SW-SM); light grayish brown, dry, medium dense, fine to coarse-grained (Qs).
	8 16 25				0.5		10		Sand with Silt (SW-SM); light grayish brown, dry, medium dense, fine to coarse-grained (Qs).
	7 13 17				0.7		16		Sand (SW); grayish brown, dry, medium dense, fine to coarse-grained (Qs).
	17 35 50				0.7	111.1	20		Sand (SW); grayish brown, dry, very dense, fine to coarse-grained (Qs).
							22		Terminated at ~ 21.5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.

Completion Notes:

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	BH-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							0		Sand with Silt (SW-SM); light grayish brown, dry, fine to coarse-grained (Qs).
							2		
							4		
■	8 15 18				0.5		6		Sand with Silt (SW-SM); light grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							8		
▪	6 10 11				0.5		10		Sand (SW); grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							12		
■	8 9 11				0.5		14		Sand (SW); grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							16		
▪	15 20 22				0.7		18		Sand (SW); grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							20		
■	18 28 31				0.6		22		Sand with Silt (SW-SM); grayish brown, dry, dense, fine to coarse-grained (Qs).
							24		
▪	13 18 22				0.5		26		Sand (SW); grayish brown, dry, dense, fine to coarse-grained (Qs).
							28		
							30		Terminated at ~ 31.5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	BH-5

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		
							4		
	4 6 8				0.8		6		Sand with Silt (SW-SM); light grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							8		
	5 10 15				3.1		10		Sand with Silt (SW-SM); grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							12		
							14		
	10 11 12				0.7		16		Sand (SW); grayish brown, dry, medium dense, fine to coarse-grained (Qs).
							18		
	15 22 33				0.6		20		Sand (SW); grayish brown, dry, dense, fine to coarse-grained (Qs).
							22		
							24		
	13 17 23				0.7		26		Sand (SW); grayish brown, dry, dense, fine to coarse-grained (Qs).
							28		
	15 26 40				0.5		30		Sand (SW); grayish brown, dry, dense, fine to coarse-grained (Qs).
							32		
							34		Terminated at ~ 31.5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	SW-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Sand with Silt (SW-SM); light grayish brown, dry, fine to coarse-grained (Qs).
							4		
							6		Terminated at ~ 5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Cased to Facilitate Stormwater Testing.
							8		
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	SW-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Sand with Silt (SW-SM); light grayish brown, dry, fine to coarse-grained (Qs).
							4		
							6		Terminated at ~ 5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Cased to Facilitate Stormwater Testing.
							8		
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	SW-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2, 4, 6, 8, 10		Sand with Silt (SW-SM); light grayish brown, dry, fine to coarse-grained (Qs).
							12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50		Terminated at ~ 10 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Cased to Facilitate Stormwater Testing.

Completion Notes:

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

Sladden Engineering

BORE LOG

Equipment:	MOBILE B-61	Date Drilled:	1/15/2026
Elevation:	285 FT MSL	Boring No:	SW-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Density, pcf	Depth (Feet)	Graphic Lithology	Description
							2		Sand with Silt (SW-SM); light grayish brown, dry, fine to coarse-grained (Qs).
							4		
							6		Terminated at ~ 5 ft bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered. Cased to Facilitate Stormwater Testing.
							8		
							10		
							12		
							14		
							16		
							18		
							20		
							22		
							24		
							26		
							28		
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

PROPOSED COMMERCIAL DEVELOPMENT
SEC DINAH SHORE DR & KEY LARGO, RANCHO MIRGAE

Project No: 544-26010
Report No: 260-01-028

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			TYPICAL NAMES	
COARSE GRAINED SOILS MORE THAN HALF IS LARGER THAN No.200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No.4 SIEVE SIZE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL GRADED GRAVEL-SAND MIXTURES
			GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, POORLY-GRADED GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, POORLY GRADED GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN No.4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL GRADED SANDS, GRAVELLY SANDS
			SP	POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, POORLY GRADED SAND-SILT MIXTURES
			SC	CLAYEY SANDS, POORLY GRADED SAND-CLAY MIXTURES
FINE GRAINED SOILS MORE THAN HALF IS SMALLER THAN No.200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS & VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, CLEAN CLAYS
			OL	ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS: LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACIOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

EXPLANATION OF BORE LOG SYMBOLS


California Split-spoon Sample


Unrecovered Sample


Standard Penetration Test Sample


Groundwater depth

Note: The stratification lines on the borelogs represent the approximate boundaries between the soil types; the transitions may be gradational.

APPENDIX B

LABORATORY TESTING

APPENDIX B

LABORATORY TESTING

Representative bulk soil samples were obtained in the field and returned to our laboratory for additional observations and testing. Laboratory testing was generally performed in two phases. The first phase consisted of testing in order to determine the compaction of the existing natural soil and the general engineering classifications of the soils underlying the site. This testing was performed in order to estimate the engineering characteristics of the soil and to serve as a basis for selecting samples for the second phase of testing. The second phase consisted of soil mechanics testing. This testing including consolidation, shear strength and expansion testing was performed in order to provide a means of developing specific design recommendations based on the mechanical properties of the soil.

CLASSIFICATION AND COMPACTION TESTING

Maximum Density-Optimum Moisture Determinations: Representative soil types were selected for maximum density determinations. This testing was performed in accordance with the ASTM Standard D1557, Test Method A. Graphic representations of the results of this testing are presented in this appendix. The maximum densities are compared to the field densities of the soil in order to determine the existing relative compaction to the soil.

Classification Testing: Soil samples were selected for classification testing. This testing consists of mechanical grain size analyses. This provides information for developing classifications for the soil in accordance with the Unified Soil Classification System which is presented in the preceding appendix. This classification system categorizes the soil into groups having similar engineering characteristics. The results of this testing is very useful in detecting variations in the soil and in selecting samples for further testing.

SOIL MECHANIC'S TESTING

Expansion Testing: One (1) bulk sample was selected for Expansion testing. Expansion testing was performed in accordance with the UBC Standard 18-2. This testing consists of remolding 4-inch diameter by 1-inch thick test specimens to a moisture content and dry density corresponding to approximately 50 percent saturation. The samples are subjected to a surcharge of 144 pounds per square foot and allowed to reach equilibrium. At that point the specimens are inundated with distilled water. The linear expansion is then measured until complete.

Direct Shear Testing: One (1) bulk sample was selected for Direct Shear testing. This test measures the shear strength of the soil under various normal pressures and is used to develop parameters for foundation design and lateral design. Tests were performed using a recompacted test specimen that was saturated prior to tests. Tests were performed using a strain controlled test apparatus with normal pressures ranging from 800 to 2300 pounds per square foot.

Corrosion Series Testing: The soluble sulfate concentrations of the surface soil were determined in accordance with California Test Method Number (CA) 417. The pH and Minimum Resistivity were determined in accordance with CA 643. The soluble chloride concentrations were determined in accordance with CA 422.

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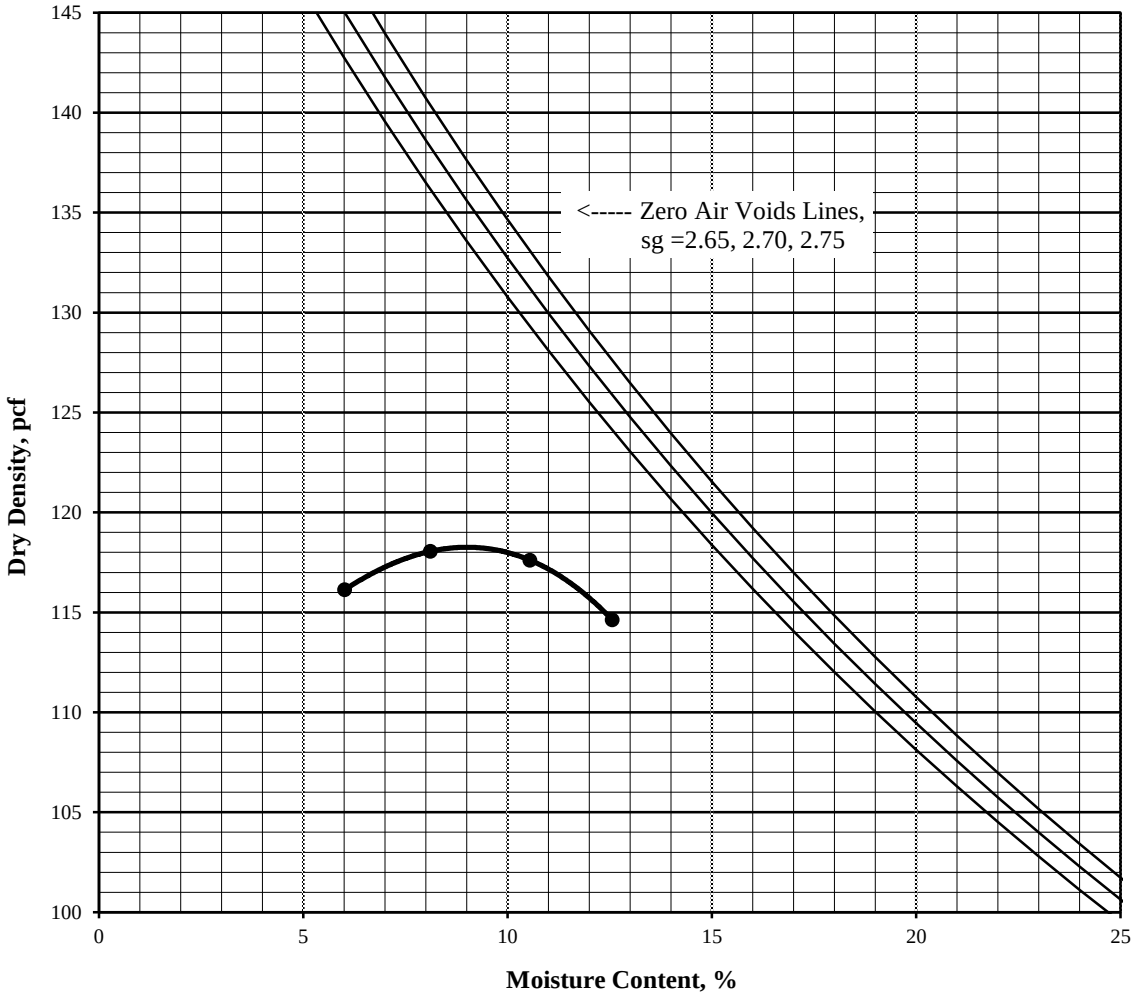
Maximum Density/Optimum Moisture

ASTM D698/D1557

Project Number: 544-26010 — January 22, 2026
Project Name: SEC Dinah Shore & Key Largo
Lab ID Number: LN6-26005 — ASTM D-1557 A
Sample Location: BH-1 Bulk 1 @ 0-5' — Rammer Type: Machine
Description: Olive Brown Sand (SW)

Maximum Density: 118.5 pcf
Optimum Moisture: 9%

Sieve Size	% Retained
3/4"	
3/8"	
#4	0.0



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Expansion Index

ASTM D 4829

Job Number: 544-26010

Job Name: SEC Dinah Shore & Key Largo

Lab ID Number: LN6-26005

Sample ID: BH-1 Bulk 1 @ 0-5'

Soil Description: Olive Brown Sand (SW)

January 22, 2026

Wt of Soil + Ring:	569.0
Weight of Ring:	190.8
Wt of Wet Soil:	378.2
Percent Moisture:	9.8%
Sample Height, in	0.95
Wet Density, pcf:	121.0
Dry Denstiy, pcf:	110.2

% Saturation:	50.0

Expansion **Rack # 1**

Date/Time	1/21/2026	2:30 PM
Initial Reading	0.0000	
Final Reading	0.0000	

Expansion Index **0**

(Final - Initial) x 1000

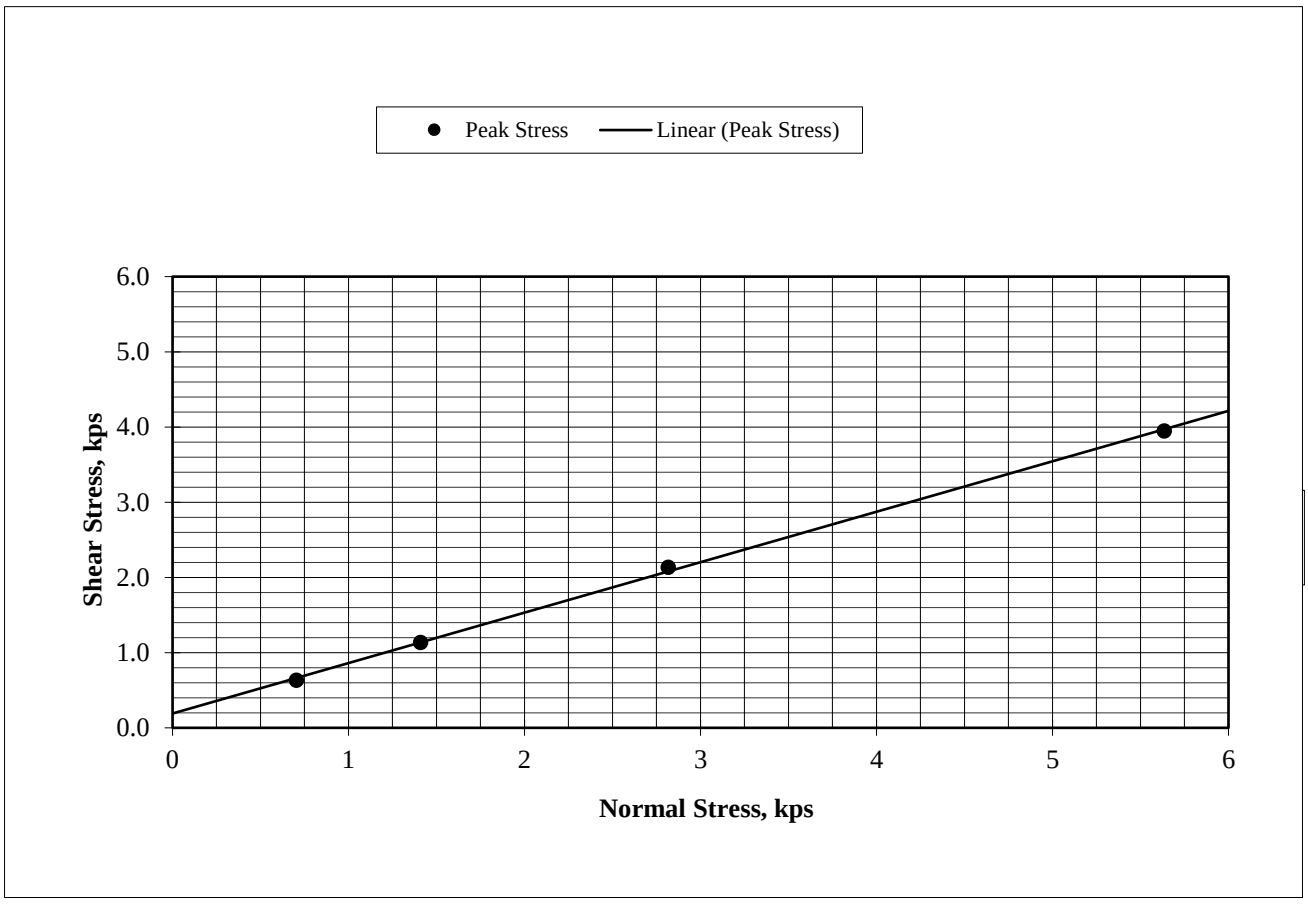
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Direct Shear ASTM D 3080-04
(modified for unconsolidated condition)

Job Number:	544-26010		January 22, 2026
Job Name	SEC Dinah Shore & Key Largo	Initial Dry Density:	107.5 pcf
Lab ID No.	LN6-26005	Initial Mosture Content:	8.9 %
Sample ID	BH-1 Bulk 1 @ 0-5'	Peak Friction Angle (Ø):	34°
Classification	Olive Brown Sand (SW)	Cohesion (c):	190 psf
Sample Type	Remolded @ 90% of Maximum Density		

Test Results	1	2	3	4	Average
Moisture Content, %	16.0	16.0	16.0	16.0	16.0
Saturation, %	76.3	76.3	76.3	76.3	76.3
Normal Stress, kps	0.704	1.409	2.817	5.635	
Peak Stress, kps	0.632	1.134	2.136	3.946	



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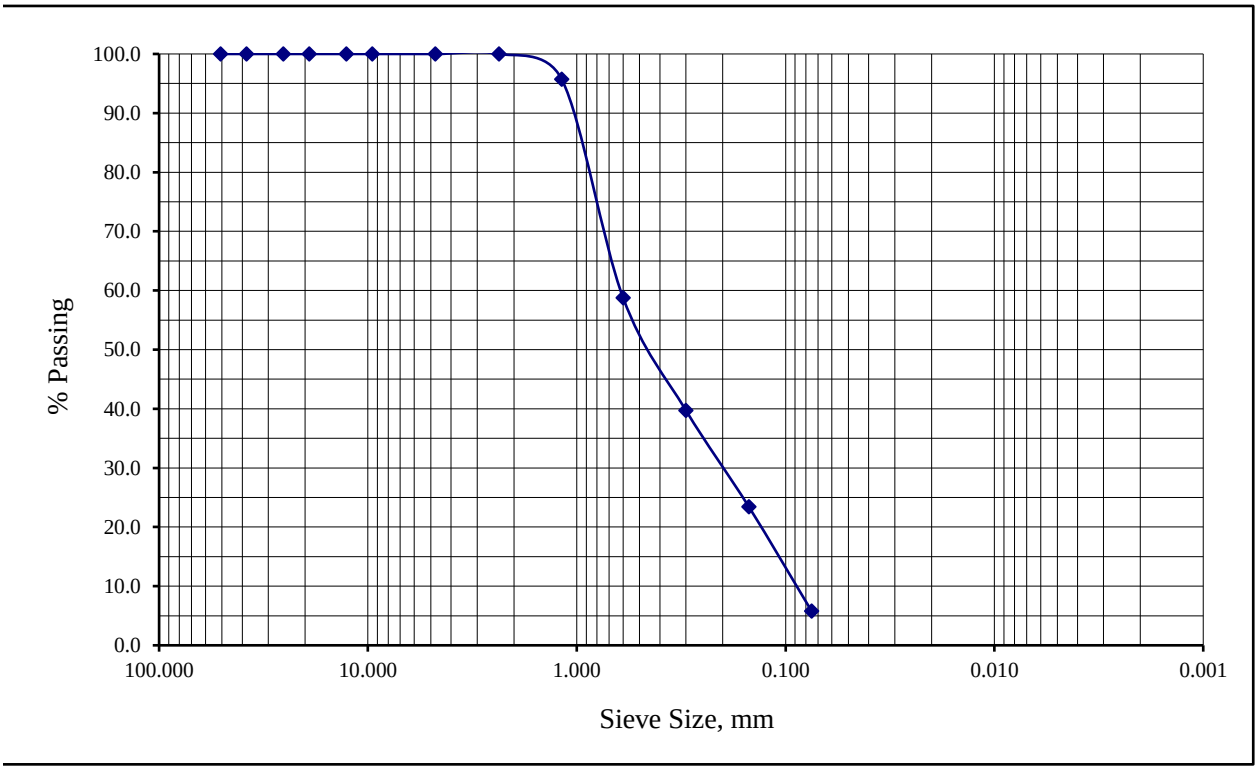
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Gradation

ASTM C117 & C136

Project Number: 544-26010 January 22, 2026
Project Name: SEC Dinah Shore & Key Largo
Lab ID Number: LN6-26005
Sample ID: BH-1 Bulk 1 @ 0-5' Soil Classification: SW

Sieve Size, in	Sieve Size, mm	Percent Passing
2"	50.8	100.0
1 1/2"	38.1	100.0
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	100.0
#8	2.36	100.0
#16	1.18	95.7
#30	0.60	58.8
#50	0.30	39.7
#100	0.15	23.4
#200	0.075	5.8



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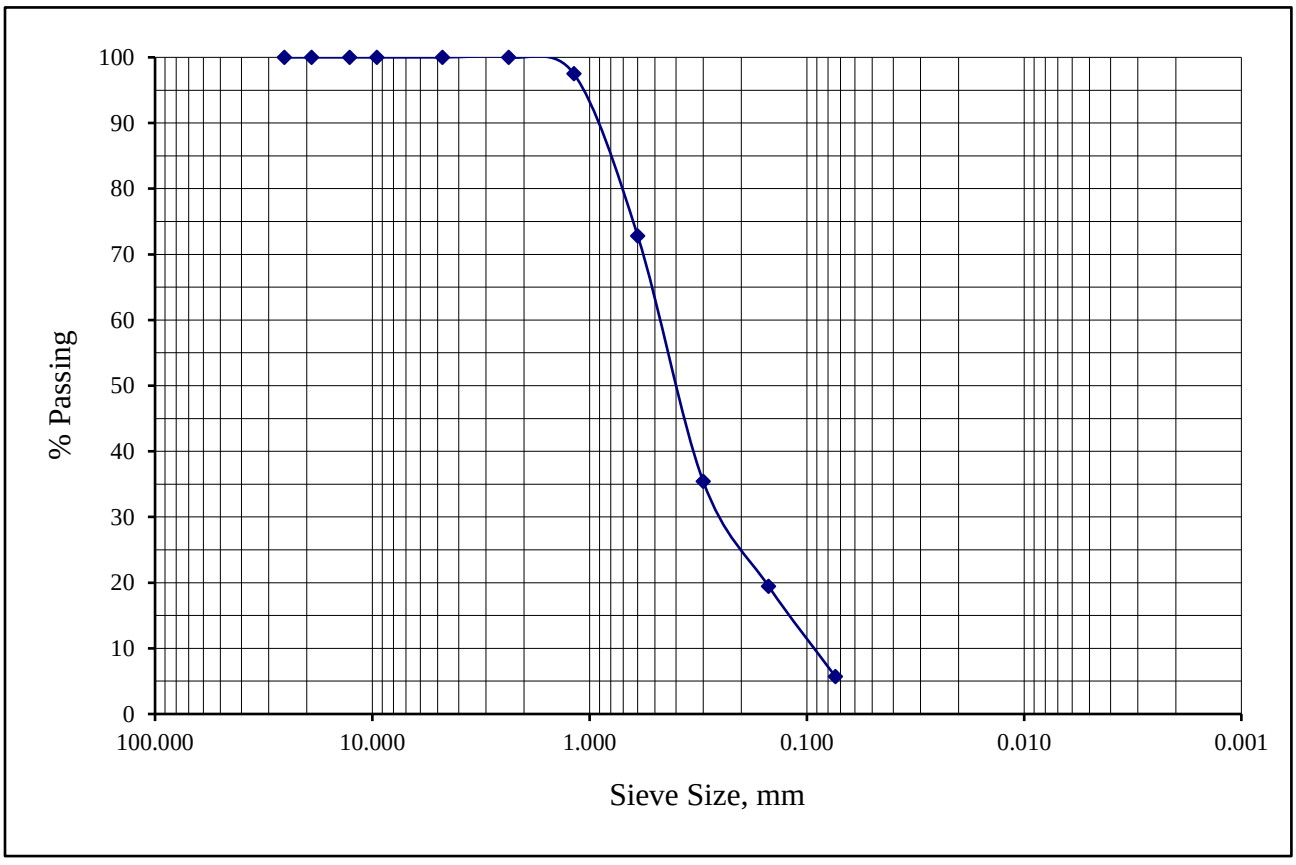
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Gradation

ASTM C117 & C136

Project Number: 544-26010 January 22, 2026
Project Name: SEC Dinah Shore & Key Largo
Lab ID Number: LN6-26005
Sample ID: BH-1 S-5 @ 20' Soil Classification: SP-SM

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	100.0
#8	2.36	100.0
#16	1.18	97.5
#30	0.60	72.8
#50	0.30	35.4
#100	0.15	19.5
#200	0.074	5.7



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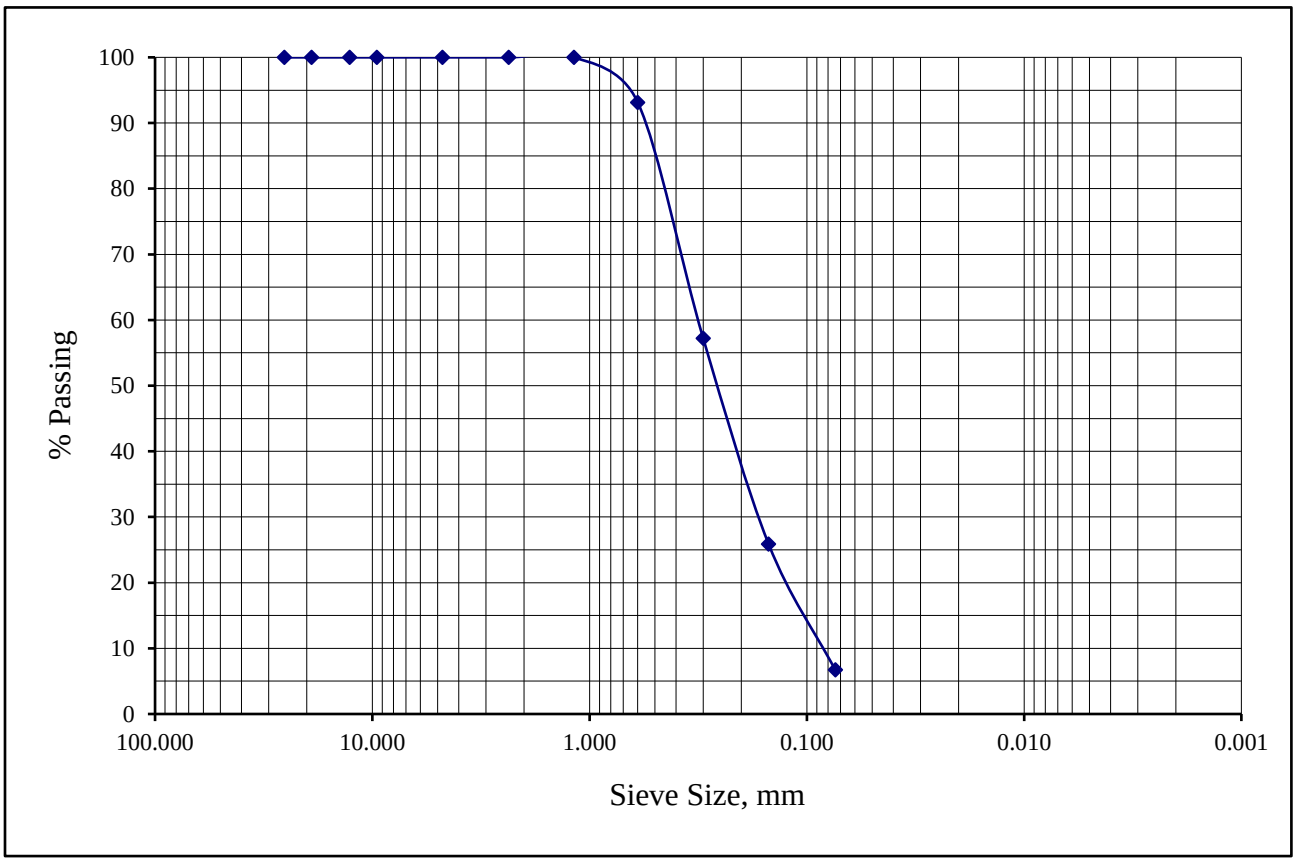
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Gradation

ASTM C117 & C136

Project Number: 544-26010 January 22, 2026
Project Name: SEC Dinah Shore & Key Largo
Lab ID Number: LN6-26005
Sample ID: BH-1 S-9 @ 40' Soil Classification: SP-SM

Sieve Size, in	Sieve Size, mm	Percent Passing
1"	25.4	100.0
3/4"	19.1	100.0
1/2"	12.7	100.0
3/8"	9.53	100.0
#4	4.75	100.0
#8	2.36	100.0
#16	1.18	100.0
#30	0.60	93.1
#50	0.30	57.2
#100	0.15	25.9
#200	0.074	6.7



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One Dimensional Consolidation

ASTM D2435 & D5333

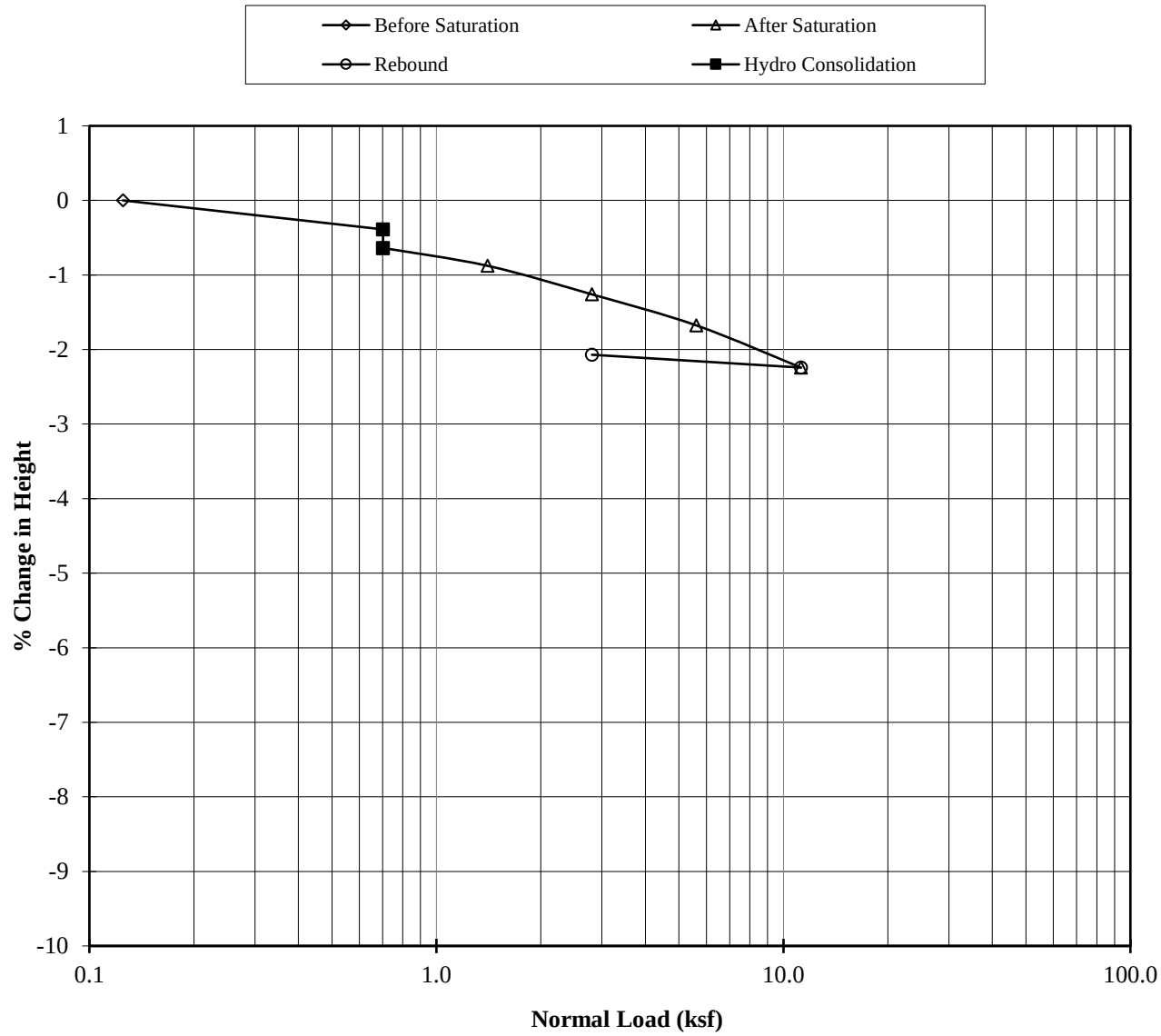
Job Number: 544-26010 January 22, 2026
Job Name: SEC Dinah Shore & Key Largo

Lab ID Number: LN6-26005
Sample ID: BH-1 R-6 @ 25'
Soil Description: Olive Brown Sand (SW)

Initial Dry Density, pcf:	101.2
Initial Moisture, %:	0.5
Initial Void Ratio:	0.647
Specific Gravity:	2.67

Hydrocollapse: 0.3% @ 0.702 ksf

% Change in Height vs Normal Presssure Diagram



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RESISTANCE '*R* ' VALUE AND EXPANSION PRESSURE

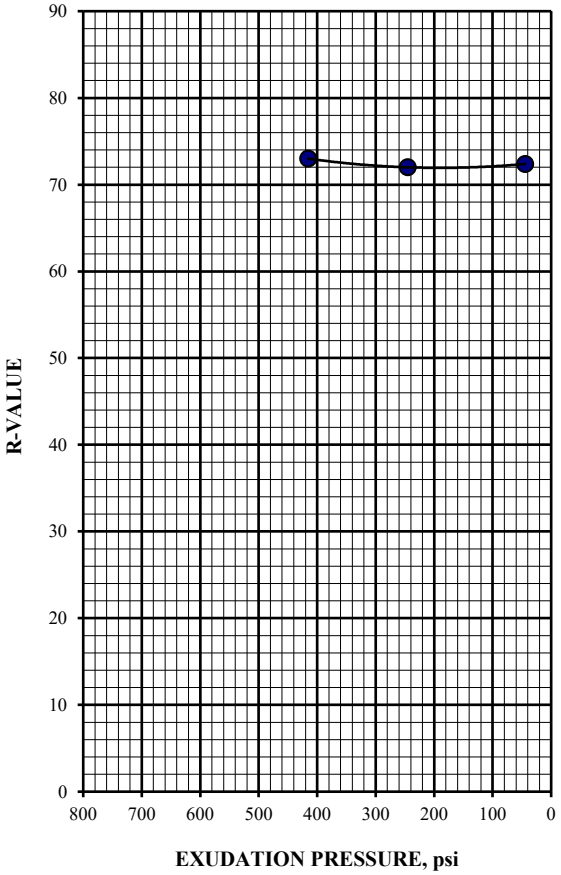
CTM 301

January 22, 2026

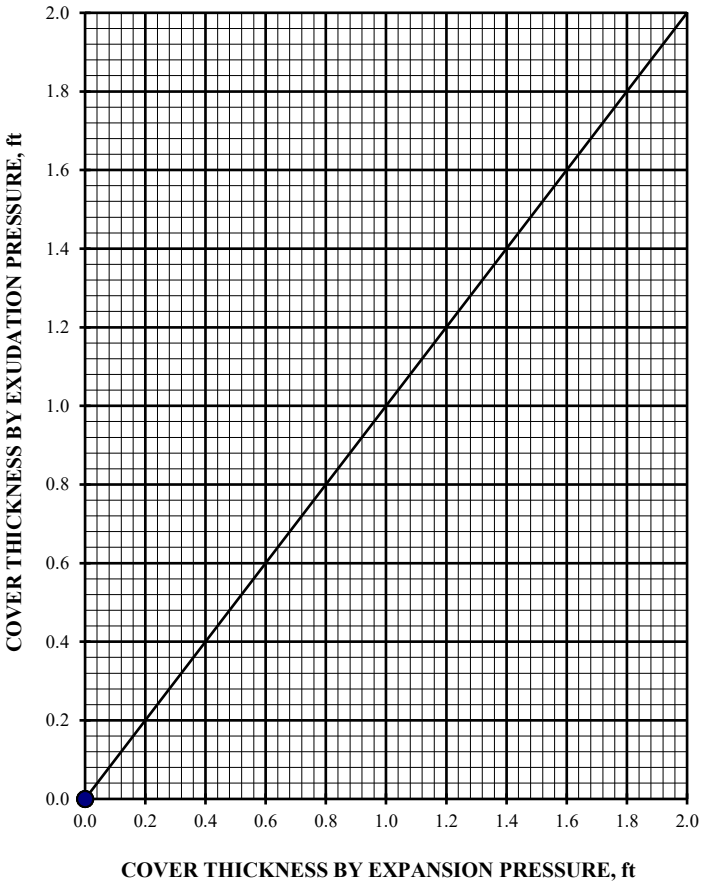
Project Number: 544-26010
Project Name: SEC Dinah Shore & Key Largo
Lab ID Number: LN6-26005
Sample ID: BH-1 Bulk 1 @ 0-5'
Sample Description: Olive Brown Silty Sand (SM)
Specified Traffic Index: 5.0

Dry Density @ 300 psi Exudation Pressure: 117.7-pcf
%Moisture @ 300 psi Exudation Pressure: 9.0%
R-Value - Exudation Pressure: 72
R-Value - Expansion Pressure: N/A
R-Value @ Equilibrium: 72

EXUDATION PRESSURE CHART



EXPANSION PRESSURE CHART



Sladden Engineering

6782 Stanton Ave., Suite C, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
45090 Golf Center Pkwy, Suite F, Indio, CA 92201 (760) 863-0713 Fax (760) 863-0847
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Date: January 21st, 2026

Account No.: 544-26010

Customer: Jose Santos – Vice President Riverside Sheriff Association

Location: South East Corner of Shore Drive and Key Largo Avenue, Rancho Mirage

Analytical Report

Corrosion Series

BH-1 @ 0-5’

pH	Soluble Sulfates	Soluble Chloride	Min. Resistivity
per CA 643	per CA 417	per CA 422	per CA 643
	ppm	ppm	ohm-cm
8.5	20	110	25,000

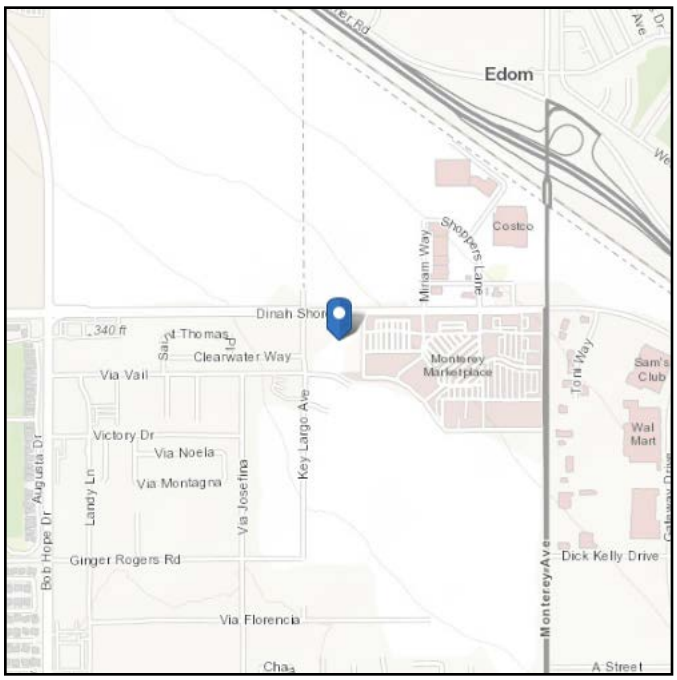
APPENDIX C

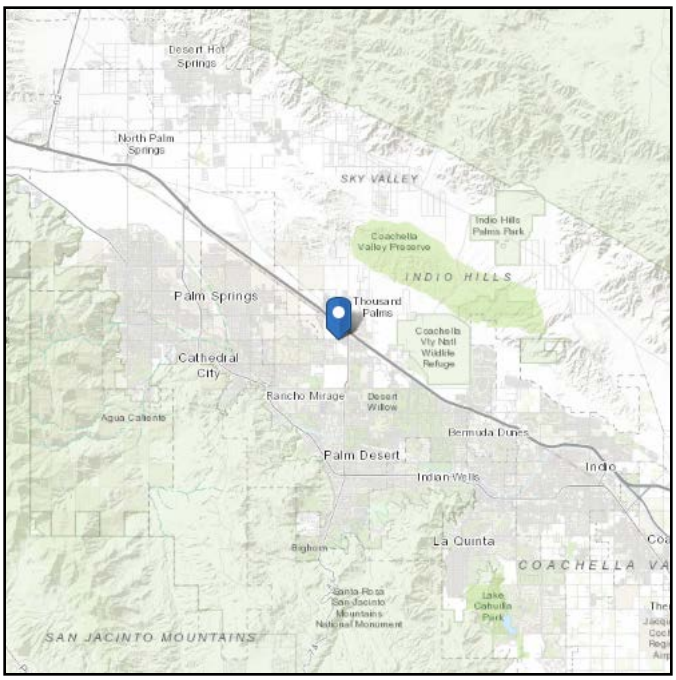
SEISMIC DESIGN MAP AND REPORT

ASCE Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-22	**Latitude:**	33.8009
Risk Category:	II	**Longitude:**	-116.3956
Soil Class:	Default	**Elevation:**	284.9879068164631 ft (NAVD 88)





Seismic

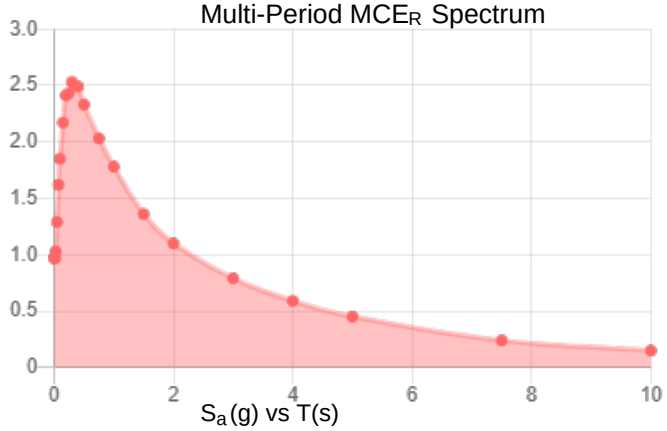
Site Soil Class: Default

Results:

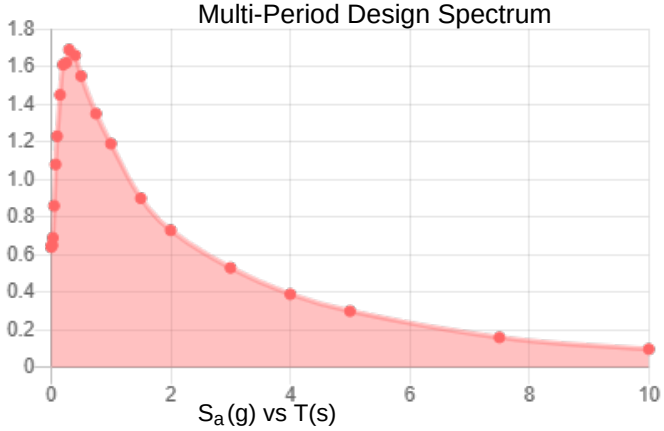
PGA_M :	0.81	T_L :	8
S_{MS} :	2.28	S_S :	2.09
S_{M1} :	2.14	S_1 :	0.79
S_{DS} :	1.52	V_{S30} :	260
S_{D1} :	1.42		

Seismic Design Category: E

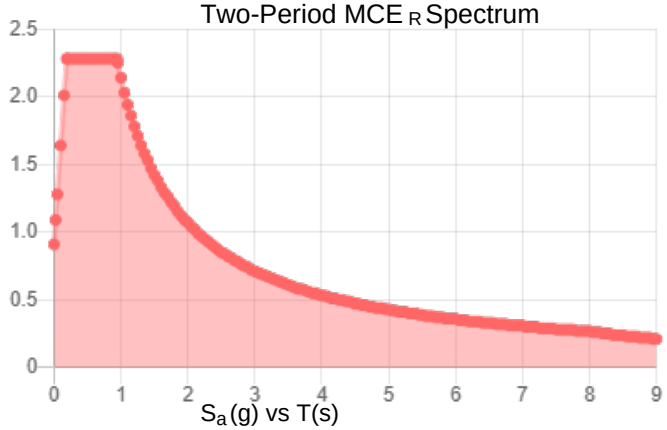
Multi-Period MCE_R Spectrum



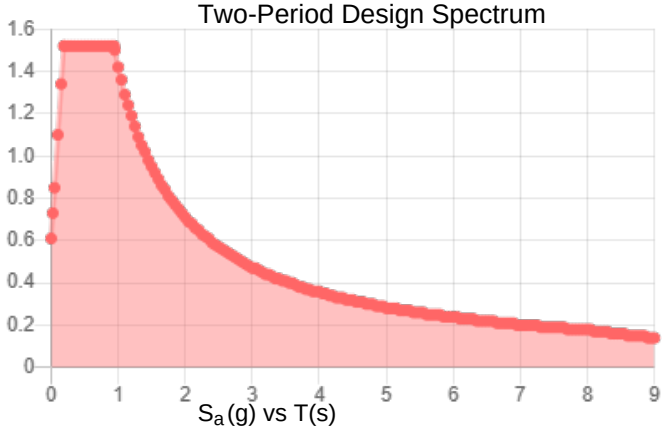
Multi-Period Design Spectrum



Two-Period MCE_R Spectrum



Two-Period Design Spectrum



MCE_R Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Design Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Data Accessed: Tue Jan 20 2026

Date Source:
USGS Seismic Design Maps based on ASCE/SEI 7-22 and ASCE/SEI 7-22 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-22 Ch. 21 are available from USGS.

The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

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Appendix E –

Noise Data

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/24/2026
Case Description: Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential	Residential	55.0	55.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		425.0	0.0
Excavator	No	40		80.7	425.0	0.0
Tractor	No	40	84.0		425.0	0.0
Tractor	No	40	84.0		425.0	0.0
Tractor	No	40	84.0		425.0	0.0
Dozer	No	40		81.7	425.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
			Noise Limits (dBA)					
Grader	66.4	62.4	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.4	61.4	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.4	61.4	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.4	61.4	N/A	N/A	N/A	N/A	N/A	N/A

Dozer		63.1	59.1	N/A	N/A	N/A	N/A	N/A
N/A								
	Total	66.4	68.7	N/A	N/A	N/A	N/A	N/A
N/A								

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/24/2026
Case Description: Building Construction

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential	Residential	55.0	55.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		425.0	0.0
Tractor	No	40	84.0		425.0	0.0
Tractor	No	40	84.0		425.0	0.0
Tractor	No	40	84.0		425.0	0.0
Excavator	No	40		80.7	425.0	0.0
Dozer	No	40		81.7	425.0	0.0

Results

Noise Limits (dBA)

Equipment	Calculated (dBA) Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Grader	66.4	62.4	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.4	61.4	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.4	61.4	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.4	61.4	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A

Dozer		63.1	59.1	N/A	N/A	N/A	N/A	N/A
N/A								
	Total	66.4	68.7	N/A	N/A	N/A	N/A	N/A
N/A								

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/24/2026
Case Description: Paving

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential	Residential	55.0	55.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84.0		425.0	0.0
Concrete Mixer Truck	No	40		78.8	425.0	0.0
Concrete Mixer Truck	No	40		78.8	425.0	0.0
Paver	No	50		77.2	425.0	0.0
Paver	No	50		77.2	425.0	0.0
Paver	No	50		77.2	425.0	0.0
Roller	No	20		80.0	425.0	0.0
Roller	No	20		80.0	425.0	0.0

Results

Noise Limits (dBA)

Equipment	Calculated (dBA) Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Tractor	65.4	61.4	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	60.2	56.2	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	60.2	56.2	N/A	N/A	N/A	N/A	N/A	N/A
Paver	58.6	55.6	N/A	N/A	N/A	N/A	N/A	N/A

Paver		58.6	55.6	N/A	N/A	N/A	N/A	N/A
N/A								
Paver		58.6	55.6	N/A	N/A	N/A	N/A	N/A
N/A								
Roller		61.4	54.4	N/A	N/A	N/A	N/A	N/A
N/A								
Roller		61.4	54.4	N/A	N/A	N/A	N/A	N/A
N/A								
	Total	65.4	65.9	N/A	N/A	N/A	N/A	N/A
N/A								

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/24/2026
Case Description: Architectural Coating

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential	Residential	55.0	55.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	425.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Compressor (air)	59.1	55.1	N/A	N/A	N/A	N/A	N/A	N/A
Total	59.1	55.1	N/A	N/A	N/A	N/A	N/A	N/A

Noise Limits (dBA)

Appendix F –

Transportation Impact Analysis

Michael Baker INTERNATIONAL

We Make a Difference

Transportation Impact Analysis
Riverside Sheriff's Association Benefit Trust – Mixed Use Project
Rancho Mirage, California

Prepared for:
PVG Architects
44530 San Pablo Avenue, Ste 200
Palm Desert, CA 92260

May 20, 2026

208116

MBAKERINTL.COM

TABLE OF CONTENTS

1 Executive Summary 1

1.1 Background 1
1.2 Analysis Scenarios 1
1.3 Analysis Findings 1
1.4 Vehicle Miles Traveled 2

2 Introduction 3

2.1 Project Description 3
2.2 Study Locations 8
2.3 Analysis Scenarios 8

3 Analysis Methodology 11

3.1 Level of Service Analysis Methodologies 11
3.2 Performance Criteria 12

4 Existing Year 2026 Conditions 13

4.1 Surrounding Roadway Network 13
4.2 Multimodal Facilities 15
4.2.1 Existing Bicyclists and Pedestrian Facilities 15
4.2.2 Existing Transit Services 15
4.3 Existing Year 2026 Traffic Volumes 15
4.4 Existing Year 2026 LOS Analysis 19

5 Forecast Traffic 20

5.1 Proposed Project 20
5.1.1 Project Forecast Trip Generation 20
5.1.2 Project Trip Distribution and Assignment 21
5.2 Cumulative Projects 21
5.3 Ambient Growth 22

6 Existing Year 2026 Plus Project Conditions 30

6.1 Existing Year 2026 Plus Project LOS Analysis 30
6.2 Existing Year 2026 Plus Project Traffic Volumes 30

7 Opening Year Without Project Condition 32

7.1 Opening Year Without Project Traffic Volumes 32
7.2 Opening Year Without Project LOS Analysis 32

8 Opening Year Plus Project Condition 34

8.1 Opening Year Plus Project Traffic Volumes 34
8.2 Opening Year Plus Project LOS Analysis 34

9 Vehicle Miles Traveled 37

10 Findings And Recommendations 40

10.1 Level Of Service Analysis 40

LIST OF EXHIBITS

Exhibit 2-1: Project Site Plan 5
Exhibit 2-2: Project Location 6
Exhibit 2-3: Project Site 7
Exhibit 2-4: Study Area 9
Exhibit 2-5: Existing Intersection Lane Configurations 10
Exhibit 4-1: Rancho Mirage Future Roadway Network 14
Exhibit 4-2: Existing Multimodal Facilities 16
Exhibit 4-3: SunLine Transit Route Map 17
Exhibit 4-4: Existing Year 2026 Peak Hour Volumes 18
Exhibit 5-1: Project Trip Distribution 23
Exhibit 5-2: Project Trip Assignment 24
Exhibit 5-3: Pass-By Trip Distribution 25
Exhibit 5-4: Pass-By Trip Assignment 26
Exhibit 5-5: Total Trip Assignment 27
Exhibit 5-6: Cumulative Project Location Map 28
Exhibit 5-7: Cumulative Project Trips 29
Exhibit 6-1: Existing Year 2026 Plus Project Peak Hour Volumes 31
Exhibit 7-1: Opening Year Without Project Peak Hour Volumes 33
Exhibit 8-1: Opening Year Plus Project Peak Hour Volumes 35

LIST OF TABLES

Table 2-1 – Development Area Summary 3
Table 2-2: Study Intersections 8
Table 3-1: HCM Intersection Level of Service Thresholds 11
Table 4-1: Existing Year 2026 Intersection Analysis Results 19
Table 5-2: Trip Generation Rates 20
Table 5-3: Project Trip Generation Summary 21
Table 5-3: Cumulative Projects 22
Table 6-1: Existing Year 2026 Plus Project Intersection Analysis Results 30
Table 7-1: Opening Year Without Project Intersection Analysis Results 32
Table 8-1: Opening Year Plus Project Intersection Analysis Results 36
Table 9-1: Screening Criteria for Development Projects Exempt from VMT Calculation 37
Table 10-1: Intersection LOS Summary Table 41

APPENDICES

Appendix A: PVG Architects Project Operations Dissertation
Appendix B: Traffic Scoping Agreement
Appendix C: Traffic Counts
Appendix D: Existing Year 2026 AM Peak Hour Analysis Worksheets
Appendix E: Existing Year 2026 PM Peak Hour Analysis Worksheets
Appendix F: Traffic Volume Development Worksheets
Appendix G: Existing Year 2026 With Project AM Peak Hour Analysis Worksheets
Appendix H: Existing Year 2026 With Project PM Peak Hour Analysis Worksheets
Appendix I: Opening Year 2027 Without Project AM Peak Hour Analysis Worksheets
Appendix J: Opening Year 2027 Without Project PM Peak Hour Analysis Worksheets
Appendix K: Opening Year 2027 With Project AM Peak Hour Analysis Worksheets
Appendix L: Opening Year 2027 With Project AM Peak Hour Analysis Worksheets

1 EXECUTIVE SUMMARY

1.1 BACKGROUND

The purpose of this Transportation Impact Analysis (TIA) is to document the traffic analysis findings of the proposed Riverside Sheriffs' Association Benefit Trust Mixed Use project (Project) in the City of Rancho Mirage. Scenarios analyzed as part of this study include Existing Conditions, Existing Plus Project Conditions, Opening Year, and Opening Year Plus Project. Key analysis measures evaluated include level of service (LOS) and delay as well as vehicle miles traveled (VMT) in support of the transportation component of the California Environmental Quality Act (CEQA). As required by the City of Rancho Mirage, this TIA has been prepared in accordance with the *Riverside County Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020)* [County Guidelines].

The Project will develop office facilities and commercial uses totaling approximately 68,665 square feet. The project includes the development of eight (8) buildings, surface parking, onsite circulation, two (2) water quality basins, and landscaping. The northern portion of the site would contain three (3) one-story commercial and fast casual restaurant buildings (Buildings 1 through 3) and associated parking.

The southern portion of the site would comprise the RSA campus and would include five (5) one-story buildings (Buildings 4 through 8). The campus includes a central mixed-use plaza, multi-purpose field, and associated parking.

The project would be constructed in multiple phases. Phase 1 would include the following: all site infrastructure; water retention areas; landscaping; the plaza; and Buildings 4 through 8 with their associated hardscape improvements. Future phases would include Buildings 1 through 3, which would be developed on a land-lease basis as tenants are secured. For the purposes of this traffic study, the complete buildout scenario will be analyzed and is expected to open in 2027.

1.2 ANALYSIS SCENARIOS

The study scenarios are listed below.

1. Existing Year 2026 Condition
2. Existing Year 2026 Plus Project Conditions
3. Opening Year Without Project Conditions (Existing plus Ambient Growth plus Cumulative Projects)
4. Opening Year Plus Project Conditions (Existing plus Ambient Growth plus Cumulative Projects plus Project)

1.3 ANALYSIS FINDINGS

The proposed project is forecast to generate approximately 2,603 daily vehicle trips with 76 AM (48 inbound and 28 outbound) peak hour trips and 118 PM (55 inbound and 63 outbound) peak hour trips.

According to Rancho Mirage's *General Plan 2017 Update,* LOS D is considered the minimum acceptable traffic operations condition. The operational analysis findings are as follows:

Existing Year 2026

In the Existing Year 2026 condition, all intersections operate at acceptable LOS D or better during the AM and PM Peak Hours.

Existing Year 2026 Plus Project Conditions

In the Existing Year 2026 Plus Project condition, all intersections operate at acceptable LOS D or better during the AM and PM Peak Hours

Opening Year Without Project Conditions
In the Opening Year Without Project condition, all intersections operate at acceptable LOS D or better during the AM and PM Peak Hours.

Opening Year Plus Project Conditions
In the Opening Year Plus Project condition, all intersections operate at acceptable LOS D or better during the AM and PM Peak Hours.

1.4 VEHICLE MILES TRAVELED

A VMT screening based on City's *Transportation Analysis Policy* and County Guidelines was conducted to determine if the project is anticipated to result in a less-than-significant transportation impact under CEQA. The VMT screening assessment shows the project meets the screening criteria for Local-Serving Retail. Therefore, a Project specific VMT assessment is not required, and the Project impact is considered less-than-significant on the environment.

2 INTRODUCTION

The purpose of this TIA is to document the traffic analysis findings of the proposed Project in the City of Rancho Mirage. Scenarios examined included Existing Conditions, Existing Plus Project Conditions, Opening Year, and Opening Year Plus Project. Key analysis measures evaluated included level of service (LOS) and delay as well as vehicle miles traveled (VMT) in support of the transportation component of the California Environmental Quality Act (CEQA). As required by the City of Rancho Mirage, this Study has been prepared in accordance with the *Riverside County Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020)* [County Guidelines].

2.1 PROJECT DESCRIPTION

The Project will develop office facilities and commercial uses totaling approximately 68,665 square feet. The existing site consists of an undeveloped, empty lot. **Exhibit 2-1** shows the project site plan. The project includes the development of eight (8) buildings, surface parking, onsite circulation, two (2) water quality basins, and landscaping. The northern portion of the site would contain three (3) one-story commercial and fast casual restaurant buildings (Buildings 1 through 3) and associated parking.

The southern portion of the site would comprise the RSA campus and would include five (5) one-story buildings (Buildings 4 through 8) as shown on the site plan. The campus includes a central mixed-use plaza, multi-purpose field, and associated parking. For the purposes of this analysis, approximately 450 RSA members including family members would have access to the Medical Office, Fraternal Order of Polic Lodge, and Health and Fitness Center.

Prest Vuksic Greenwood (PVG) Architects prepared a dissertation of the project to provide a further breakdown of the uses of each building on-site. The dissertation, dated February 2026, also provides logistical details as well as the hours of operations for each use within the project and which uses have irregular operational hours or are reserved for special event purposes. This dissertation can be found in **Appendix A**. The following summarizes each of the buildings uses:

- **Buildings 1-3** will consist of a mix of commercial and restaurant space, with a total of 18,673 square feet (SF) of leasable space. As outlined in the PVG dissertation, the space is planned to accommodate up to 100% restaurant use for maximum tenant flexibility.
- **Building 4** will consist of entirely office space, with a total of 9,874 square feet of leasable space. The space is also intended for the future expansion of the Riverside Sheriff's Association (RSA) office.
- **Building 5** will consist of a mix of interior office uses, with approximately 14,130 square feet.
- **Building 6** will consist of entirely medical office space, with approximately 11,357 square feet.
- **Building 7** will be a mixed-use facility for the Fraternal Order of Police (FOP), with approximately 5,891 square feet. The building breakdown is as follows:
    - Office Space – 3,568 SF
    - Lounge/Bar – 2,323 SF. The space will operate as a typical breakroom/lounge on weekdays for deputies to have lunch and/or write reports while being uninterrupted and in a safe and controlled environment. During special events, this space can be utilized as banquet space. It should be noted that the bar will only be open and operational during special event uses.
- **Building 8** will consist of a health and fitness center, approximately 7,667 square feet. The center will be for RSABT members and their eligible dependents, featuring free weights, cardio equipment, a multipurpose fitness studio, locker rooms, and saunas.

TABLE 2-1 – DEVELOPMENT AREA SUMMARY

Building	Project Use	Intensity	Operational Details

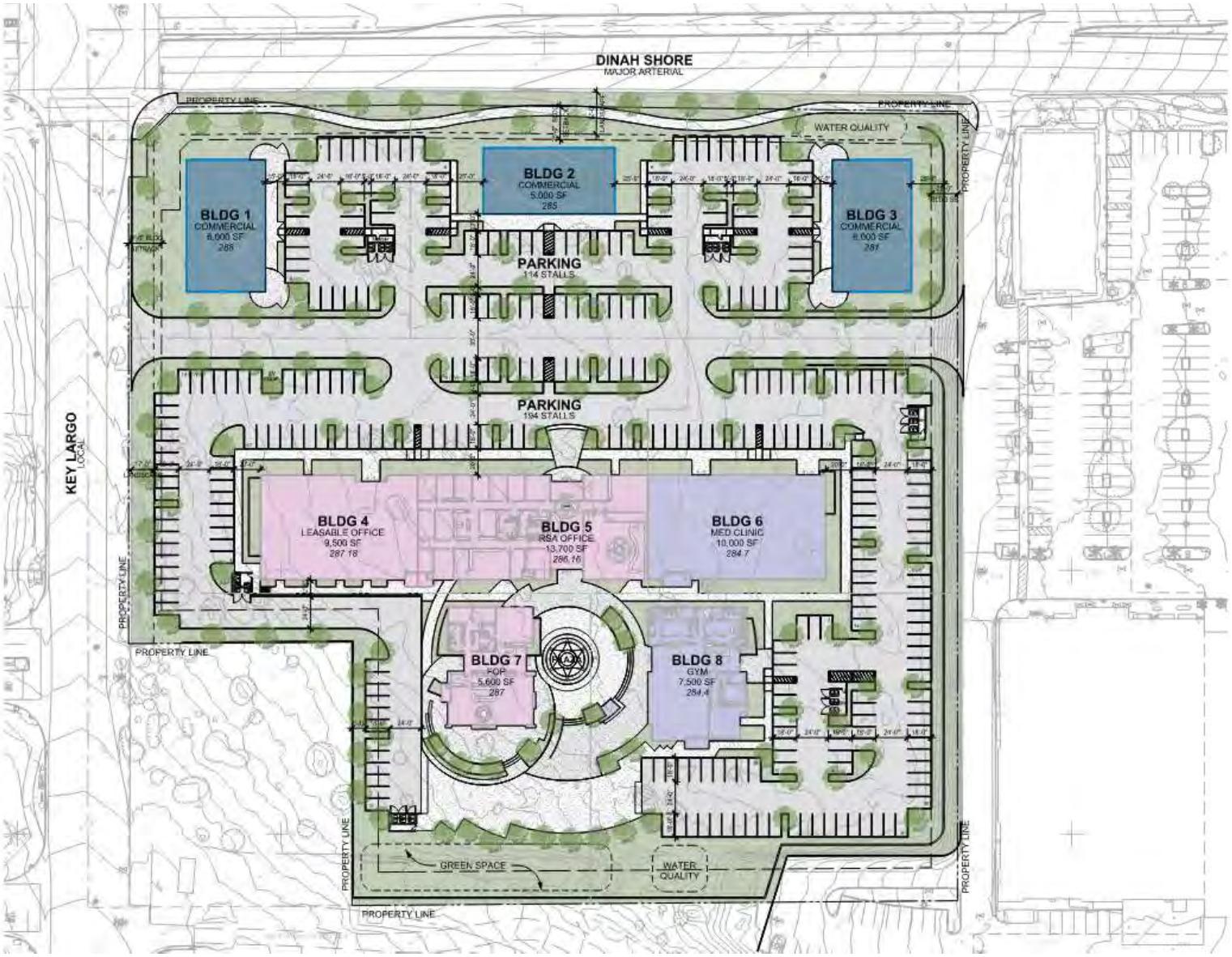
1	Restaurant	6,582 SF	Typical commercial retail and restaurant, conservatively assumes 100% restaurant use.
2	Restaurant	5,510 SF	
3	Restaurant	6,582 SF	
4	Office	9,874 SF	Leasable office space. Intended for the future expansion of the RSA offices.
5	Office	10,619 SF	RSA offices.
	Retail	1,095 SF	Retail exclusive to deputies, includes uniforms and equipment.
	Meeting Hall	76 Seats	Special event venue for executive boardroom anticipated to be utilized 3 times per year from 1:00 PM-2:00 PM.
6	Medical Office	5,237 SF	Medical office space for RSABT medical service. Approximately 450 eligible members.
	Medical Office	6,120 SF	Leasable medical office space, or office space. Intended for the future expansion of RSABT medical services.
7	Office	3,568 SF	Provides additional office space for deputies.
	Bar/Lounge	2,323 SF	Typical use anticipated to support deputies on site as a breakroom. Special event venue is used for after-hours events and community outreach.
8	Health/Fitness Club	7,667 SF	Gym will be for RSABT members and their eligible dependents. Approximately 300-350 eligible members.

The project would be constructed in multiple phases. Phase 1 would include the following: all site infrastructure; water retention areas; landscaping; the plaza; and Buildings 4 through 8 with their associated hardscape improvements. Future phases would include Buildings 1 through 3, which would be developed on a land-lease basis as tenants are secured. For the purposes of this traffic study, the complete buildout scenario will be analyzed and is expected to open in 2027.

Regionally, the Project site is located within the City of Rancho Mirage (City), within the County of Riverside (County) as shown in **Exhibit 2-2**. Locally, the Project site is located on the southeast corner of Dinah Shore Drive and Key Largo Avenue as shown in **Exhibit 2-3**.

The Project proposes two (2) access points. One full-access driveway is proposed on the east side of Key Largo Avenue, approximately 170 feet south of the intersection of Dinah Shore Drive and Key Largo Avenue. Another project driveway is proposed on the east side of the project site that would connect with the existing parking lot of the Monterey Market Place shopping center. This shared access provides partial access to Dinah Shore Drive (left-in / right-in / right-out only) via the existing driveway approximately 570 feet west of Miriam Way.

Not to Scale



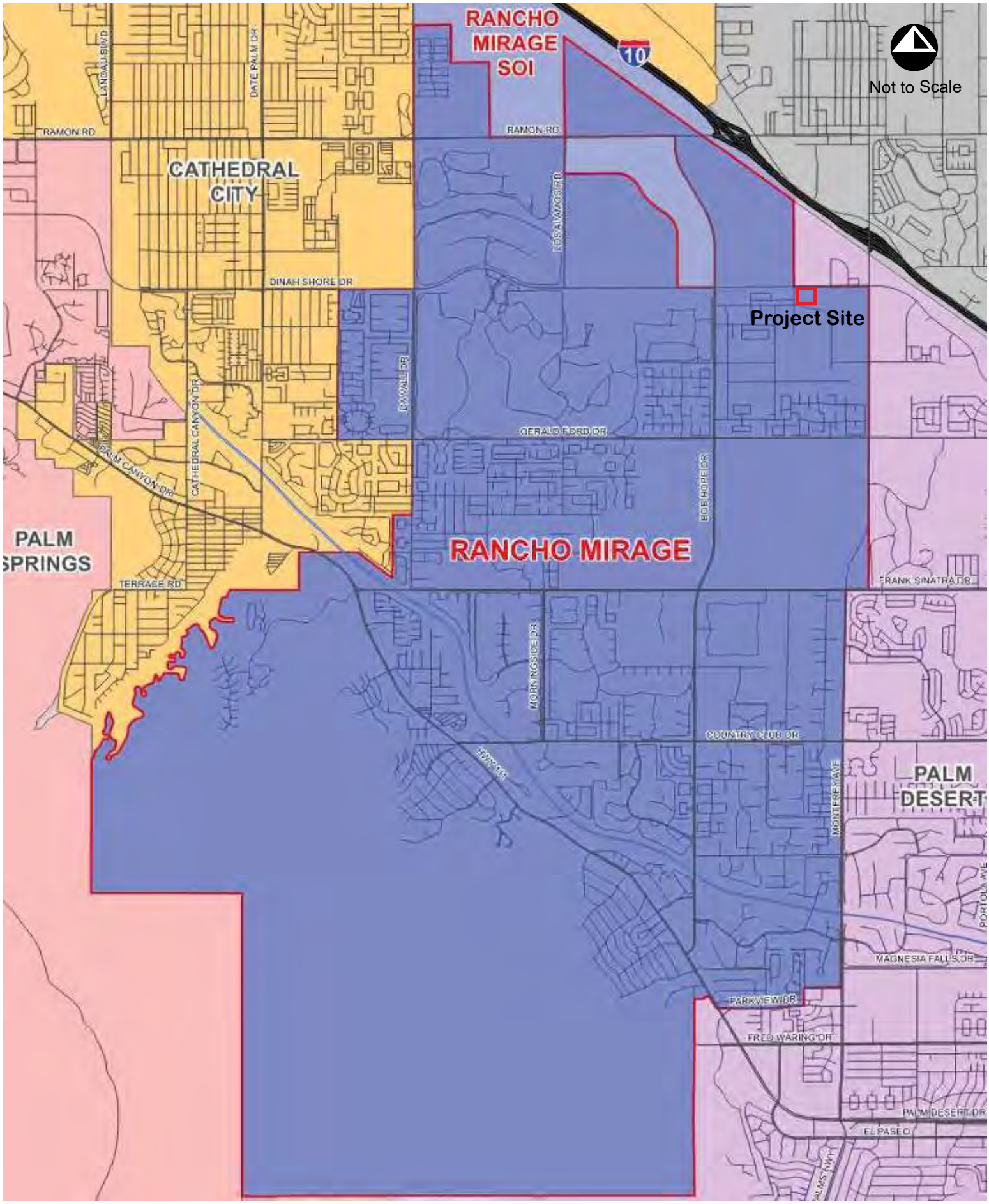
Source: Prest Vuksic Greenwood Architects

Not to Scale

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Project Site Plan

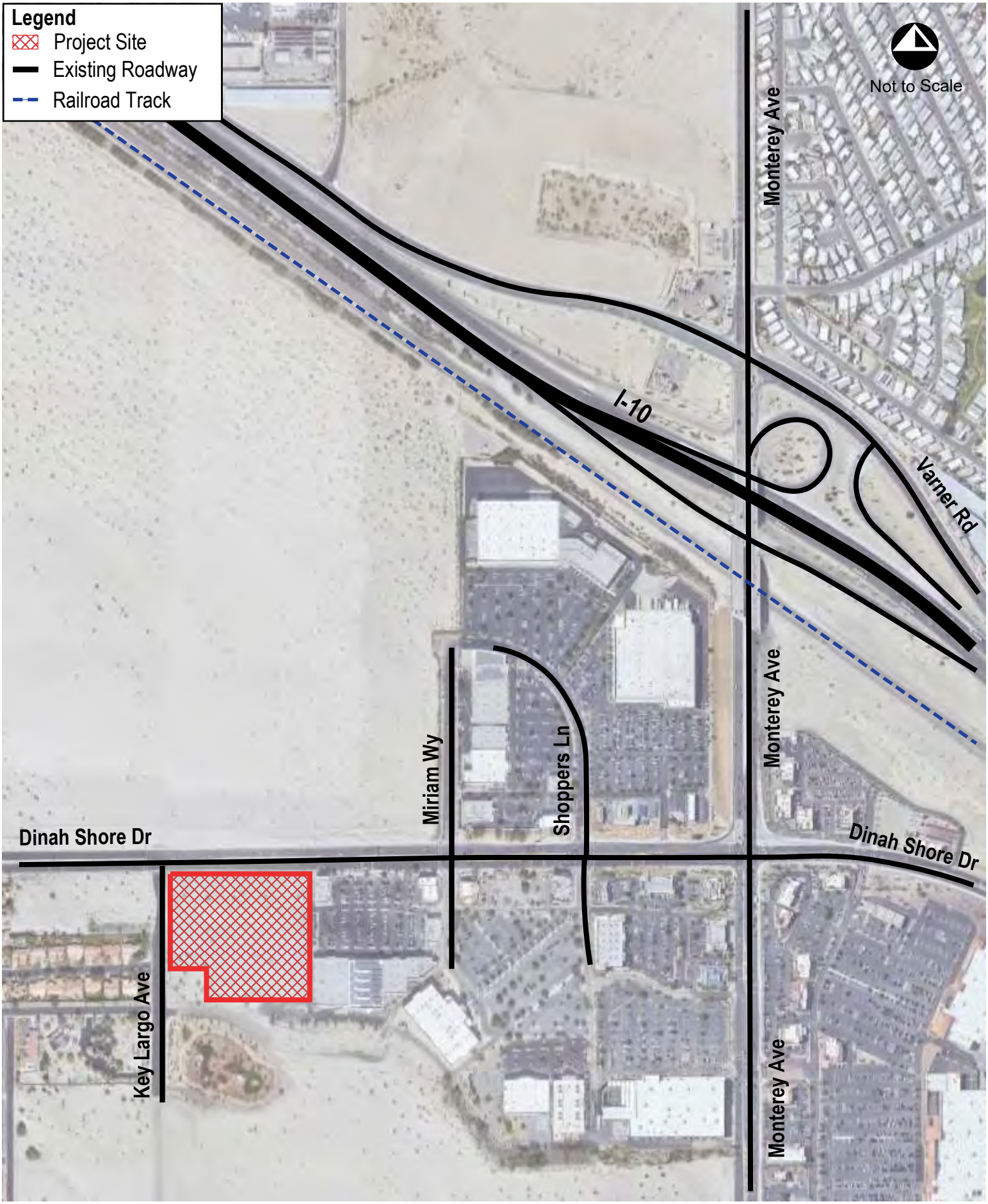
Exhibit 2-1



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Project Location

Exhibit 2-2



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Project Site

Exhibit 2-3

2.2 STUDY LOCATIONS

The scope of this traffic study, including the overall study area, has been coordinated with City staff and the approved scoping memo is included as **Appendix B**.

This study evaluates a total of 8 study intersections during the AM and PM peak hours within the vicinity of the project site. **Table 2-2** lists the study intersections that were examined as part of this analysis.

TABLE 2-2: STUDY INTERSECTIONS

ID	Intersection	Control Type	Jurisdiction
1	Varner Road & Monterey Avenue	SIG	Thousand Palms
2	I-10 SB Ramps & Monterey Avenue	SIG	Caltrans
3	Dinah Shore Drive & Key Largo Avenue	SIG	Rancho Mirage
4	Key Largo Avenue & Project Driveway	OWSC	Rancho Mirage
5	Dinah Shore Drive & Project Driveway	OWSC	Rancho Mirage
6	Dinah Shore Drive & Miriam Way	SIG	Rancho Mirage
7	Dinah Shore Drive & Shoppers Lane	SIG	Rancho Mirage
8	Dinah Shore Drive & Monterey Avenue	SIG	Rancho Mirage

SIG = Signalized Control; OWSC = One-Way Stop-Controlled.

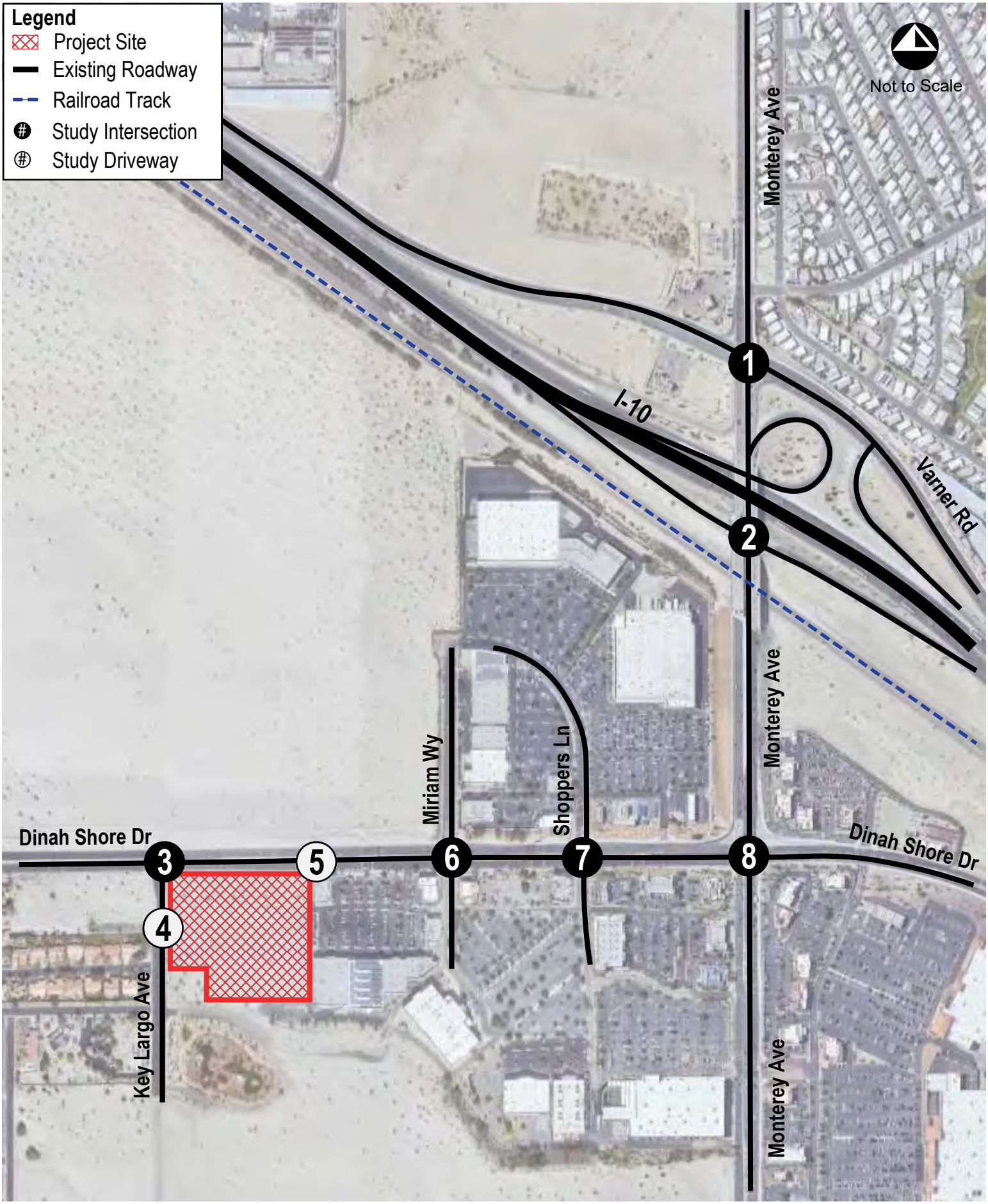
These study intersections have been identified in coordination with City staff as locations where traffic operations could potentially be impacted by the proposed Project. Six (6) of the study intersections are located within the City of Rancho Mirage, one (1) is located within the City of Thousand Palms, and one (1) is under Caltrans jurisdiction.

Exhibit 2-4 shows the study intersections within the study area. It should be noted that Intersection #4 does not exist without the Project and was not analyzed under the Existing or Opening Year without Project conditions. **Exhibit 2-5** shows the Existing study intersection lane geometry.

2.3 ANALYSIS SCENARIOS

In accordance with County guidelines, the analysis scenarios assessed are as follows:

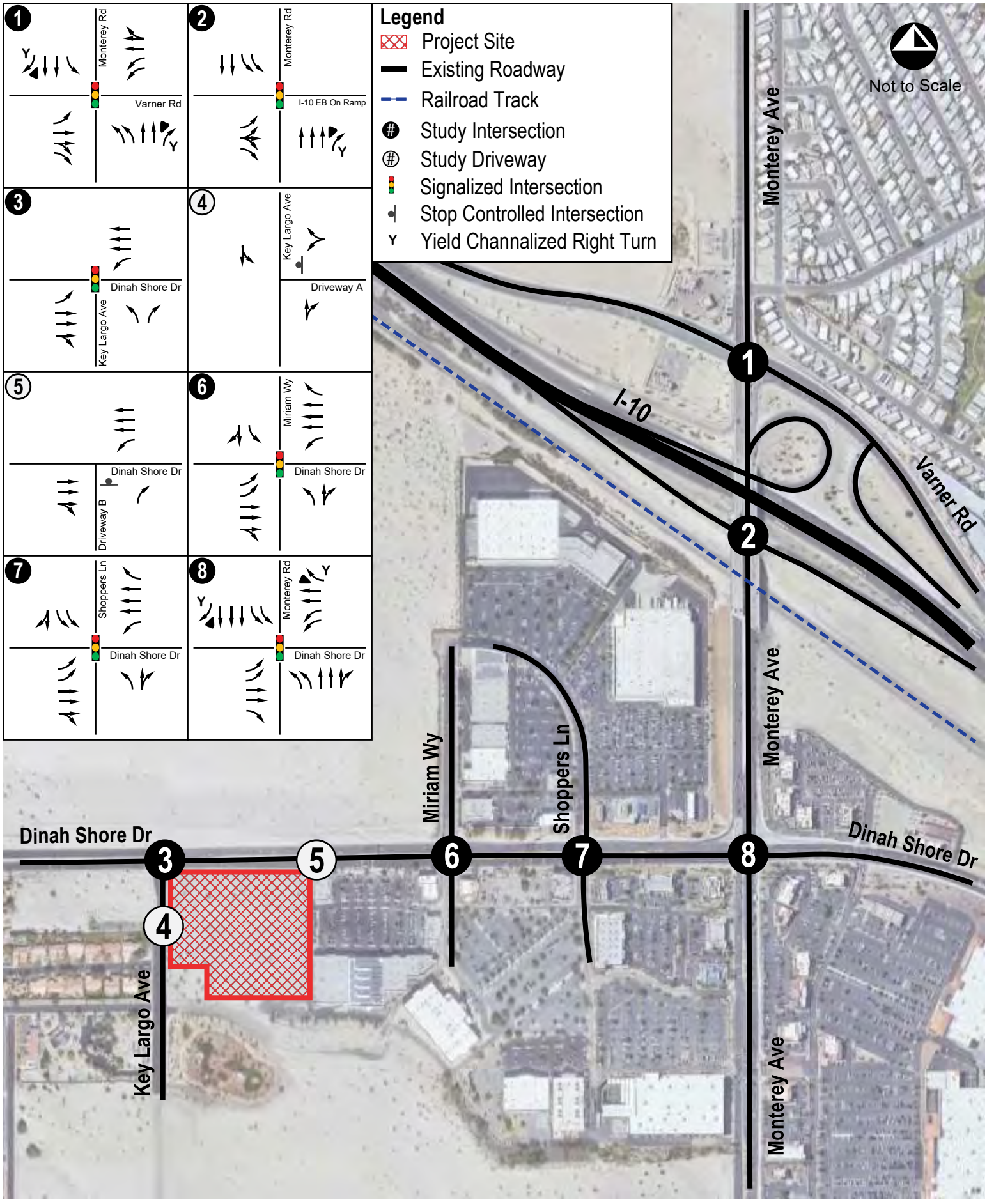
1. Existing Year 2026 Condition
2. Existing Year 2026 Plus Project Conditions
3. Opening Year Without Project Conditions (Existing plus Ambient Growth plus Cumulative Projects)
4. Opening Year Plus Project Conditions (Existing plus Ambient Growth plus Cumulative Projects plus Project)



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Study Area

Exhibit 2-4



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Existing Intersection Lane Configurations

Exhibit 2-5

3 ANALYSIS METHODOLOGY

3.1 LEVEL OF SERVICE ANALYSIS METHODOLOGIES

As required by the City, this Study has been prepared in accordance with the *Riverside County Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020)* [County Guidelines]. The scope of this traffic study has been coordinated with City staff and the approved scoping memo is included as **Appendix B**.

Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the type of traffic control and experienced delay at the intersection. The Highway Capacity Manual 7th Edition, published by the Transportation Research Board, was utilized in this analysis to determine the operating LOS at each of the study intersections. LOS can range from LOS A (free-flow conditions) to LOS F (severely congested conditions). Delay in seconds per vehicle (sec/veh) passing through the intersection, is the primary measure of effectiveness for signalized, stop-controlled, and roundabout intersections. The corresponding average stopped delay range experienced per vehicle per LOS is shown in **Table 3-1**.

TABLE 3-1: HCM INTERSECTION LEVEL OF SERVICE THRESHOLDS

Level of Service	Control Delay (seconds/vehicle)		Description
	Signalized Intersections	Unsignalized Intersections	
A	≤ 10.0	≤ 10.0	Operates with very low delay and most vehicles do not stop.
B	> 10.0 to 20.0	> 10.0 to 15.0	Operates with good progression with some restricted movements.
C	> 21.0 to 35.0	>15.1 to 25.0	Operates with significant number of vehicles stopping with some backup and light congestion.
D	> 35.1 to 55.0	> 25.0 to 35.0	Operates with noticeable congestion, longer delays occur, and many vehicles stop.
E	>55.0 to 80.0	> 35.1 to 50.0	Operates with significant delay, extensive queuing and unfavorable progression.
F	> 80.0	> 50.0	Operates at a level that is unacceptable to most drivers. Arrival rates exceed capacity of the intersection. Extensive queuing occurs.

Source: Highway Capacity Manual (HCM) 7th Edition.

LOS is reported for the average stopped delay per vehicle for the overall intersection (all movements) for signalized intersections, all-way stop-controlled, and roundabout intersections. For one-way or two-way stop-controlled intersections, LOS is reported for the worst stop-controlled approach. LOS and delay for the intersection analysis was conducted with Synchro/SimTraffic (version 12) software. HCM 7th Edition results were reported.

3.2 PERFORMANCE CRITERIA

Rancho Mirage's *General Plan 2017 Update*, adopted in November 2017 [City General Plan], sets LOS D as the minimum acceptable traffic operations condition for intersections. For the purposes of this analysis and consistent with The County's guidelines, improvements may be required when:

- Existing traffic conditions exceed the General Plan target LOS
- Project traffic, when added to existing traffic, will determine the LOS to below the target LOS
- Cumulative traffic exceeds the target LOS

4 EXISTING YEAR 2026 CONDITIONS

4.1 SURROUNDING ROADWAY NETWORK

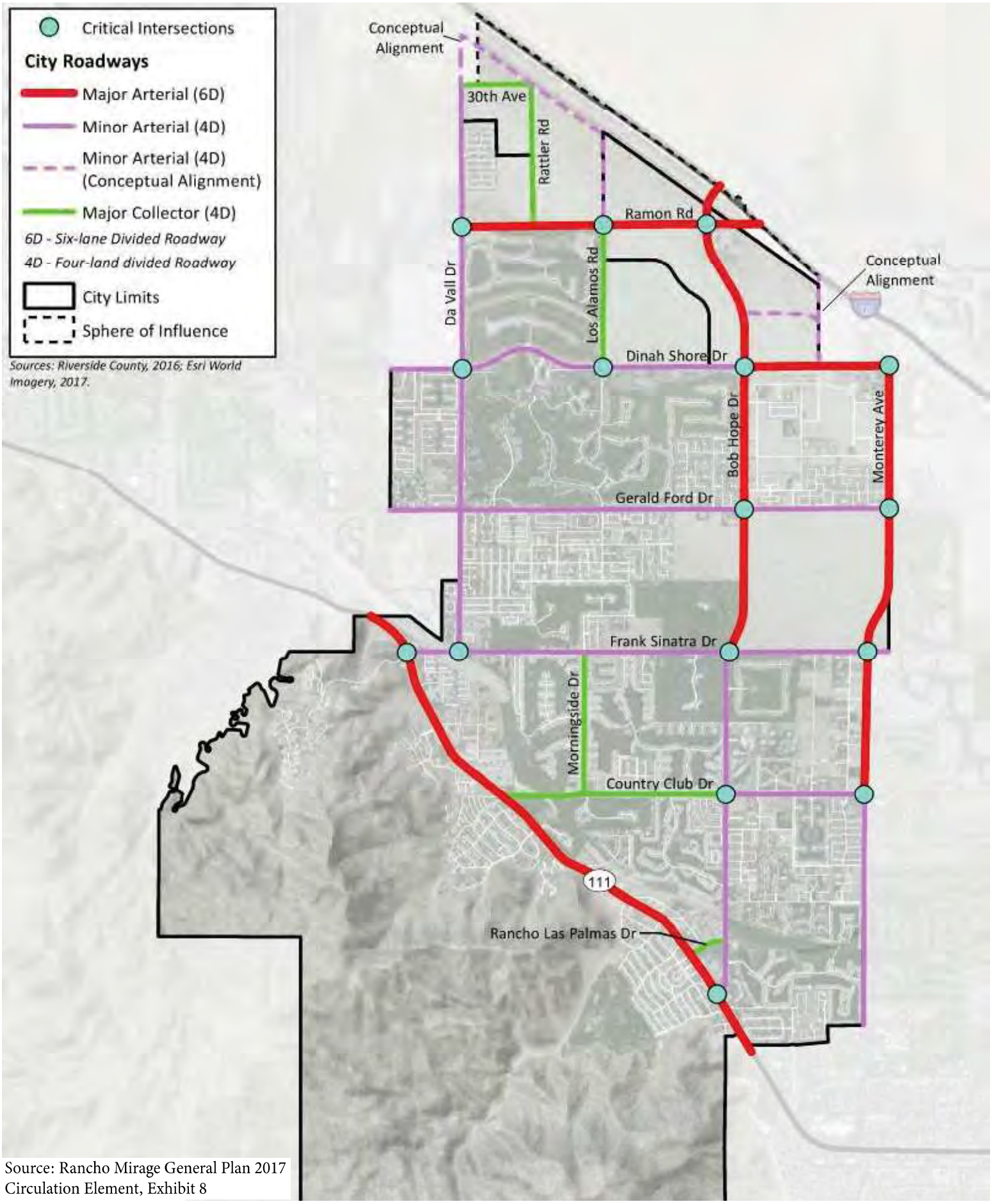
The characteristics of the roadway system in the vicinity of the project site are described below:

Dinah Shore Drive is a six-lane divided roadway in Rancho Mirage. Regionally, it travels east-west from California Highway 111 in the west to Gerald Ford Drive in the east. The Rancho Mirage General Plan (2017) identifies Dinah Shore Drive as a Major Arterial Roadway. The current posted speed limit on Dinah Shore Drive is 50 mph.

Monterey Avenue is a divided six-lane roadway in Rancho Mirage. Regionally, it travels north-south from Varner Road in the north to Pines to Palms Highway in the south. The Rancho Mirage General Plan (2017) identifies Monterey Avenue as a Major Arterial Roadway. The current posted speed limit on Monterey Avenue is 55 mph.

Key Largo Avenue is a two-lane roadway in Rancho Mirage. Regionally, it travels north-south from Dinah Shore Drive in the north to Via Vail in the south. The current posted speed limit on Key Largo Avenue is 25 mph.

Exhibit 4-1 shows the Rancho Mirage General Plan Future Roadway Network.



Source: Rancho Mirage General Plan 2017 Circulation Element, Exhibit 8

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Rancho Mirage Future Roadway Network

Exhibit 4-1

4.2 MULTIMODAL FACILITIES

The surrounding area of the project site accommodates various modes of travel, including passenger cars, delivery trucks, transit vehicles, bicycles, and pedestrians. The information presented in this section focuses on the bicycle and pedestrian activity observed in the study area as well as the available transit options. The existing multimodal facilities are shown in **Exhibit 4-2**.

4.2.1 Existing Bicyclists and Pedestrian Facilities

Within close proximity to the project site, Class II Bike Lanes are located along both sides of Dinah Shore Drive, East of Monterey Avenue; they are also provided southbound along Monterey Avenue, approximately 1,200 feet South of Dinah Shore Drive. On all other roadways, bicyclists generally utilize a shoulder adjacent to motor vehicle travel lanes.

Sidewalks are generally provided throughout the study area, with good connectivity within the study area. However, there are intermittent gaps in existing sidewalk infrastructure, particularly along arterials adjacent to undeveloped properties. Notable gaps in sidewalks in immediate vicinity of the project site include:

- Dinah Shore Drive on both sides of the street between Miriam Way and Bobe Hope Drive
- Key Largo Avenue northbound between Dinah Shore Drive and south of Via Vail
- Monterey Avenue northbound between Varner Road and Dinah Shore Drive

The existing bikeway facilities and sidewalk gaps are presented in **Exhibit 4-2**.

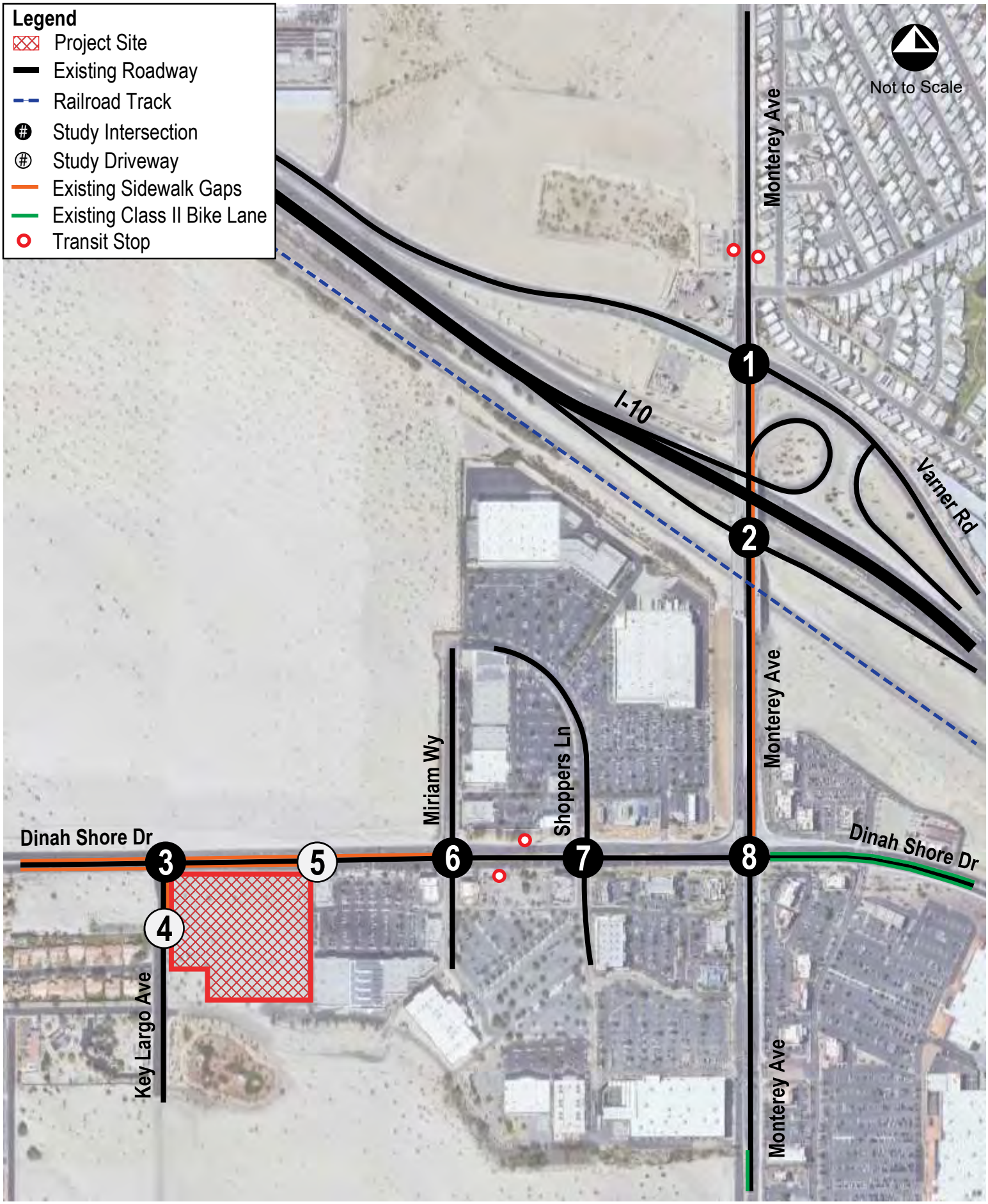
4.2.2 Existing Transit Services

SunLine Transit Agency (STA) provides transit services in the area including a fixed-route bus service and Dial-a-Ride service. Dial-a-Ride service is provided for locations within three quarters of a mile of an STA local route, meaning service is provided in the Project area.

Exhibit 4-2 illustrates the existing transit stops within the vicinity of the project site. The current bus route map showing the fixed route services is shown in **Exhibit 4-3**, along with the Project location added to the exhibit. Service offered through the study area is provided by Route 14 seven (7) days a week. Route 14 spans between Palm Desert, Rancho Mirage, and Thousand Palms. The northbound route runs from about 6 AM to 10 PM with approximate headways of 60-minutes. The southbound route runs from about 6 AM to 9:30 PM with about approximate headways of 60-minutes. The closest transit stop is located between the intersections of Dinah Shore Drive and Mirium Way and Dinah Shore Drive and Shoppers Lane approximately 850 feet east of the limits of the project site.

4.3 EXISTING YEAR 2026 TRAFFIC VOLUMES

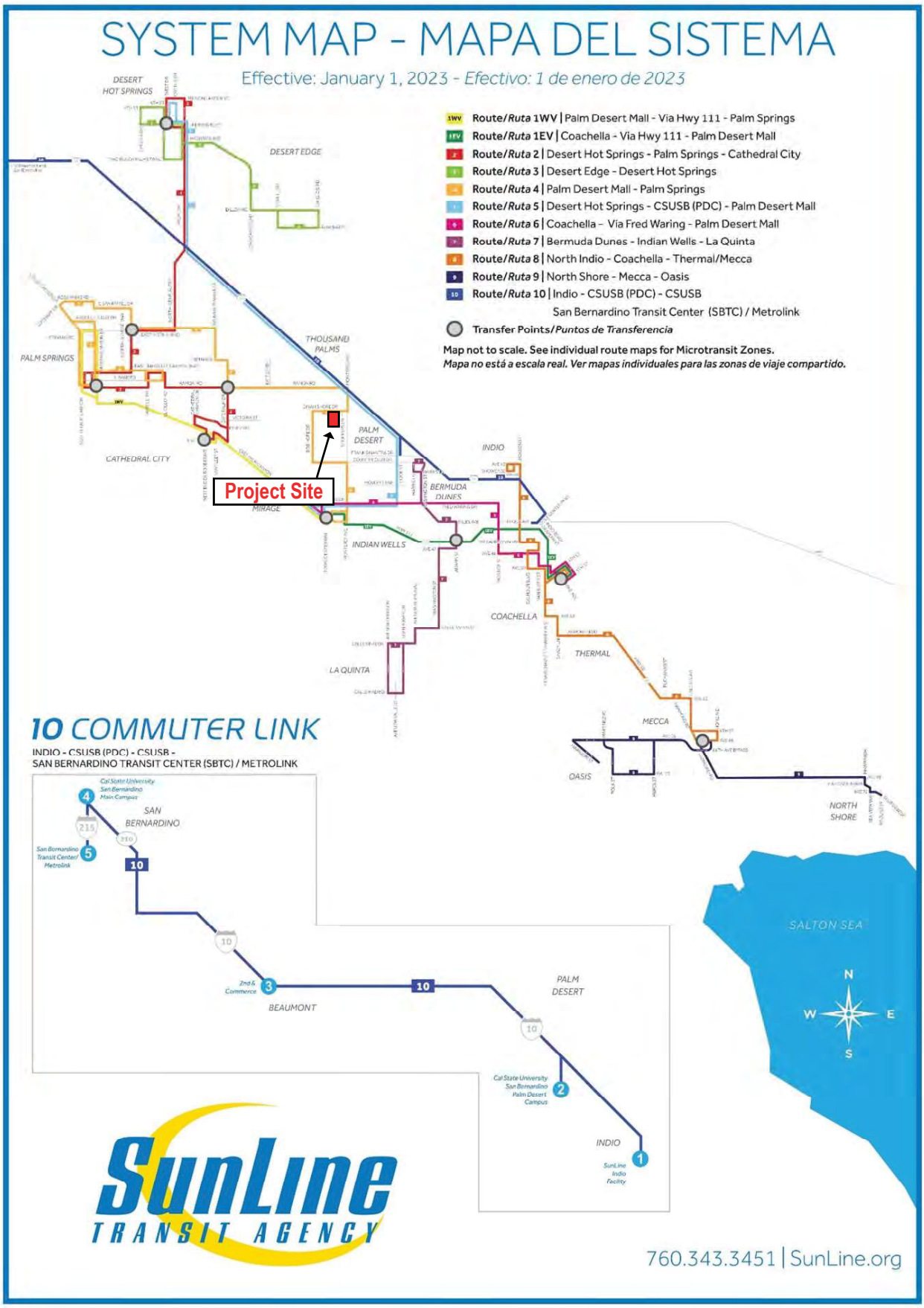
To determine the existing operations of the study intersections, peak hour intersection movement counts were collected on Tuesday April 7th, 2026. Intersection counts were collected during the peak AM commute period from 7:00 AM to 9:00 AM as well as the peak PM commute period from 4:00 PM to 6:00 PM. The counts used in this analysis represent the highest hour within each peak period for each study intersection. **Exhibit 4-4** shows the existing AM and PM peak hour intersection volumes at the study intersections. Detailed count data for this study is included in **Appendix C**.



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Existing Multimodal Facilities

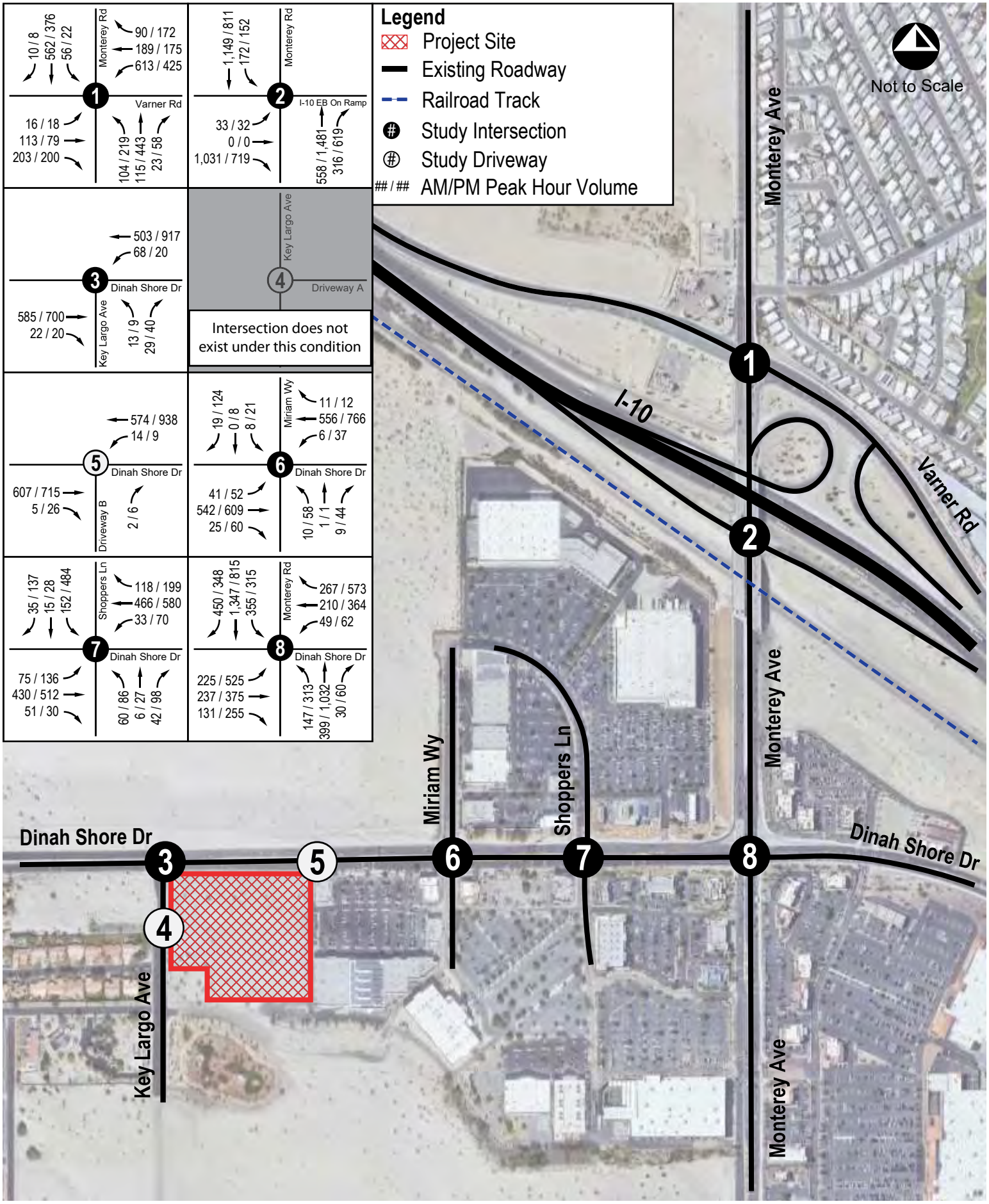
Exhibit 4-2



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SunLine Transit Route Map

Exhibit 4-3



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Existing Year 2026 Peak Hour Volumes

Exhibit 4-4

4.4 EXISTING YEAR 2026 LOS ANALYSIS

Table 4-1 summarizes the Existing Year 2026 AM and PM peak hour level of service analysis results for all study intersections. The analysis results show all intersections operate at acceptable levels of service (LOS D or better) during the AM Peak Hour and PM Peak Hour. The Existing Year 2026 AM Peak Hour analysis worksheets are contained in **Appendix D** and the Existing Year 2026 PM Peak Hour analysis worksheets are contained in **Appendix E**.

TABLE 4-1: EXISTING YEAR 2026 INTERSECTION ANALYSIS RESULTS

ID	Intersection	Control Type	Existing Year 2026			
			AM Peak Hour		PM Peak Hour	
			LOS	Delay	LOS	Delay
1	Varner Road & Monterey Avenue	SIG	C	28.6	C	24.0
2	I-10 SB Ramps & Monterey Avenue	SIG	C	29.7	C	23.0
3	Dinah Shore Drive & Key Largo Avenue	SIG	A	6.3	A	5.5
4	Key Largo Avenue & Project Driveway	OWSC	*Intersection Does Not Exist Under This Condition*			
5	Dinah Shore Drive & Project Driveway	OWSC	B	11.3	B	12.2
6	Dinah Shore Drive & Miriam Way	SIG	A	9.8	B	14.7
7	Dinah Shore Drive & Shoppers Lane	SIG	B	15.7	C	21.8
8	Dinah Shore Drive & Monterey Avenue	SIG	C	26.5	D	35.1

LOS = Level of Service.
SIG = Signalized Control; OWSC = One-Way Stop-Controlled.
Overall LOS provided for signalized intersection. Worst approach LOS provided for one-way stop-controlled intersections.
Delay shown in seconds per vehicle.

5 FORECAST TRAFFIC

5.1 PROPOSED PROJECT

The Project will develop office facilities and commercial uses totaling approximately 68,665 square feet. The project includes the development of eight (8) buildings, surface parking, onsite circulation, two (2) water quality basins, and landscaping. The northern portion of the site would contain three (3) one-story commercial and fast casual restaurant buildings (Buildings 1 through 3) and associated parking.

5.1.1 Project Forecast Trip Generation

Michael Baker used the land use options and trip generation rates available in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition* to calculate the estimated daily and peak hour trip generated by the proposed Project. **Table 5-2** provides the trip generation rates assumed for the Project site.

TABLE 5-2: TRIP GENERATION RATES

Land Use	ITE Code(1)	Daily Trip Rate	AM Peak Hour Rate		PM Peak Hour Rate	
			Total	In : Out	Total	In : Out
Fast Casual Restaurant	930	225.89 / TSF	1.58 / TSF	64% : 36%	14.35 / TSF	53% : 47%
Small Office	712	14.39 / TSF	1.64 / TSF	83% : 17%	2.16 / TSF	34% : 66%
Medical-Dental Office	-	0.4 / Member(2)	K-factor 0.10(3)	78% : 22%	K-factor 0.10(3)	30% : 70%
Health/Fitness Club	-	0.8 / Member(2)	K-factor 0.10(3)	51% : 49%	K-factor 0.10(3)	57% : 43%

(1) Source: ITE Trip Generation Manual, 12th Edition.
(2) Trip rates are estimated based on 450 eligible RSA members. Assumes 20% of members (20% in/20% out) visit Building 6 on a weekday and 40% (40% in/ 40% out) visit Building 8 on a given weekday.
(3) K-factor of 0.10 was used to estimate peak hour trips based on the estimated daily trips.

Given the speculative nature of future tenants in Buildings 1 through 3, a land use of Fast Casual Restaurant was assumed to provide a conservative estimate of trips. Buildings 6 through 8 will be accessible to RSA members. Additionally, Building 7, is expected to be ancillary to Building 5 and therefore generate a negligible amount of additional trips. Due to access restrictions on Building 6 and 8, trip rates were independently estimated and based on number of estimated members. Approximately 450 members are eligible to use these facilities, however the trip generation assumes only a portion of member use these facilities on a given weekday. For the purposes of this analysis, it was assumed 20% of members access Building 6 and 40% of members access Building 8 on any given weekday. Including inbound and outbound trips, this results in approximately 0.4 daily trips per member for Building 6 and 0.8 daily trips per member for Building 8.

Pass-by trip reduction rates and internal trip reduction rates were applied to specific uses, as applicable. The Fast Casual Restaurant use applies pass-by trip reduction rates found in the *ITE Trip Generation Handbook*. Internal trip reduction rates were used for the restaurant and office land uses based on the NCHRP 684 Internal Reduction Tool.

Table 5-3 summarizes the Project trip generation using the rates shown in **Table 5-2**. As shown, the Project is expected to generate 2,603 daily vehicle trips with 76 AM (48 inbound and 28 outbound) peak hour trips and 118 PM (55 inbound and 63 outbound) peak hour trips.

TABLE 5-3: PROJECT TRIP GENERATION SUMMARY

Land Use	Intensity	Daily Trips	AM Peak Hour Trips				PM Peak Hour Trips			
			Total	In	:	Out	Total	In	:	Out
Fast Casual Restaurant[1]	18.67 TSF	4,217	29	19	:	10	268	142	:	126
Internal Capture Reduction[3]		-422	-7	-4	:	-3	-5	-1	:	-4
Restaurant Subtotal		**3,795**	**22**	**15**	**:**	**7**	**263**	**141**	**:**	**122**
Pass-by (10% Daily, 10% AM, 43% PM)		-411	-2	-1	:	-1	-113	-61	:	-52
Restaurant Subtotal		**3,384**	**20**	**14**	**:**	**6**	**150**	**80**	**:**	**70**
Small Office[2]	24.00 TSF	345	39	33	:	6	52	18	:	34
Medical-Dental Office	450 Members	180	18	14	:	4	18	5	:	13
Internal Capture Reduction[3]		-53	-7	-3	:	-4	-6	-4	:	-2
Office Subtotal		**472**	**50**	**44**	**:**	**6**	**64**	**19**	**:**	**45**
Health/Fitness Club	450 Members	360	36	18	:	18	36	21	:	15
Health/Fitness Subtotal		**360**	**36**	**18**	**:**	**18**	**36**	**21**	**:**	**15**
Total Driveway Trips		**4,627**	**108**	**77**	**:**	**31**	**363**	**181**	**:**	**182**
Total Added Trips		**4,216**	**106**	**76**	**:**	**30**	**250**	**120**	**:**	**130**

[1] Buildings 1, 2 and 3 were calculated together as all are expected to operate as fast casual restaurants.

[2] Building 4 and Building 5 were calculated together as they will both operate as small offices.

[3] Based on NCHRP 684 guidelines.

5.1.2 Project Trip Distribution and Assignment

Based on a review of the local roadway network surrounding the project site, consideration of nearby commercial land uses, proximity to the I-10 freeway, as well as historic travel patterns, a project trip distribution was developed to assign project-related trips to the adjacent roadway network.

Exhibit 5-1 shows the Project trip distribution at each of the study intersections and **Exhibit 5-2** shows the Project intersection trips. The Pass-By trip distribution and assignment are shown in **Exhibits 5-3** and **5-4**, respectively. **Exhibit 5-5** shows the net new project trip assignment at each of the study intersections including both internal reductions and pass-by assignment. **Appendix F** contains detailed volume development worksheets.

5.2 CUMULATIVE PROJECTS

A list of cumulative projects was determined based on the *Development Activity Map* provided by the City of Rancho Mirage. Where available, Cumulative Project traffic volumes were taken directly from traffic studies prepared for individual projects'. Where project specific studies were not available, volumes were developed by applying the listed projects' land use to ITE Trip Generation 11th Edition equations and assigned to the surrounding roadway network. **Table 5-3** shows the projects which were determined to potentially add traffic at the study intersections. A map of the cumulative projects is shown in **Exhibit 5-6. Exhibit 5-7** shows the cumulative project trips affecting the study intersections.

Appendix F contains detailed cumulative projects volume development worksheets and trip generation volumes.

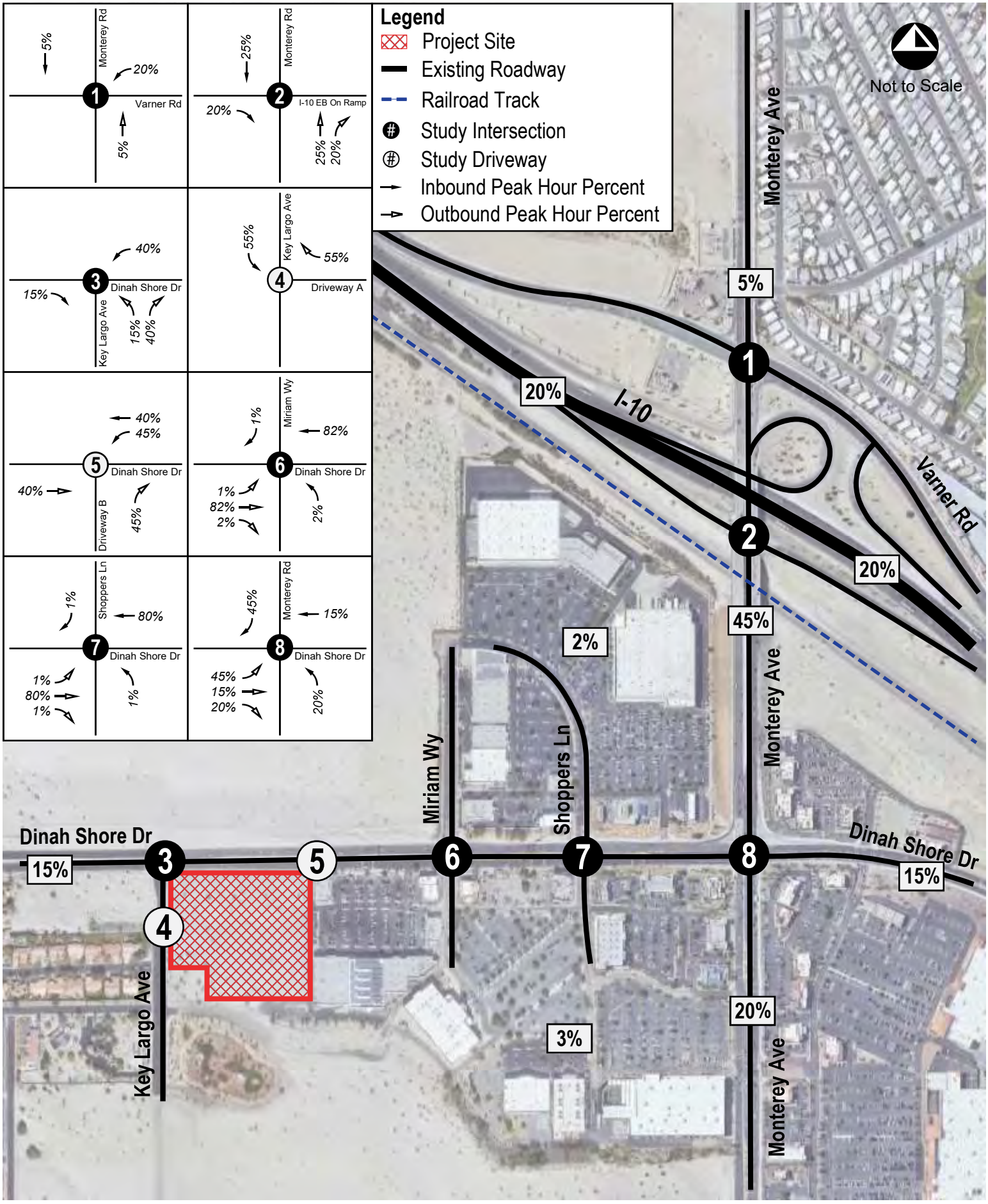
TABLE 5-3: CUMULATIVE PROJECTS

ID	Project Name	Location	Type	Size	Jurisdiction
1	Rosette Apartments (Via Vail Village)	S of Via Vail	Residential	236 DU	Rancho Mirage
2	Rancho Mirage Affordable Housing	S of Via Vail and E of Key Largo Ave	Residential	150 DU	Rancho Mirage
3	TTM 38041	E of Via Josefina	Residential	17 DU	Rancho Mirage
4	Priviere Villas	SEC of Ginger Rogers Rd and Via Josefina	Residential	28 DU	Rancho Mirage
5	TTM 38224	NEC of Ginger Rogers Rd and Via Josefina	Residential	9 DU	Rancho Mirage
6	TTM 38636	NEC of Ginger Rogers Rd and Landy Ln	Residential	9 DU	Rancho Mirage
7	Linea North	N of Ginger Rogers Rd	Residential	9 DU	Rancho Mirage
8	Linea Rancho Mirage	S of Ginger Rogers Rd	Residential	9 DU	Rancho Mirage
9	PM 38380	S of Ginger Rogers Rd	Residential	4 DU	Rancho Mirage
10	TTM 38266	S of Via Florencia	Residential	9 DU	Rancho Mirage
11	TTM 38273	S of Via Florencia	Residential	9 DU	Rancho Mirage
12	TTM 38447 (Aura Circle)	SWC of Via Florencia and Via Josefina	Residential	8 DU	Rancho Mirage
13	Rancho Monterey Specific Plan Amendment	N of Dick Kelly Dr and W of Monterey Ave	Residential and Commercial	35 Acres	Rancho Mirage
14	Section 31 Cotino	S of Gerald Ford Dr and W of Monterey Ave	Residential, Office, and Commercial	175 KSF	Rancho Mirage

KSF = Thousand Square Feet; DU = Dwelling Unit
N = North; S = South; E = East; W = West; NEC = Northeast Corner; SEC = Southeast Corner; SWC = Southwest Corner.

5.3 AMBIENT GROWTH

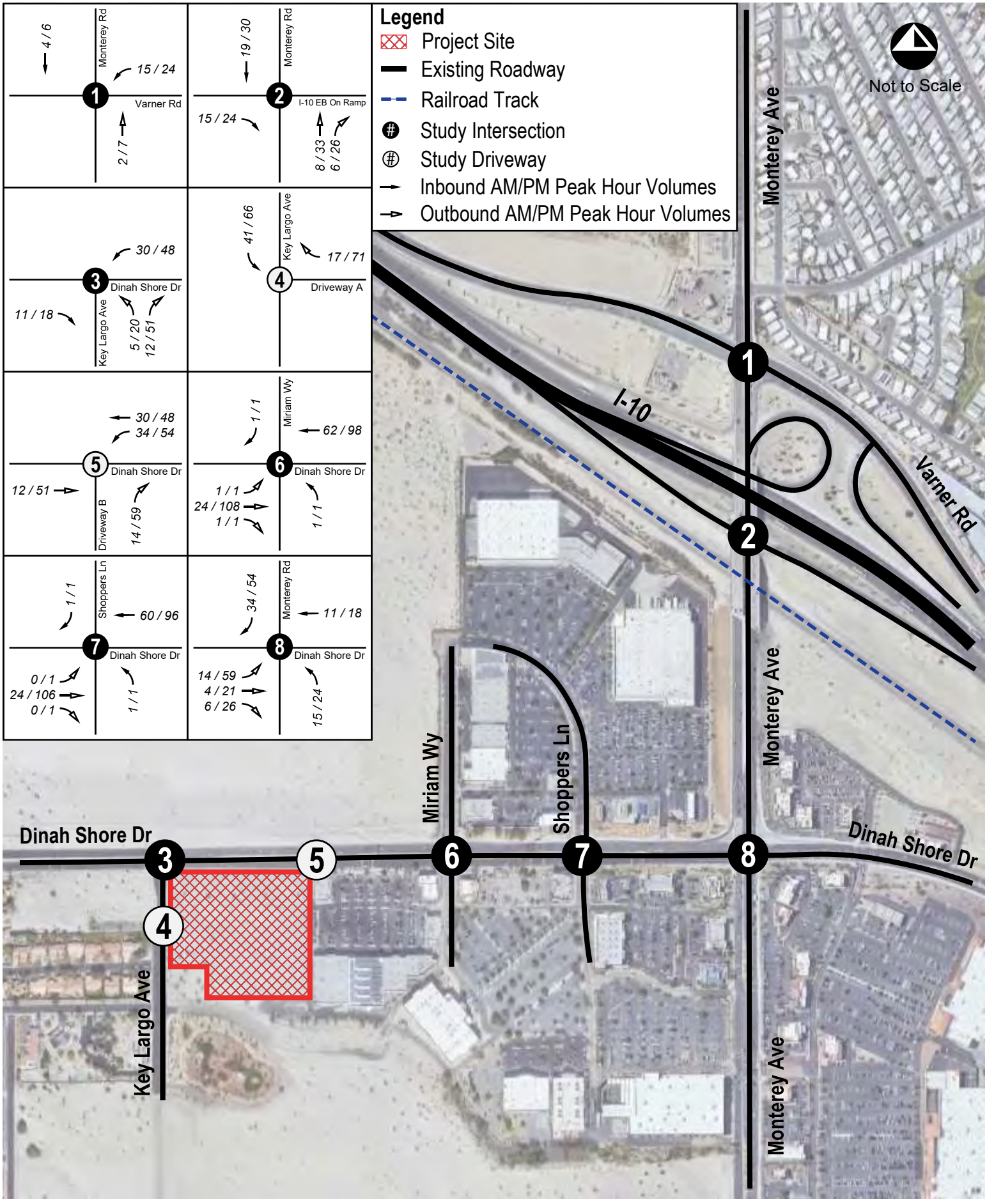
The project Opening Year is estimated to be 2027. Therefore, Existing traffic volumes need to be adjusted to include one year of ambient growth. Per County guidelines, a 2% annual compound growth rate was applied to existing traffic volumes in order to account for background traffic growth between existing conditions and project Opening Year 2027.



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Project Trip Distribution

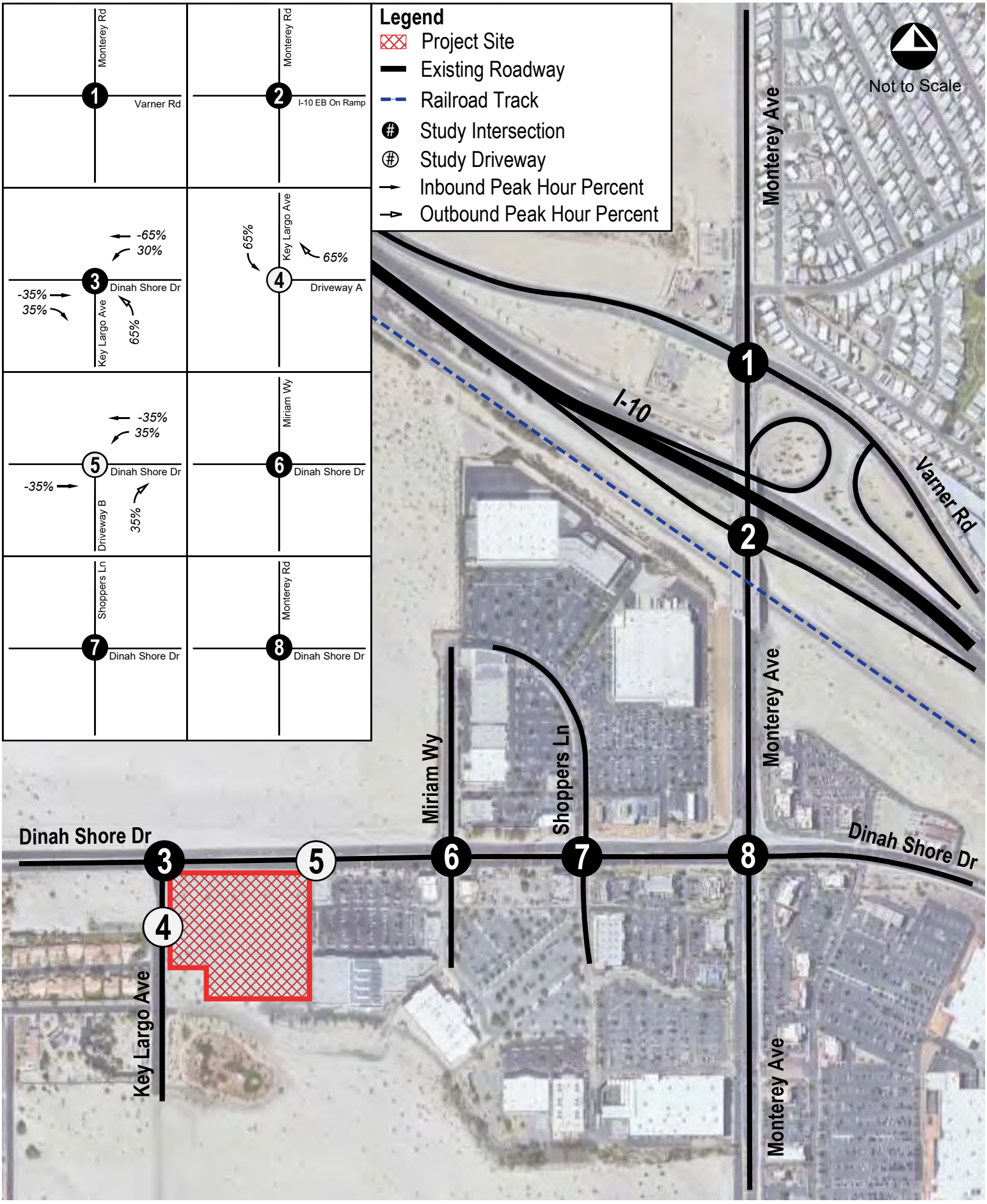
Exhibit 5-1



Michael Baker INTERNATIONAL

Project Trip Assignment

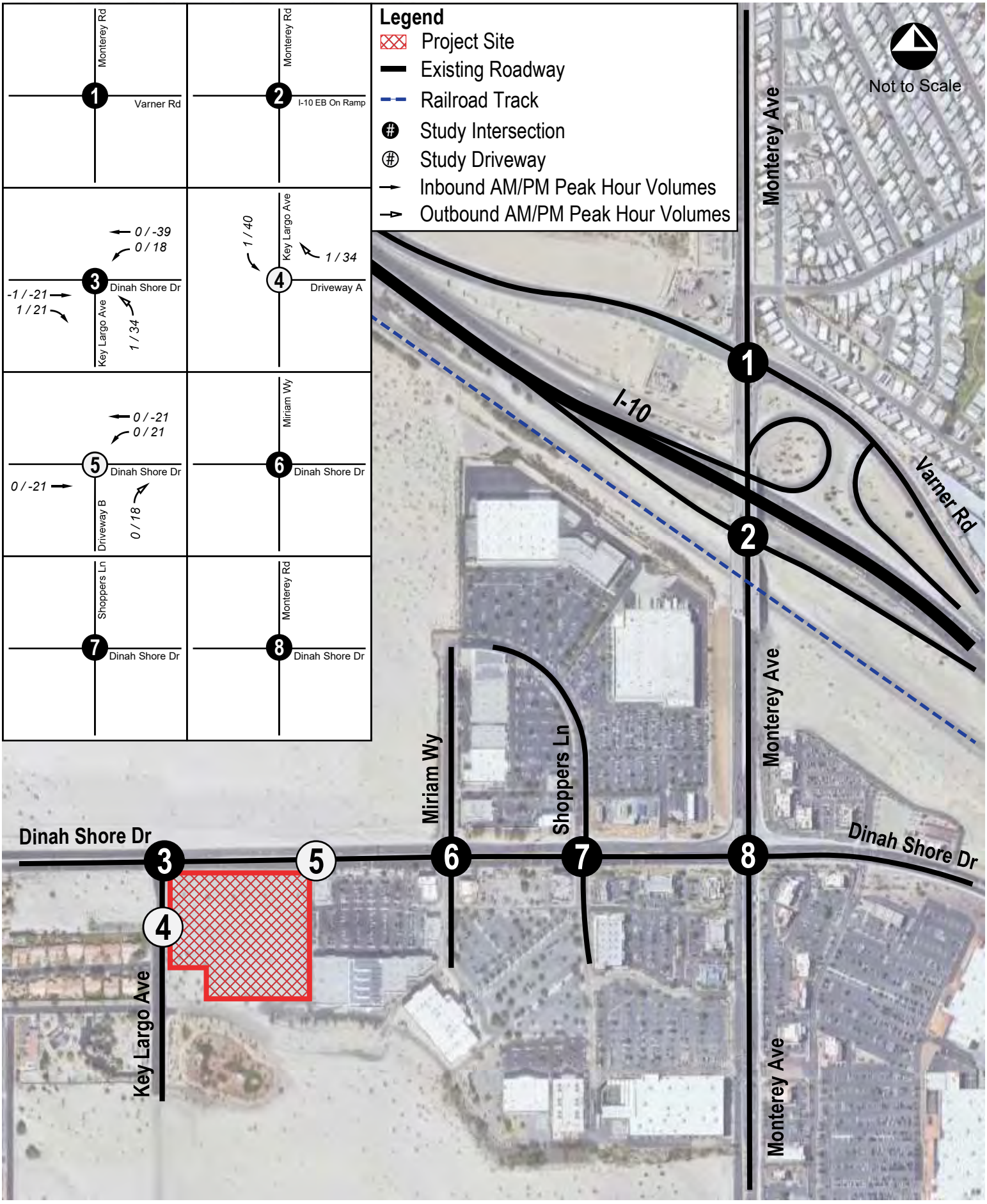
Exhibit 5-2



Pass-By Trip Distribution

Exhibit 5-3

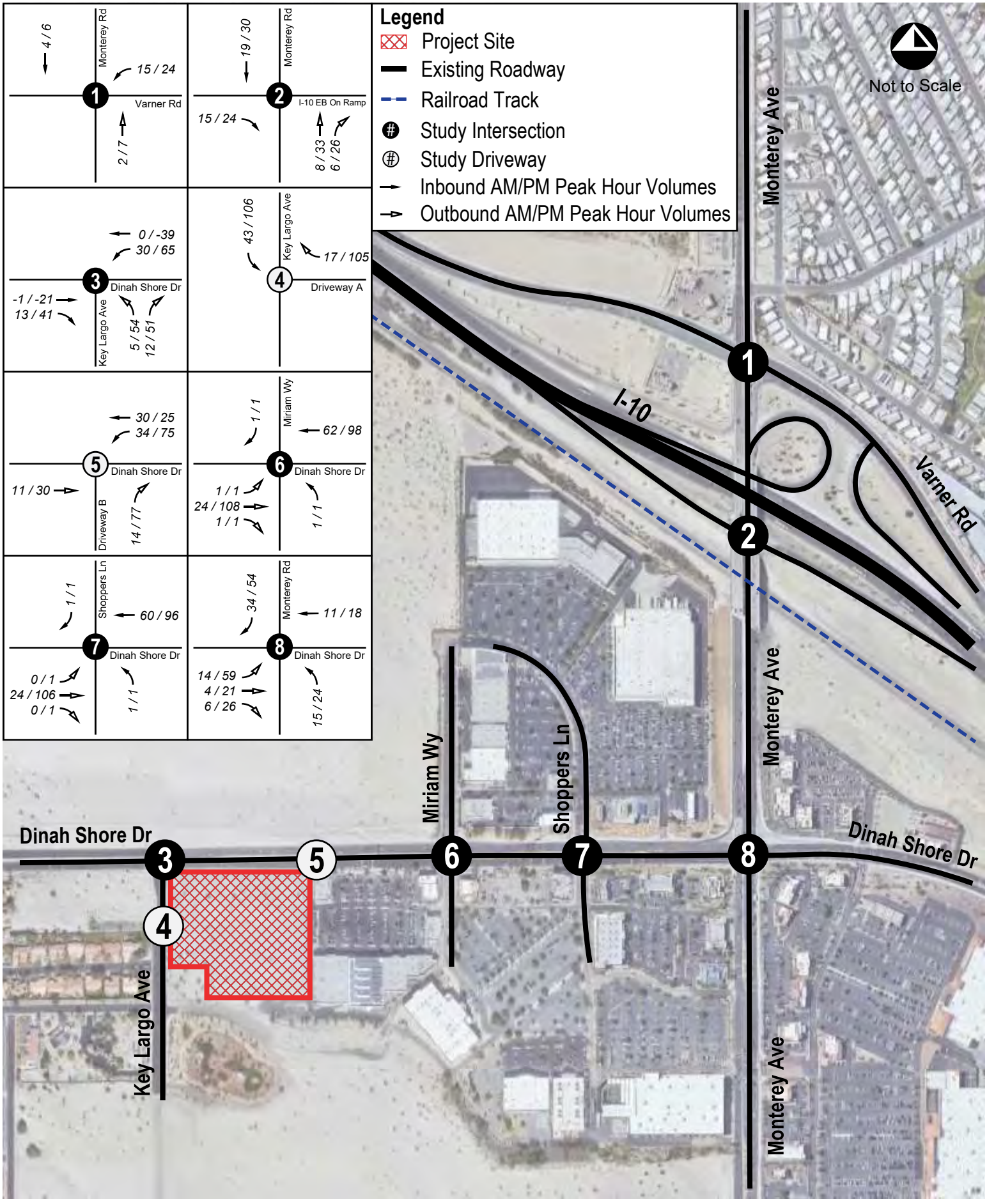
Michael Baker INTERNATIONAL



Michael Baker INTERNATIONAL

Pass-By Trip Assignment

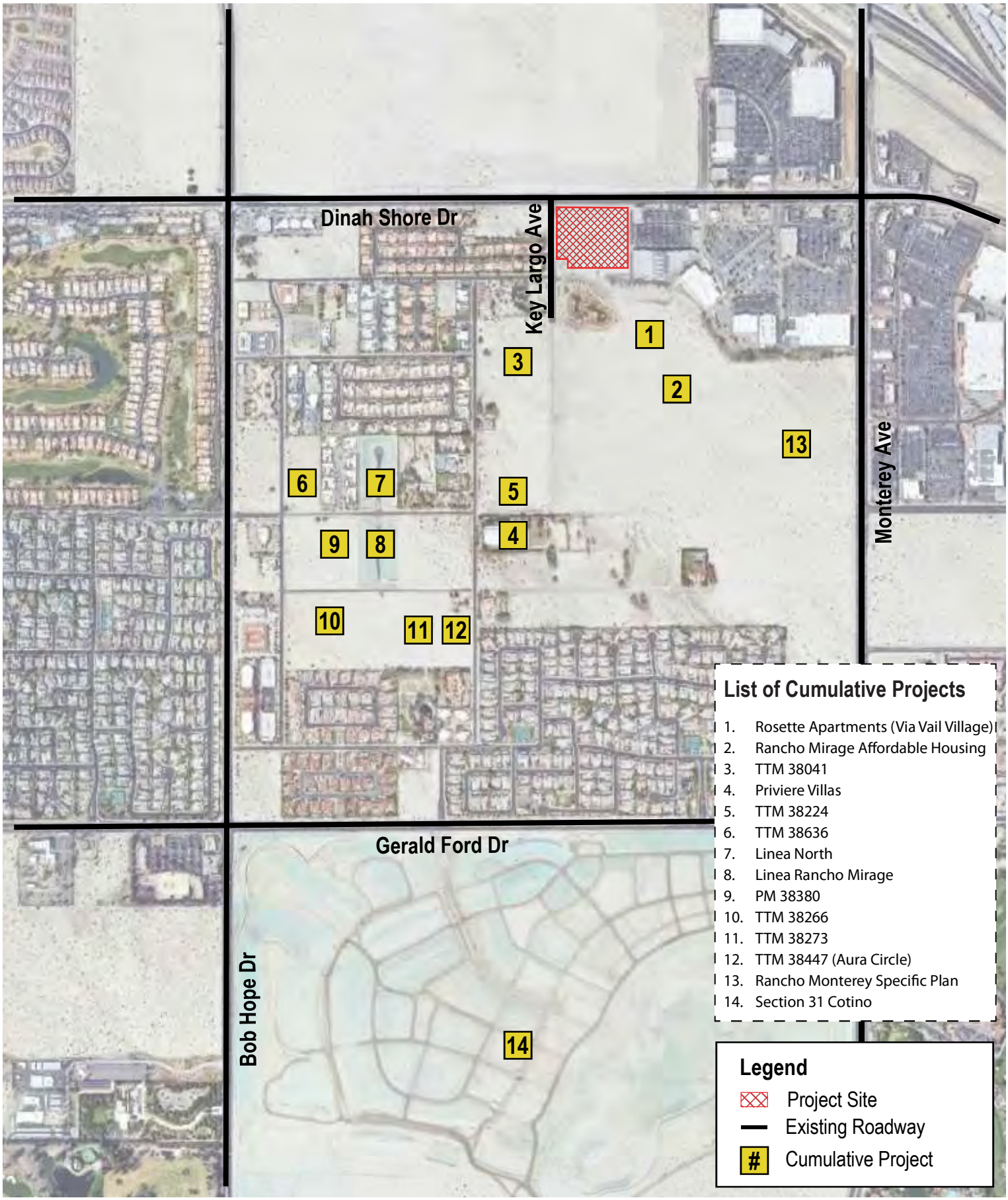
Exhibit 5-4



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Total Trip Assignment

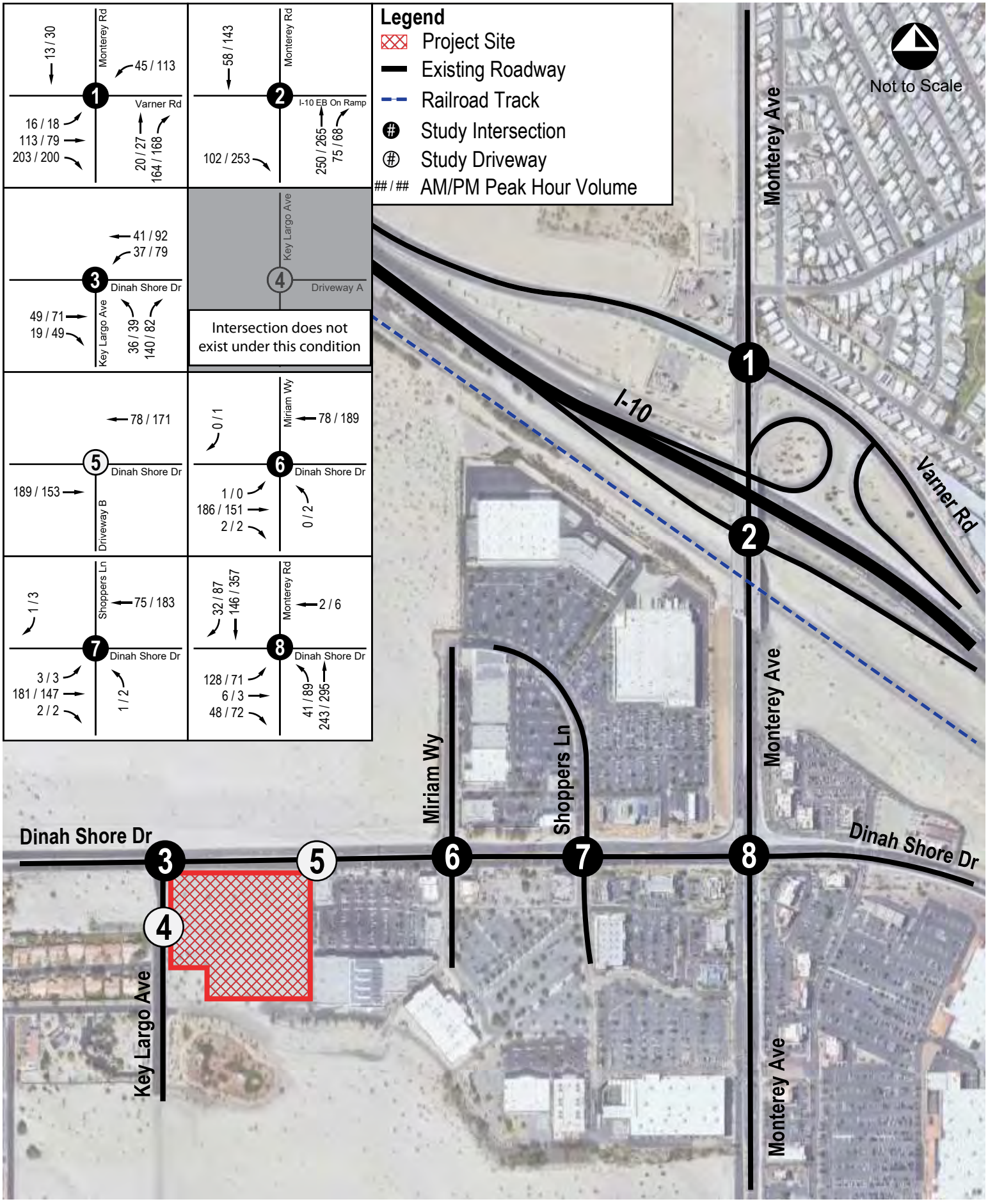
Exhibit 5-5



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Cumulative Project Location Map

Exhibit 5-6



Michael Baker INTERNATIONAL

Cumulative Project Trips

Exhibit 5-7

6 EXISTING YEAR 2026 PLUS PROJECT CONDITIONS

6.1 EXISTING YEAR 2026 PLUS PROJECT LOS ANALYSIS

Table 6-1 summarizes the Existing Year 2026 Plus Project AM and PM peak hour level of service analysis results for all study intersections. The analysis results show all intersections operate at acceptable levels of service (LOS D or better) during the AM Peak Hour and PM Peak Hour. The Existing Year 2026 Plus Project AM Peak Hour analysis worksheets are contained in **Appendix G** and the Existing Year 2026 Plus Project PM Peak Hour analysis worksheets are contained in **Appendix H**.

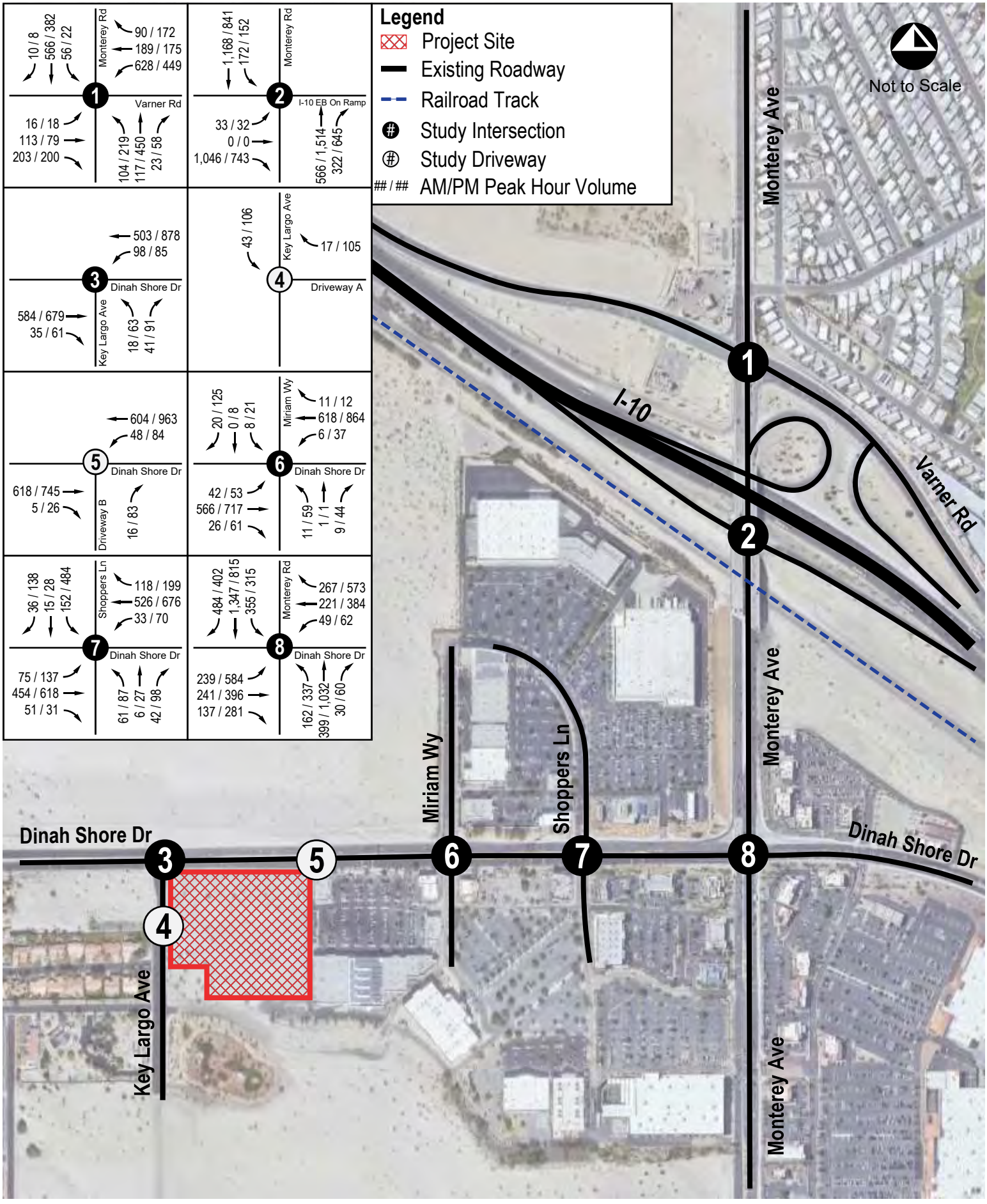
TABLE 6-1: EXISTING YEAR 2026 PLUS PROJECT INTERSECTION ANALYSIS RESULTS

ID	Intersection	Control Type	Existing Year 2026 With Project			
			AM Peak Hour		PM Peak Hour	
			LOS	Delay	LOS	Delay
1	Varner Road & Monterey Avenue	SIG	C	28.8	C	24.3
2	I-10 SB Ramps & Monterey Avenue	SIG	C	30.9	C	24.0
3	Dinah Shore Drive & Key Largo Avenue	SIG	A	7.0	A	7.6
4	Key Largo Avenue & Project Driveway	OWSC	A	0.0	A	0.0
5	Dinah Shore Drive & Project Driveway	OWSC	B	11.5	B	13.8
6	Dinah Shore Drive & Miriam Way	SIG	A	9.9	B	14.9
7	Dinah Shore Drive & Shoppers Lane	SIG	B	15.7	C	22.0
8	Dinah Shore Drive & Monterey Avenue	SIG	C	27.1	D	37.7

LOS = Level of Service.
SIG = Signalized Control; OWSC = One-Way Stop-Controlled.
Overall LOS provided for signalized intersection. Worst approach LOS provided for one-way stop-controlled intersections.
Delay shown in seconds per vehicle.

6.2 EXISTING YEAR 2026 PLUS PROJECT TRAFFIC VOLUMES

Exhibit 6-1 shows the existing plus project AM and PM peak hour intersection volumes at the study intersections.



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Existing Year 2026 Plus Project Peak Hour Volumes

Exhibit 6-1

7 OPENING YEAR WITHOUT PROJECT CONDITION

7.1 OPENING YEAR WITHOUT PROJECT TRAFFIC VOLUMES

The Opening Year Without Project traffic volumes are developed by adding cumulative project trips and growing the Existing traffic volumes by a 2% compound annual growth rate. The growth rate used for the traffic forecasting was in accordance with County standards. **Exhibit 7-1** shows the Opening Year Without Project peak hour intersection volumes.

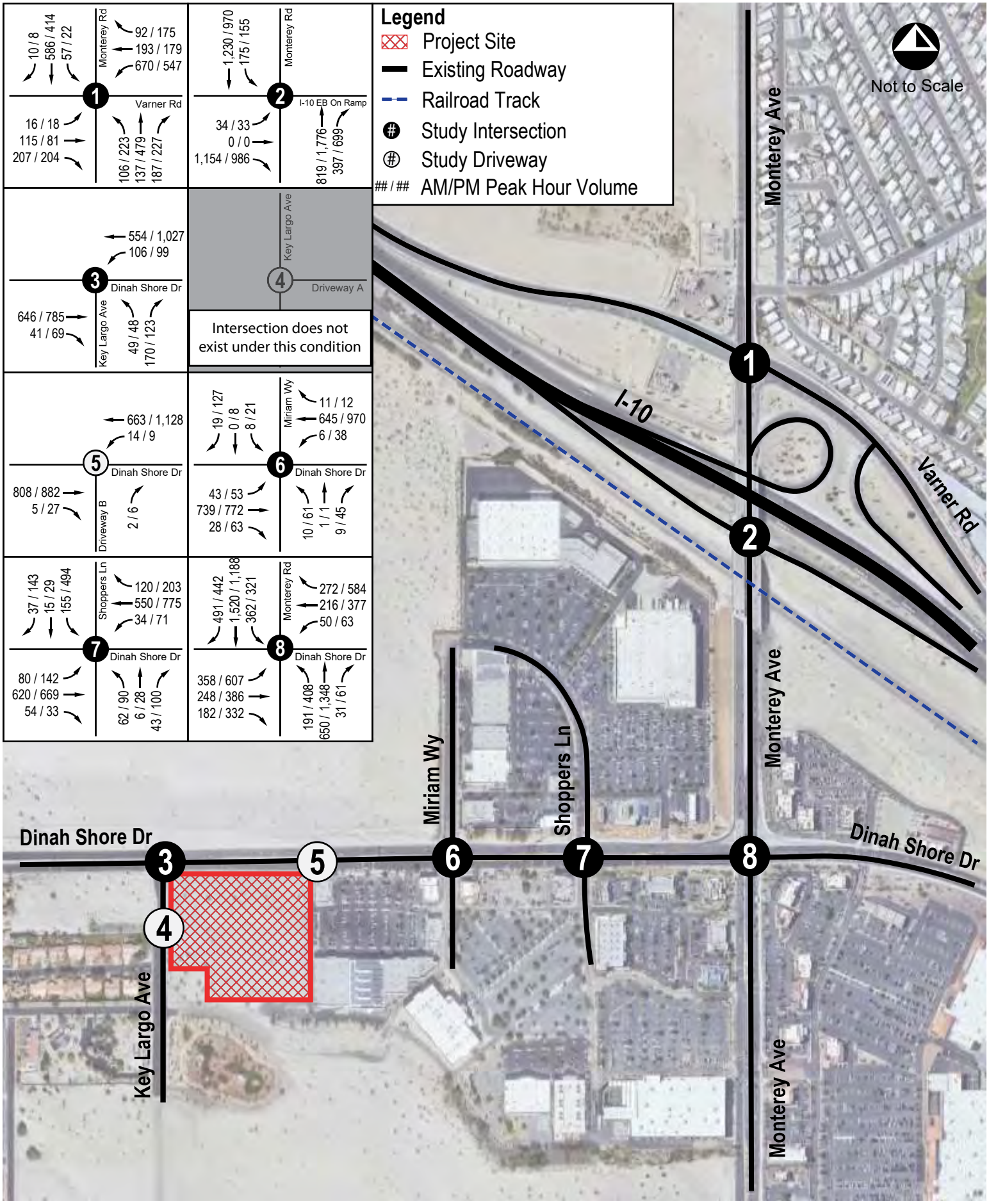
7.2 OPENING YEAR WITHOUT PROJECT LOS ANALYSIS

Table 7-1 summarizes the Opening Year Without Project AM and PM peak hour level of service analysis results for all study intersections. The analysis results show all intersections operate at acceptable levels of service (LOS D or better) during the AM Peak Hour and PM Peak Hour. The Opening Year Without Project AM Peak Hour analysis worksheets are contained in **Appendix I** and the Opening Year Without Project PM Peak Hour analysis worksheets are contained in **Appendix J**.

TABLE 7-1: OPENING YEAR WITHOUT PROJECT INTERSECTION ANALYSIS RESULTS

ID	Intersection	Control Type	Opening Year 2027 Without Project			
			AM Peak Hour		PM Peak Hour	
			LOS	Delay	LOS	Delay
1	Varner Road & Monterey Avenue	SIG	C	29.7	C	25.8
2	I-10 SB Ramps & Monterey Avenue	SIG	D	38.4	D	36.8
3	Dinah Shore Drive & Key Largo Avenue	SIG	A	9.8	A	8.2
4	Key Largo Avenue & Project Driveway	OWSC	*Intersection Does Not Exist Under This Condition*			
5	Dinah Shore Drive & Project Driveway	OWSC	B	12.4	B	13.2
6	Dinah Shore Drive & Miriam Way	SIG	A	9.9	B	15.0
7	Dinah Shore Drive & Shoppers Lane	SIG	B	15.9	C	22.7
8	Dinah Shore Drive & Monterey Avenue	SIG	C	31.7	D	47.6

LOS = Level of Service
SIG = Signalized Control; OWSC = One-Way Stop-Controlled.
Overall LOS provided for signalized intersection. Worst approach LOS provided for one-way stop-controlled intersections.
Delay shown in seconds per vehicle.



Opening Year 2027 Without Project Peak Hour Volumes

Exhibit 7-1

Michael Baker INTERNATIONAL

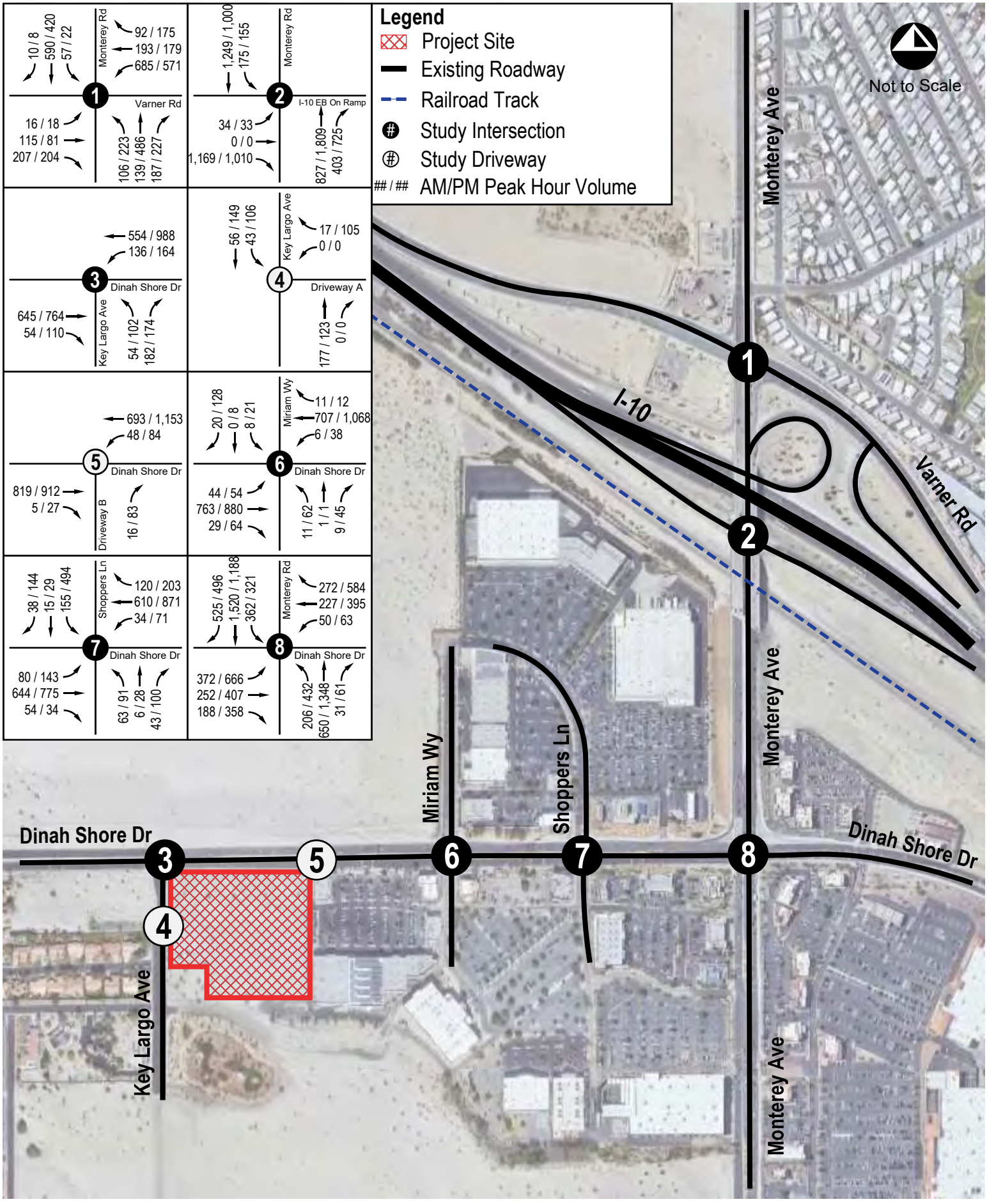
8 OPENING YEAR PLUS PROJECT CONDITION

8.1 OPENING YEAR PLUS PROJECT TRAFFIC VOLUMES

The Opening Year Plus Project traffic volumes are developed by adding the estimated Project trips to the Opening Year volumes. **Exhibit 8-1** shows the Opening Year With Project peak hour intersection volumes.

8.2 OPENING YEAR PLUS PROJECT LOS ANALYSIS

Table 8-1 summarizes the Opening Year Plus Project AM and PM peak hour level of service analysis results for all study intersections. The analysis results show all the intersections in the study area operate at levels of service (LOS D or better) for both the AM and PM Peak Hours. The Opening Year Plus Project AM Peak Hour analysis worksheets are contained in **Appendix K** and the Opening Year Plus Project PM Peak Hour analysis worksheets are contained in **Appendix L**.



Michael Baker INTERNATIONAL

Opening Year 2027 Plus Project Peak Hour Volumes

Exhibit 8-1

TABLE 8-1: OPENING YEAR PLUS PROJECT INTERSECTION ANALYSIS RESULTS

ID	Intersection	Control Type	Opening Year 2027 Without Project				Opening Year 2027 With Project				Change in Delay	
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	AM	PM
1	Varner Road & Monterey Avenue	SIG	C	29.7	C	25.8	C	30.0	C	26.2	0.3	0.4
2	I-10 SB Ramps & Monterey Avenue	SIG	D	38.4	D	36.8	D	39.9	D	38.5	1.5	1.7
3	Dinah Shore Drive & Key Largo Avenue	SIG	A	9.8	A	8.2	B	10.6	B	10.8	0.8	2.6
4	Key Largo Avenue & Project Driveway	OWSC	*Intersection Does Not Exist Under This Condition*				A	9.3	A	9.5	9.3	9.5
5	Dinah Shore Drive & Project Driveway	OWSC	B	12.4	B	13.2	B	12.7	C	15.4	0.3	2.2
6	Dinah Shore Drive & Miriam Way	SIG	A	9.9	B	15.0	A	9.8	B	15.2	-0.1	0.2
7	Dinah Shore Drive & Shoppers Lane	SIG	B	15.9	C	22.7	B	15.8	C	23.0	-0.1	0.3
8	Dinah Shore Drive & Monterey Avenue	SIG	C	31.7	D	47.6	C	32.6	D	54.1	0.9	6.5

LOS = Level of Service.
SIG = Signalized Control; OWSC = One-Way Stop-Controlled.
Overall LOS provided for signalized intersection. Worst approach LOS provided for one-way stop-controlled intersections.
Delay shown in seconds per vehicle.

9 VEHICLE MILES TRAVELED

In support of the transportation component of the California Environmental Quality Act (CEQA), a Vehicle Miles Travelled (VMT) screening assessment was conducted for the project. Both the City's *Transportation Analysis Policy, 1st Revision* as well as the Coutny's *Transportation Assessment Guidelines* outline VMT metrics and thresholds of significance. As outlined in these guiding documents, certain land use projects that meet certain screening threshold criteria based on project size, location, proximity to transit, or trip-making potential may be presumed to have a less-than-significant transportation impact under CEQA.

Table 9-1 summarizes each of the screening criteria as well as the individual project's evaluation and result for each criterion. As shown, the Project meets one the screening criteria as locally serving and can be presumed to have a less-than-significant under CEQA. Therefore, a detailed Project specific VMT calculation is not required.

TABLE 9-1: SCREENING CRITERIA FOR DEVELOPMENT PROJECTS EXEMPT FROM VMT CALCULATION

Screening Criteria	Description of Screening Criteria	Project Evaluation	Result
SMALL PROJECTS	This applies to projects with low trip generation per existing CEQA exemptions or based on the County Greenhouse Gas Emissions Screening Tables, result in a 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO2e) per year screening level threshold. **Projects presumed to cause a less-than-significant impact:** • Single Family Housing projects less than or equal to 110 Dwelling Units; or • Multi Family (low rise) Housing projects less than or equal to 147 Dwelling Units; or • Multi Family (mid-rise) Housing projects less than or equal to 194 Dwelling Units; or • General Office Building with area less than or equal to 165,000 SF; or • Retail buildings with area less than or equal to 60,000 SF; or • Warehouse (unrefrigerated) buildings with area less than or equal to 208,000 SF; or • General Light Industrial buildings with area less than or equal to 179,000 SF • Project GHG emissions less than 3,000 Metric Tons of Carbon	Project is expected to generate 4,216 net new daily trips which exceeds the 110-trip threshold.	Does Not Meet Criteria

Screening Criteria	Description of Screening Criteria	Project Evaluation	Result
	Dioxide Equivalent (MTCO2e) as determined by a methodology acceptable to the Transportation Department; or • Unless specified above, project trip generation is less than 110 trips per day per the ITE Manual or other acceptable source determined by Riverside County.		
PROJECTS NEAR HIGH QUALITY TRANSIT	Is the Project located within ½ mile of an existing major transit stop; and maintains a service interval frequency of 15 minutes or less during the morning and afternoon peak commute periods?	Transit service (bus) is provided along Dana Shore Drive near the Project site. However, the Project is not located within located within ½ mile of an existing major transit stop (multiple bus lines or rail station).	Does Not Meet Criteria
LOCAL-SERVING RETAIL	No single store on-site exceeds 50,000 SF; and Project is local serving as determined by the Transportation Department.	Each of the commercial buildings on-site are well below the 50,000 SF threshold and would most likely be considered local serving. Additionally, all RSA facilities will likely primarily serve Coachella Valley members. Therefore, all buildings on-site are likely considered local serving	**Criteria Is Met**
AFFORDABLE HOUSING	A high percentage of affordable housing is provided as determined by the Riverside County Planning and Transportation Departments.	The Project is not residential and therefore this screening criteria does not apply.	Does Not Apply
LOCAL ESSENTIAL SERVICE	Project is local serving as determined by the Transportation Department; and Local-serving Day Care Center; or Police or Fire Facility; or Medical/Dental Office Building under 50,000 SF; or Government Offices (in-person services such as Post Office, Library, and Utilities); or Local or Community Parks.	The Project is not considered local essential as the meeting hall and office use would be used exclusively for RSA members. In addition, the health/fitness clinic and medical office would be only accessible for RSA members.	Does Not Meet Criteria
MAP-BASED SCREENING	Area of development is under threshold as shown on screening map as allowed by the Transportation Department.	The Project does not appear to be located within a low VMT generating TAZ based on Home-Based Work VMT per worker based on available VMT Screening Tools.	Does Not Meet Criteria

Screening Criteria	Description of Screening Criteria	Project Evaluation	Result
REDEVELOPMENT PROJECTS	Project replaces an existing VMT-generating land use and does not result in a net overall increase in VMT.	The existing site is currently vacant and undeveloped. Therefore, this criterion does not apply.	Does Not Apply

10 FINDINGS AND RECOMMENDATIONS

10.1 LEVEL OF SERVICE ANALYSIS

Table 10-1 summarizes the intersection analysis results for all scenarios. The key findings are summarized below:

Existing Year 2026
In the Existing Year 2026 condition, all intersections operate at acceptable LOS D or better during the AM and PM Peak Hours.

Existing Year 2026 Plus Project Conditions
In the Existing Year 2026 Plus Project condition, all intersections operate at acceptable LOS D or better during the AM and PM Peak Hours.

Opening Year Without Project Conditions
In the Opening Year Without Project condition, all intersections operate at acceptable LOS D or better during the AM and PM Peak Hours.

Opening Year Plus Project Conditions
In the Opening Year Plus Project condition, all intersections operate at acceptable LOS D or better during the AM and PM Peak Hours.

As all study intersections are shown to operate at acceptable levels of service under all study scenarios and no operational adverse effects were identified, no additional improvements are necessary or required.

TABLE 10-1: INTERSECTION LOS SUMMARY TABLE

ID	Intersection	Control Type	Existing Year 2026								Opening Year 2027							
			Without Project				With Project				Without Project				With Project			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	Varner Road & Monterey Avenue	SIG	C	28.6	C	24.0	C	28.8	C	24.3	C	29.7	C	25.8	C	30.0	C	26.2
2	I-10 SB Ramps & Monterey Avenue	SIG	C	29.7	C	23.0	C	30.9	C	24.0	D	38.4	D	36.8	D	39.9	D	38.5
3	Dinah Shore Drive & Key Largo Avenue	SIG	A	6.3	A	5.5	A	7.0	A	7.6	A	9.8	A	8.2	B	10.6	B	10.8
4	Key Largo Avenue & Project Driveway	OWSC	*Intersection Does Not Exist Under This Condition*				A	0.0	A	0.0	*Intersection Does Not Exist Under This Condition*				A	9.3	A	9.5
5	Dinah Shore Drive & Project Driveway	OWSC	B	11.3	B	12.2	B	11.5	B	13.8	B	12.4	B	13.2	B	12.7	C	15.4
6	Dinah Shore Drive & Miriam Way	SIG	A	9.8	B	14.7	A	9.9	B	14.9	A	9.9	B	15.0	A	9.8	B	15.2
7	Dinah Shore Drive & Shoppers Lane	SIG	B	15.7	C	21.8	B	15.7	C	22.0	B	15.9	C	22.7	B	15.8	C	23.0
8	Dinah Shore Drive & Monterey Avenue	SIG	C	26.5	D	35.1	C	27.1	D	37.7	C	31.7	D	47.6	C	32.6	D	54.1

LOS = Level of Service.
SIG = Signalized Control; OWSC = One-Way Stop-Controlled.
Overall LOS provided for signalized intersection. Worst approach LOS provided for one-way stop-controlled intersections.
Delay shown in seconds per vehicle.

Appendix A:
PVG Architects Project Operations Dissertation

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ARCHITECTS • INTERIORS

Riverside Sheriff's Association Benefit's Trust – Mixed Use Project
Project Dissertation
February 2026

Project Summary

The proposed project entails the development of a new mixed-use campus on the vacant approximately 7.92-acre parcel located at the southeast corner of Dinah Shore Drive and Key Largo Avenue. The project will serve the Riverside Sheriff's Association Benefits Trust (RSABT) and include a mix of commercial, office, medical, health and fitness uses as described below.

The site is divided by a shared access road that connects the existing mixed-use commercial center to the east with Key Largo Avenue to the west. The northern portion of the site will contain three one-story commercial buildings and associated parking. The southern portion will include five one-story buildings, a central multi-use plaza, a multi-purpose field, and shared parking areas. Parking will be provided through a shared parking agreement in accordance with the Monterey Specific Plan.

Phasing

The project will be constructed in multiple phases:

- Phase 1 will include all site infrastructure, parking, water retention areas, landscaping, the plaza, and Buildings 4 through 8 with their associated hardscape improvements.
- Future Phases will include Buildings 1 through 3, which will be developed on a land-lease basis as tenants are secured. Conceptual designs for these future buildings have been prepared to ensure architectural and material consistency throughout the project.

Building Uses and Descriptions

Buildings 1, 2 & 3 – Future Commercial

- **Size:** Approximately 5,510 to 6,582 SF each
- **Use:** Retail, restaurant, or office (planned to accommodate up to 100% restaurant use for maximum tenant flexibility)
- **Operations:** Typical retail and restaurant business hours

Building 4 – Office

- **Size:** Approximately 9,874 SF
- **Use:** Leasable office space. Space is also intended for the future expansion of the Riverside Sheriff's Association (RSA) offices
- **Operations:** Standard business hours

DRAFT

Building 5 – RSA Office

- **Size:** Approximately 14,130 SF
- **Use:** RSA office building, including 10,619 SF of office space, a 2,416 SF executive boardroom, and 1,095 SF of retail space. Retail items for sale would be uniforms and equipment for deputies at discounted rates. The store will be operated by RSA Staff under the Deputy Depot, DBA. Currently there is no uniform store for our deputies in the desert.
- **Operations:**
    - Office: Standard business hours (6:30AM-5:00PM)
    - Boardroom: Utilized three times per year from 1:00–2:00 PM
    - Retail: (6:30AM-5:00PM)

Building 6 – Medical Office

- **Size:** Approximately 11,357 SF
- **Use:** Medical office building, including 5,237 SF for RSABT medical services and 6,120 SF of leasable medical office or office space. Space is also intended for the future expansion of RSABT medical services.
- **Operations:** Standard business hours
- **Access:** Available to RSABT members and eligible dependents (approximately 450 eligible members)

Building 7 – FOP Lodge

- **Size:** Approximately 5,891 SF
- **Use:** Mixed-use facility for the Fraternal Order of Police, including 3,568 SF of office space and 2,323 SF of lounge/bar area
- **Operations:**
    - Office: Standard business hours (6:30AM-5:00PM)
        - Meetings & governance – executive board meetings, general membership meetings, elections, and committee work.
        - Member support – a place to handle benefits, legal plan questions, contract issues, and other member services.
        - Training & briefings – hosting classes, workshops, and informational sessions for officers.
    - Lounge/Bar: (6:30AM to 5:00PM for Typical uses, as needed for Special Uses)

      Typical Use:
        - Deputies will use the lounge to have their lunch or write reports while being uninterrupted and in a safe & controlled environment. The bar will not be available during this time.

      Special Uses:
        - Events & community outreach – ceremonies, fundraisers, memorial events, retirements, and community-focused programs.

Building 8 – Health & Fitness Center

- **Size:** Approximately 7,667 SF
- **Use:** Heath & Fitness center for will be for RSABT members and their eligible dependents, featuring free weights, cardio equipment, a multi-purpose fitness studio, locker rooms, and saunas
- **Operations:** Open during normal business hours, though most member use occurs before 5:00 AM and after 5:00 PM
- **Access:** Available to RSABT members and eligible dependents (approximately 300-350 eligible members) who are also participating in the program's medical benefits. This is an accessory use to the medical office component of the project as a health benefit to RSABT members.

Loading

- **Buildings 1–3:** Will be serviced as standard front-loaded retail buildings, with deliveries occurring during off-peak hours.
- **Buildings 4–8:** Will be serviced as front-loaded office buildings or via the designated loading area located south of Building 6.

Architectural Design

The architectural character will be contemporary, featuring clean lines, high-quality materials, and a cohesive design language across all buildings. The design will reflect elements that honor the professionalism, service, and community values of the Riverside Sheriff's Association.

If you have any questions, please feel free to reach out.

Best,



Nicole Williams, Architect

Appendix B:
Traffic Scoping Agreement

TECHNICAL MEMORANDUM

To: Transportation Department, City of Rancho Mirage

From: Alejandro Tapia, PE - Michael Baker International
Jordan Gray, PE, TE – Michael Baker International

Date: March 5, 2026

Subject: Riverside Sheriffs' Association Project - Transportation Study Scoping Agreement

Introduction

Michael Baker International (Michael Baker) prepared this technical memorandum to provide a Transportation Study Scoping Agreement for the proposed Riverside's Sheriffs' Association (Project) located along Dinah Shore Drive at the southeastern intersection of Key Largo Avenue in the City of Rancho Mirage, County of Riverside, California. The purpose of this Transportation Study Scoping Agreement is to determine whether a Level of Service (LOS) Analysis is needed and whether a full Vehicle Miles Traveled (VMT) Analysis is required in accordance with the County of Riverside's *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled* dated December 2020 and the City of Rancho Mirage's *Transportation Analysis Policy, 1st Revision*, dated February 2021. **Table 1** provides key project information. **Exhibit 1** shows the Project Site Plan.

Table 1: Project Information

Item	Description
Project Title	Riverside Sheriffs' Association (RSA)
Project Location	Southeast corner of Dinah Shore Drive & Key Largo Avenue intersection (City of Rancho Mirage, County of Riverside)
Existing Use	Vacant and Undeveloped
Existing Zoning	Community Commercial (C-C)
Proposed Use	Commercial and Office
Site Area	Approx. 7.92 Acres (Gross)

Project Description

The RSA Project would develop office facilities and commercial uses totaling approximately 67,593 square feet. **Exhibit 1** shows the Project site plan. The project includes the development of eight (8) buildings, surface parking, onsite circulation, two (2) water quality basins, and landscaping. The northern portion of the site would contain three (3) one-story commercial and fast casual restaurant buildings (Buildings 1 through 3) and associated parking.

The southern portion of the site would comprise the RSA campus and would include five (5) one-story buildings (Buildings 4 through 8) as shown on the site plan. Buildings 6 through 8 will not be open to the public and will only be accessible to RSA members. As such, for the purposes of this analysis, specific trip generation rates were applied to

these facilities based on exclusive access by RSA members only. Approximately 450 members are eligible to use these facilities. Building 7 is expected to be ancillary to land use and operations Building 5.

The campus would be closed to the public and include a central mixed-use plaza, multi-purpose field, and associated parking. **Table 2** summarizes the area associated with each proposed use.

Table 2: Project Development Summary

Project Component	Square Feet
Building 1 – Fast Causal Restaurant	6,582 SF
Building 2 –Fast Causal Restaurant	5,510 SF
Building 3 – Fast Causal Restaurant	6,582 SF
Building 4 – Leasable Office	9,874 SF
Building 5 – Riverside Sheriff Association Office	14,130 SF
Building 6 – Medical Office	11,357 SF
Building 7 – Fraternal Order of Police Lodge	5,891 SF
Building 8 – Health and Fitness Center	7,667 SF
TOTAL SQUARE FEET	**67,593 SF**

Transportation Analysis Guidelines

The transportation analysis includes two components: vehicle miles traveled (VMT) analysis to comply with the California Environmental Quality Act (CEQA) process and traffic operations analysis based on level of service (LOS) to comply with the County's requirements. The City's *Transportation Analysis Policy, 1st Revision* (February 2021) and the County of Riverside's *Transportation Analysis Guidelines (TAG) for Level of Service and Vehicle Miles Traveled* (December 2020) were utilized as a resource to determine if a detailed VMT and LOS analysis is required.

Trip Generation Summary

Michael Baker used the land use options and trip generation rates available in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition* to calculate the estimated daily and peak hour trip generated by the proposed Project. **Table 3** provides the trip generation rates assumed for the Project site.

Table 3: Trip Generation Rates

Land Use	ITE Code(1)	Daily Trip Rate	AM Peak Hour Rate		PM Peak Hour Rate	
			Total	In : Out	Total	In : Out
Fast Casual Restaurant	930	225.89 / TSF	1.58 / TSF	64% : 36%	14.35 / TSF	53% : 47%
Small Office	712	14.39 / TSF	1.64 / TSF	83% : 17%	2.16 / TSF	34% : 66%
Medical-Dental Office	-	0.4 / Member(2)	K-factor 0.10(3)	78% : 22%	K-factor 0.10(3)	30% : 70%
Health/Fitness Club	-	0.8 / Member(2)	K-factor 0.10(3)	51% : 49%	K-factor 0.10(3)	57% : 43%

(1) Source: ITE Trip Generation Manual, 12th Edition.
(2) Trip rates are estimated based on 450 eligible RSA members. Assumes 20% of members (20% in/20% out) visit Building 6 on a weekday and 40% (40% in/ 40% out) visit Building 8 on a given weekday.
(3) K-factor of 0.10 was used to estimate peak hour trips based on the estimated daily trips.

Given the speculative nature of future tenants in Buildings 1 through 3, a land use of Fast Casual Restaurant was assumed to provide a conservative estimate of trips. As previously discussed, access to buildings 6 through 8 will not be open to the public and will only be accessible to RSA members. Additionally, Building 7 ,in particular, is expected to be ancillary to Building 5 and therefore generate a negligible amount of additional trips. Due to access restrictions on Building 6 and 8, trip rates were independently estimated and based on number of estimated members. Approximately 450 members are eligible to use these facilities, however the trip generation assumes only a portion of member use these facilities on a given weekday. For the purposes of this analysis, it was assumed 20% of members access Building 6 and 40% of members access Building 8 on any given weekday. Including inbound and outbound trips, this results in approximately 0.4 daily trips per member for Building 6 and 0.8 daily trips per member for Building 8.

Pass-by trip reduction rates and internal trip reduction rates were applied to specific uses, as applicable. The Fast Casual Restaurant use applies pass-by trip reduction rates found in the *ITE Trip Generation Handbook*. Internal trip reduction rates were used for the restaurant and office land uses based on the NCHRP 684 Internal Reduction Tool.

Table 4 summarizes the Project trip generation using the rates shown in **Table 3**. As shown in Table 4, the Project is expected to generate 2,603 daily vehicle trips with 76 AM (48 inbound and 28 outbound) peak hour trips and 118 PM (55 inbound and 63 outbound) peak hour trips. According to the County's TAG, if the project adds 100 or more AM or PM peak hour trips to the existing circulation system, a transportation analysis is required. Since the Project is expected to generate more than 100 peak hour trips (118 PM peak hour trips), a full transportation analysis is required.

Table 4: Project Trip Generation Summary

Land Use	Intensity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			Total	In : Out		Total	In : Out	
Fast Casual Restaurant(1)	18.67 TSF	4,217	29	19 : 10		268	142 : 126	
Internal Capture Reduction(3)		-422	-7	-4 : -3		-5	-1 : -4	
Restaurant Subtotal		**3,795**	**22**	**15 : 7**		**263**	**141 : 122**	
Pass-by (10% Daily, 10% AM, 43% PM)		-411	-2	-1 : -1		-113	-61 : -52	
Restaurant Subtotal		**3,384**	**20**	**14 : 6**		**150**	**80 : 70**	
Small Office(2)	24.00 TSF	345	39	33 : 6		52	18 : 34	
Medical-Dental Office	450 Members	180	18	14 : 4		18	5 : 13	
Internal Capture Reduction(3)		-53	-7	-3 : -4		-6	-4 : -2	
Office Subtotal		**472**	**50**	**44 : 6**		**64**	**19 : 45**	
Health/Fitness Club	450 Members	360	36	18 : 18		36	21 : 15	
Health/Fitness Subtotal		**360**	**36**	**18 : 18**		**36**	**21 : 15**	
Total Driveway Trips		**4,627**	**108**	**77 : 31**		**363**	**181 : 182**	
Total Added Trips		**4,216**	**106**	**76 : 30**		**250**	**120 : 130**	

(1) Buildings 1, 2 and 3 were calculated together as all are expected to operate as fast casual restaurants.
(2) Building 4 and Building 5 were calculated together as they will both operate as small offices.
(3) Based on NCHRP 684 guidelines.

Intersection Operations Analysis

Michael Baker reviewed the local roadway network surrounding the Project site to identify the study intersections for the Transportation Impact Analysis (TIA) Report. Based on anticipated travel patterns, Michael Baker developed an assumed Project trip distribution onto the adjacent roadway network, as shown in **Exhibit 2**.

Considering nearby commercial land uses, access to the I-10 freeway via Monterey Avenue, and available ReplicaHQ data, **Exhibit 3** illustrates the assumed distribution of Project-related traffic. **Exhibit 4** shows the pass-by trip

distribution. Pass-by trip assignment at each study intersections 3, 4 and 5 are presented in **Exhibit 5**. The net new trip assignment (assuming both internal and pass-by trip reductions) at each study intersection is provided in **Exhibit 6**.

The TIA would analyze the following study intersections:

1. I-10 NB Ramps & Monterey Avenue
2. I-10 SB Ramps & Monterey Avenue
3. Dinah Shore Drive & Key Largo Avenue
4. Key Largo Avenue & Project Driveway
5. Dinah Shore Drive & Project Driveway
6. Dinah Shore Drive & Miriam Way
7. Dinah Shore Drive & Shoppers Lane
8. Dinah Shore Drive & Monterey Avenue

The TIA would evaluate the following study scenarios:

- Existing Conditions
- Existing Plus Project Conditions
- Opening Year Without Project Conditions
- Opening Year Plus Project Conditions

VMT Screening Criteria

According to the City's *Transportation Analysis Policy, 1st Revision* and the County's TAG, CEQA analysis requires an evaluation of project impacts related to VMT. Screening criteria to determine if a project is anticipated to result in a less-than-significant transportation impact along with VMT metrics and thresholds of significance are included within both documents. Projects that meet the VMT screening criteria identified in **Table 5** are assumed to result in a less-than-significant transportation impact under CEQA and do not require a detailed quantitative VMT assessment. Michael Baker has conducted an evaluation of the VMT screening criteria and has determined that **the Project meets one of the Screening Criteria listed in the table below. Therefore, a Project specific VMT assessment is not required, and the Project impact is considered less-than-significant on the environment.**

Table 5: Screening Criteria for Development Projects Exempt from VMT Calculation

Screening Criteria	Description of Screening Criteria	Project Evaluation	Result
SMALL PROJECTS	This applies to projects with low trip generation per existing CEQA exemptions or based on the County Greenhouse Gas Emissions Screening Tables, result in a 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO2e) per year screening level threshold. **Projects presumed to cause a less-than-significant impact:** • Single Family Housing projects less than or equal to 110	Project is expected to generate 4,216 net new daily trips which exceeds the 110-trip threshold.	Does Not Meet Criteria

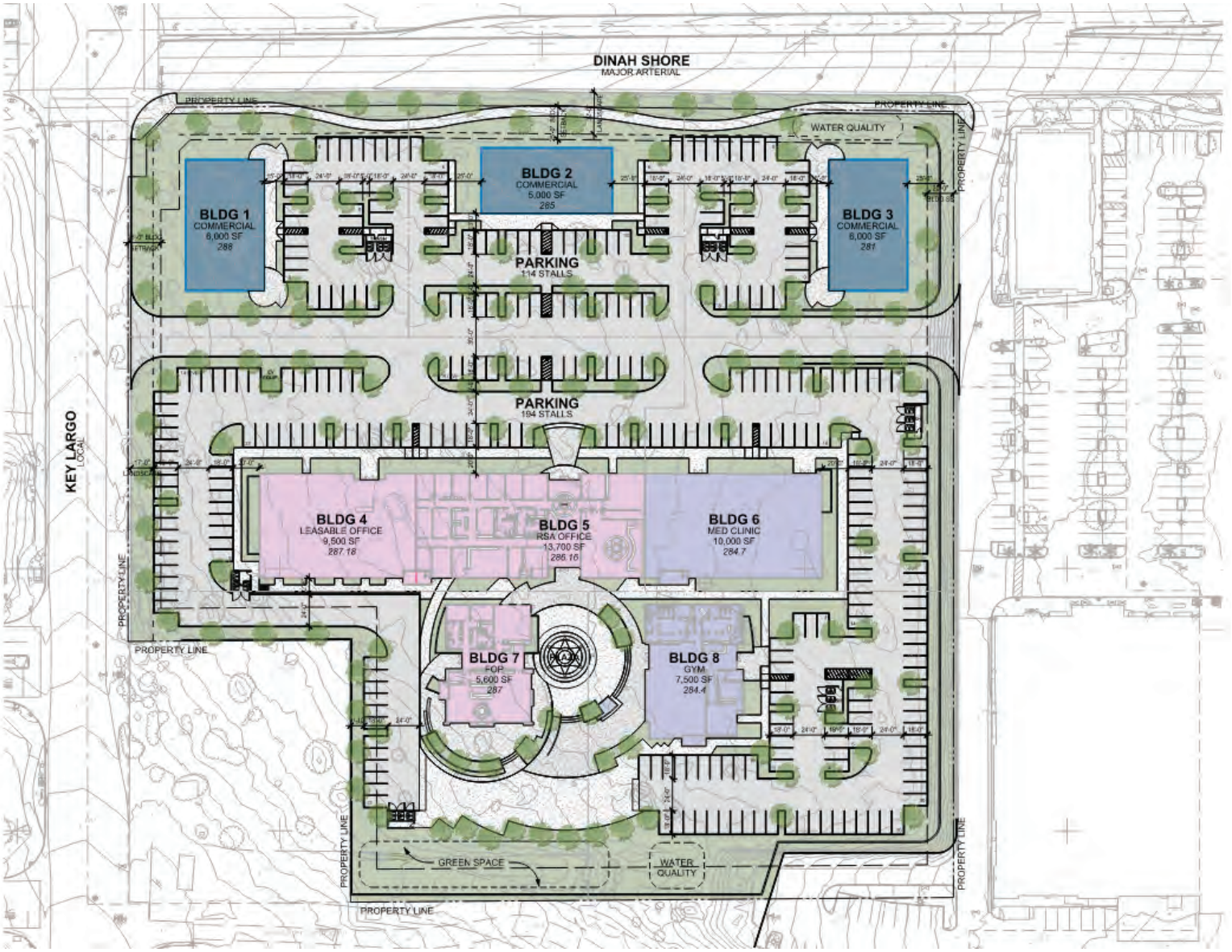
Screening Criteria	Description of Screening Criteria	Project Evaluation	Result
	Dwelling Units; or • Multi Family (low rise) Housing projects less than or equal to 147 Dwelling Units; or • Multi Family (mid-rise) Housing projects less than or equal to 194 Dwelling Units; or • General Office Building with area less than or equal to 165,000 SF; or • Retail buildings with area less than or equal to 60,000 SF; or • Warehouse (unrefrigerated) buildings with area less than or equal to 208,000 SF; or • General Light Industrial buildings with area less than or equal to 179,000 SF • Project GHG emissions less than 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO2e) as determined by a methodology acceptable to the Transportation Department; or • Unless specified above, project trip generation is less than 110 trips per day per the ITE Manual or other acceptable source determined by Riverside County.		
PROJECTS NEAR HIGH QUALITY TRANSIT	Is the Project located within ½ mile of an existing major transit stop; and maintains a service interval frequency of 15 minutes or less during the morning and afternoon peak commute periods?	Transit service (bus) is provided along Dana Shore Drive near the Project site. However, the Project is not located within located within ½ mile of an existing major transit stop (multiple bus lines or rail station).	Does Not Meet Criteria
LOCAL-SERVING RETAIL	No single store on-site exceeds 50,000 SF; and Project is local serving as determined by the Transportation Department.	Each of the commercial buildings on-site are well below the 50,000 SF threshold and would most likely be considered local serving. Additionally, all RSA facilities will likely primarily serve Coachella Valley members. Therefore, all buildings on-site are likely considered local serving	**Criteria Is Met**

Screening Criteria	Description of Screening Criteria	Project Evaluation	Result
AFFORDABLE HOUSING	A high percentage of affordable housing is provided as determined by the Riverside County Planning and Transportation Departments.	The Project is not residential and therefore this screening criteria does not apply.	Does Not Apply
LOCAL ESSENTIAL SERVICE	Project is local serving as determined by the Transportation Department; and Local-serving Day Care Center; or Police or Fire Facility; or Medical/Dental Office Building under 50,000 SF; or Government Offices (in-person services such as Post Office, Library, and Utilities); or Local or Community Parks.	The Project is not considered local essential as the meeting hall and office use would be used exclusively for RSA members. In addition, the health/fitness clinic and medical office would be only accessible for RSA members.	Does Not Meet Criteria
MAP-BASED SCREENING	Area of development is under threshold as shown on screening map as allowed by the Transportation Department.	The Project does not appear to be located within a low VMT generating TAZ based on Home-Based Work VMT per worker based on available VMT Screening Tools.	Does Not Meet Criteria
REDEVELOPMENT PROJECTS	Project replaces an existing VMT-generating land use and does not result in a net overall increase in VMT.	The existing site is currently vacant and undeveloped. Therefore, this criterion does not apply.	Does Not Apply

Conclusions

Based on our review of the County's TAG, a full Transportation Impact Analysis is required since the Project is expected to generate 106 net new AM Peak Hour trips and 250 net new PM peak hour trips i.e. more than the 100 peak hour trips threshold. In accordance with the City's *Transportation Analysis Policy, 1st Revision* and the County's TAG, a project-level VMT analysis is not required since the Project meets one of the VMT screening criteria and therefore, the Project is considered to have a less-than-significant VMT impact on the environment.

Please review the assumptions and study locations identified in this TIA Scoping Agreement and let us know if you have any comments or questions.



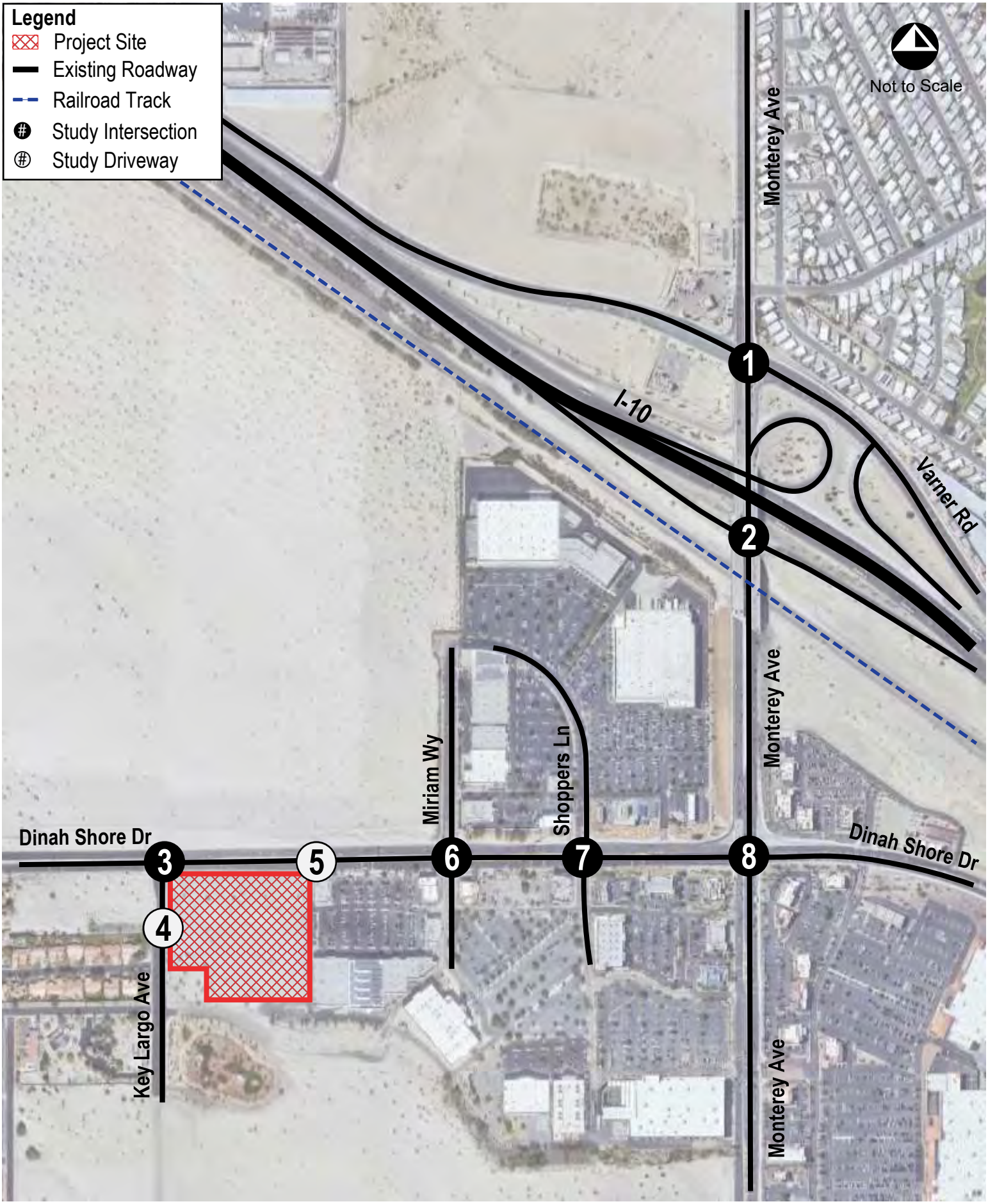
Source: Prest Vuksic Greenwood Architects

Not to Scale

Michael Baker INTERNATIONAL

Site Plan

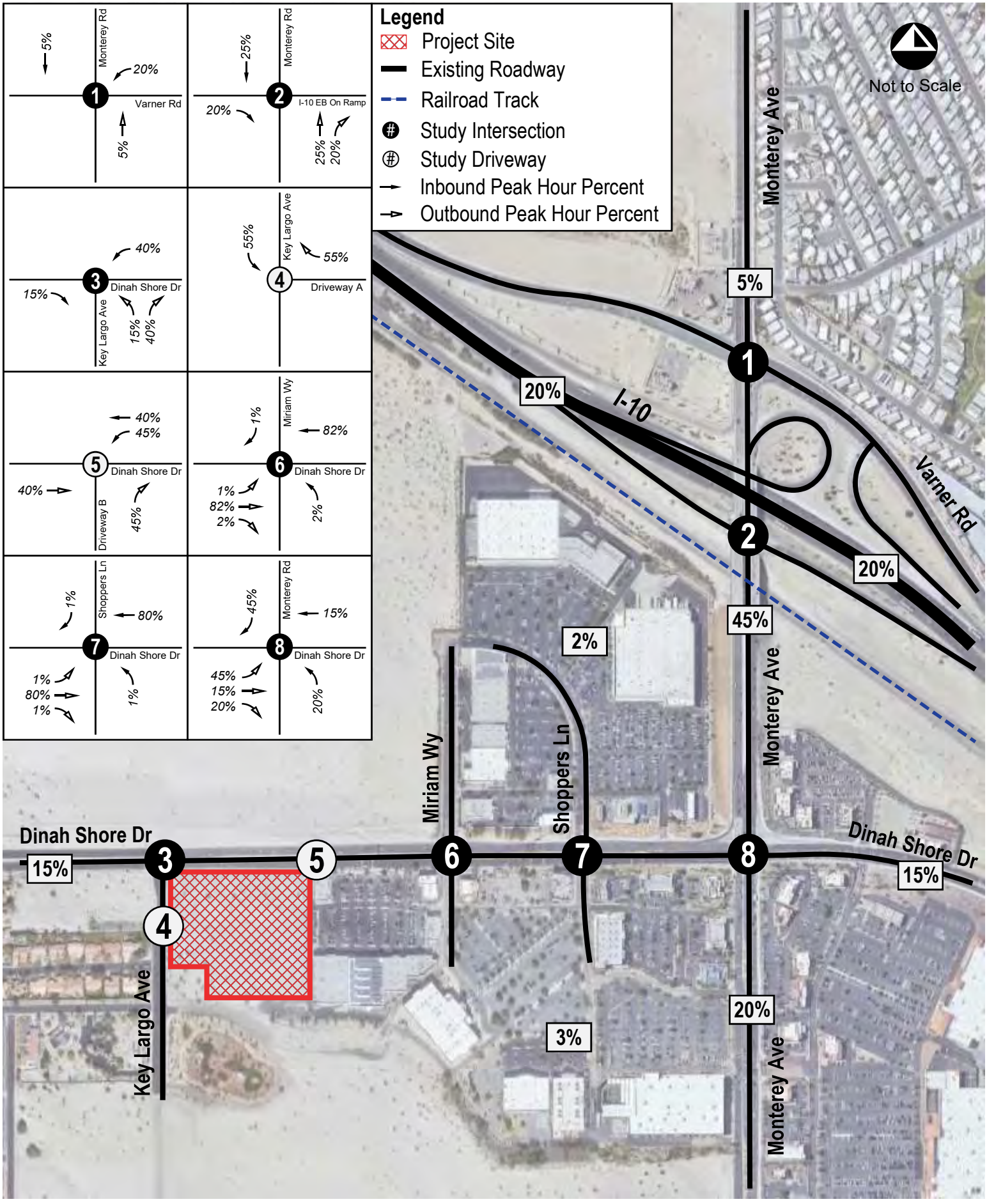
Exhibit 1



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Study Intersections

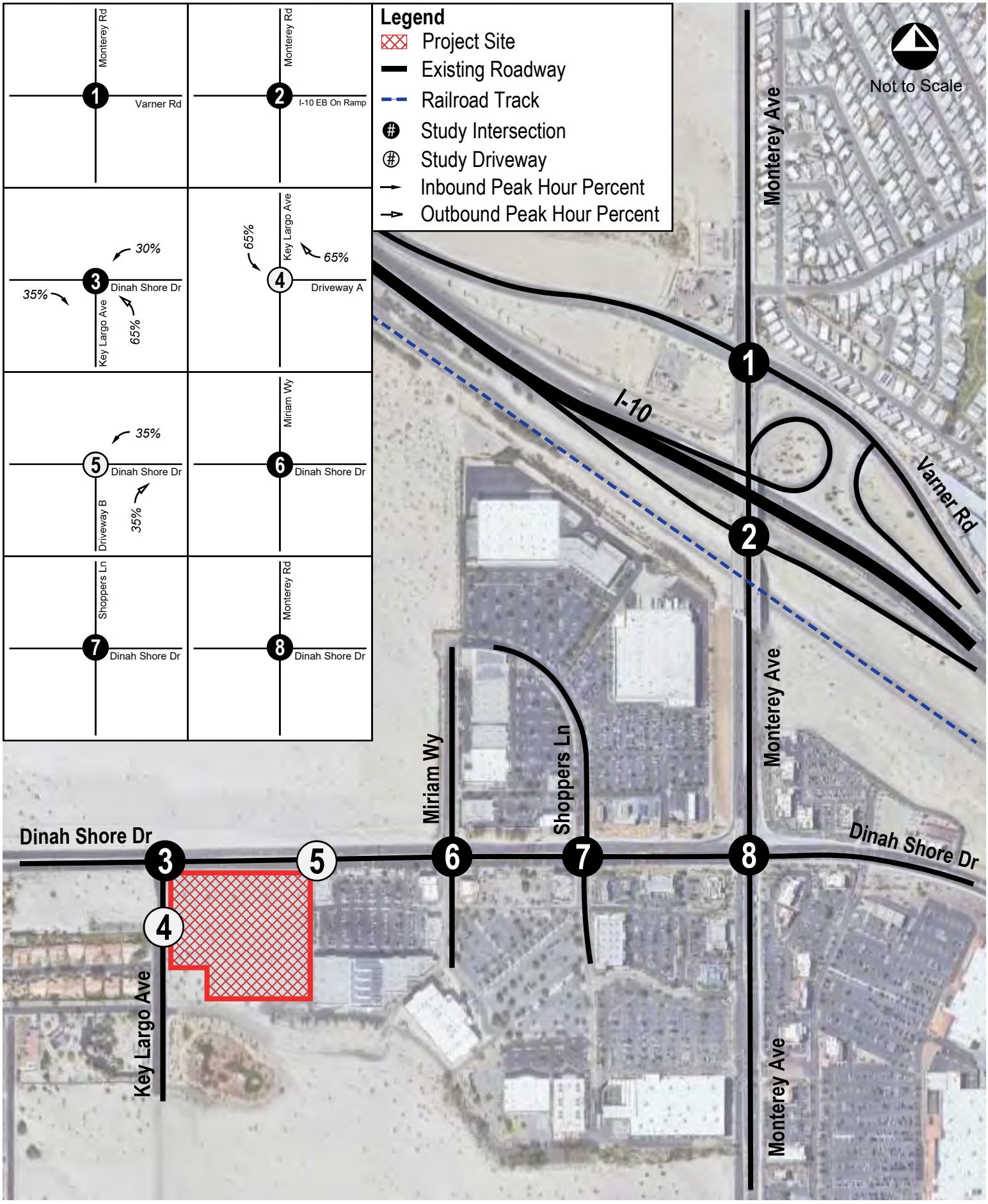
Exhibit 2



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Project Trip Distribution

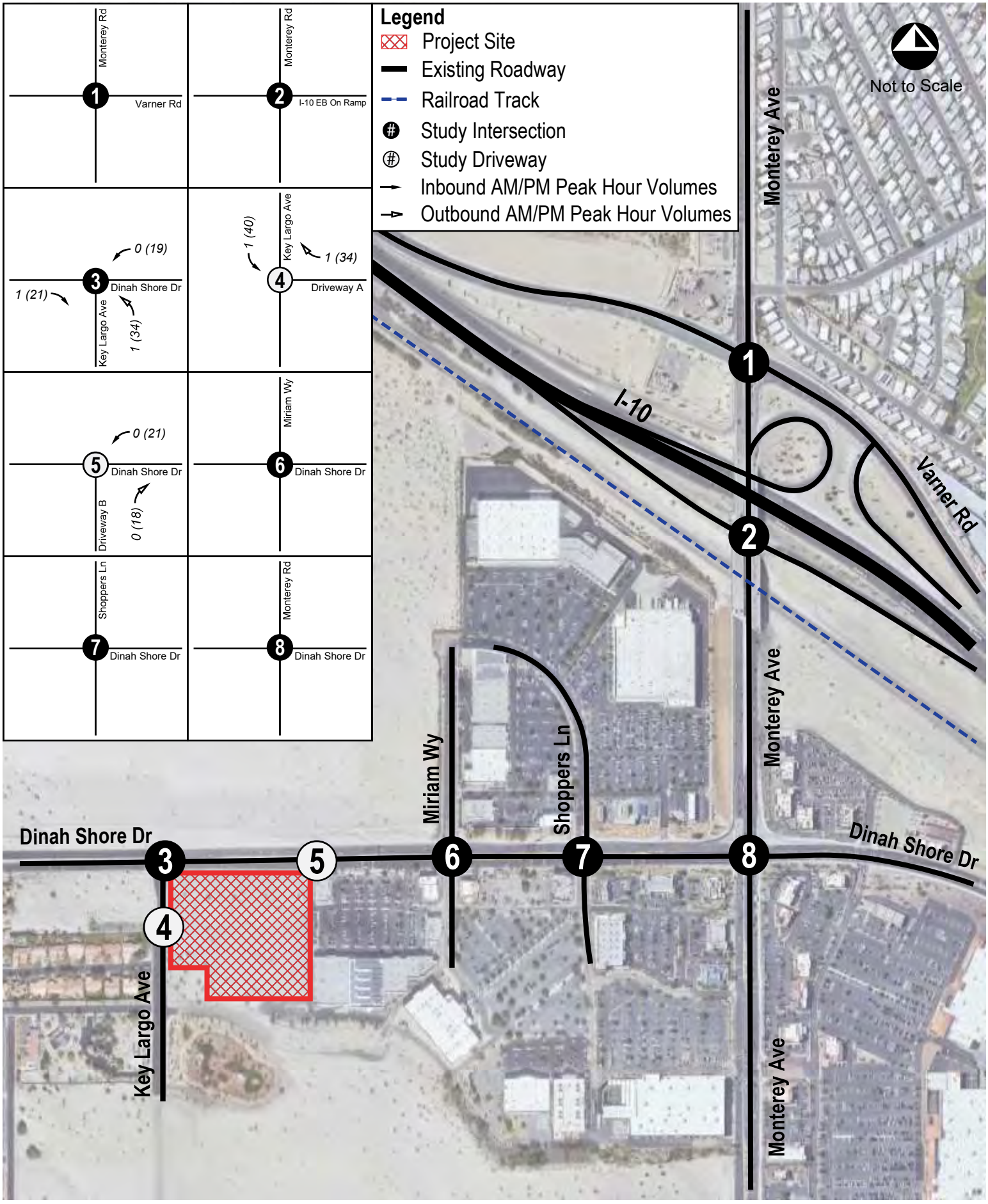
Exhibit 3



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Pass-By Trip Distribution

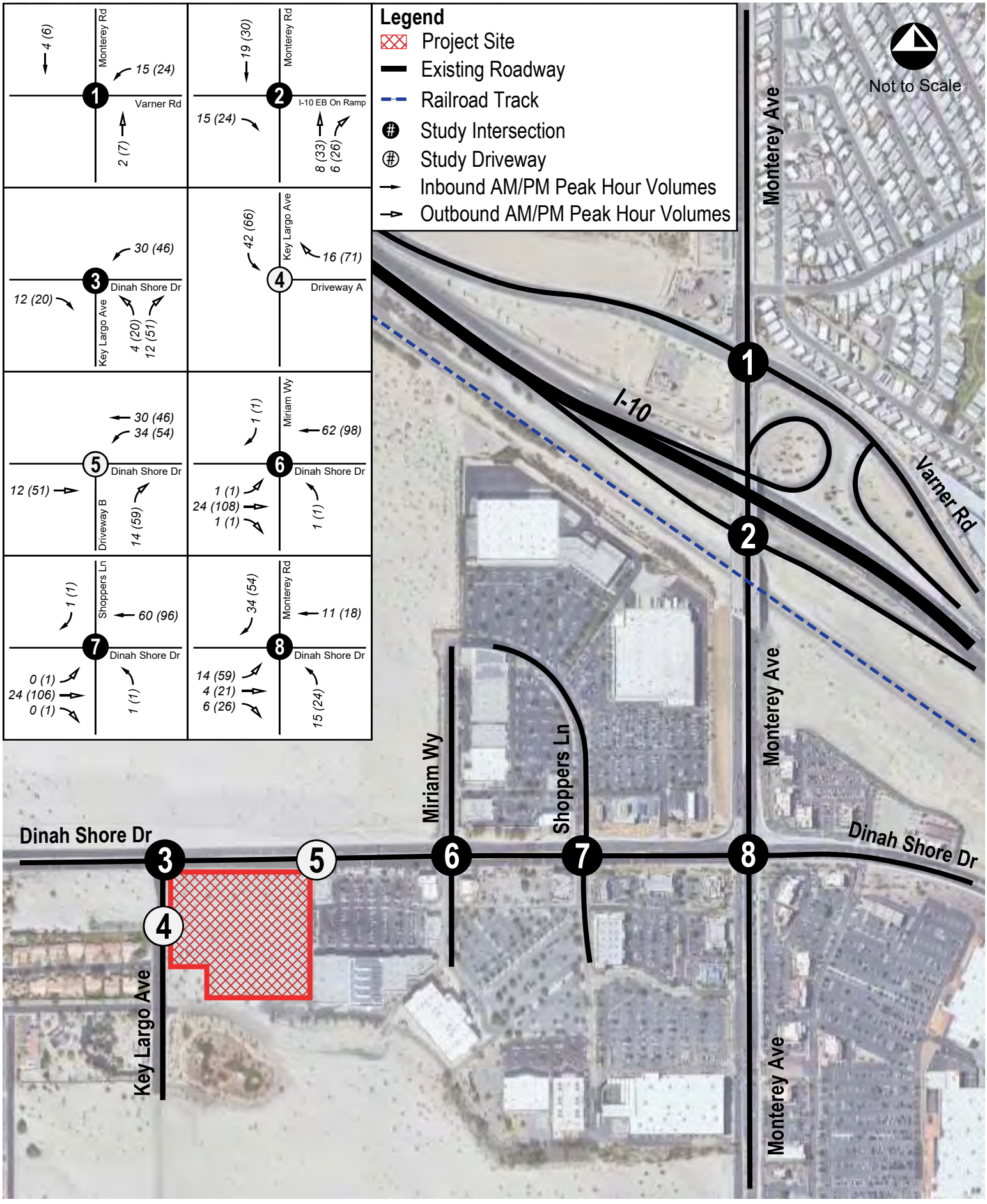
Exhibit 4



Pass-By Trip Assignment

Exhibit 5

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Net New Project Trip Assignment

Exhibit 6

Appendix C:
Traffic Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Varner Rd
City: Palm Desert
Control: Signalized

Project ID: 26-030024-001
Date: 4/7/2026

Data - Total

NS/EW Streets:	Monterey Ave				Monterey Ave				Varner Rd				Varner Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	19	27	7	1	11	120	4	0	3	19	48	0	121	39	25	0	444
7:15 AM	25	19	2	1	4	139	5	0	7	29	59	0	125	54	26	0	495
7:30 AM	29	39	9	1	19	146	0	0	1	38	52	0	161	45	17	0	557
7:45 AM	28	30	5	0	22	157	1	0	5	27	44	0	206	51	22	0	598
8:00 AM	26	32	5	2	11	100	3	0	5	19	47	0	107	43	25	0	425
8:15 AM	23	31	6	1	11	124	1	0	6	17	48	0	123	39	22	0	452
8:30 AM	30	56	8	1	6	124	1	0	6	9	33	0	121	42	28	0	465
8:45 AM	30	32	16	2	6	121	4	0	4	14	39	0	142	37	23	0	470
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	210	266	58	9	90	1031	19	0	37	172	370	0	1106	350	188	0	3906
APPROACH %'s :	38.67%	48.99%	10.68%	1.66%	7.89%	90.44%	1.67%	0.00%	6.39%	29.71%	63.90%	0.00%	67.27%	21.29%	11.44%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	101	115	23	3	56	562	10	0	16	113	203	0	613	189	90	0	2094
PEAK HR FACTOR :	0.871	0.737	0.639	0.750	0.636	0.895	0.500	0.000	0.571	0.743	0.860	0.000	0.744	0.875	0.865	0.000	0.875
		0.776				0.872				0.874				0.799			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	49	102	24	5	10	92	3	0	3	25	57	0	109	43	52	0	574
4:15 PM	47	92	17	6	4	71	3	0	5	16	37	0	122	63	44	0	527
4:30 PM	52	117	22	9	8	104	1	0	4	18	53	0	84	37	44	0	553
4:45 PM	46	117	9	7	5	89	2	0	6	26	38	0	102	36	40	0	523
5:00 PM	46	117	10	6	5	112	2	0	3	19	72	0	117	39	44	0	592
5:15 PM	34	94	14	26	3	75	0	0	7	20	34	0	116	52	48	0	523
5:30 PM	44	114	14	5	9	107	3	0	8	11	42	0	96	34	48	0	535
5:45 PM	38	96	21	4	4	80	3	0	9	15	28	0	100	34	38	0	470
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	356	849	131	68	48	730	17	0	45	150	361	0	846	338	358	0	4297
APPROACH %'s :	25.36%	60.47%	9.33%	4.84%	6.04%	91.82%	2.14%	0.00%	8.09%	26.98%	64.93%	0.00%	54.86%	21.92%	23.22%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	191	443	58	28	22	376	8	0	18	79	200	0	425	175	172	0	2195
PEAK HR FACTOR :	0.918	0.947	0.659	0.778	0.688	0.839	0.667	0.000	0.750	0.760	0.694	0.000	0.871	0.694	0.977	0.000	0.927
		0.900				0.853				0.790				0.843			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Varner Rd
City: Palm Desert
Control: Signalized

Project ID: 26-030024-001
Date: 4/7/2026

Data - Cars

NS/EW Streets:	Monterey Ave				Monterey Ave				Varner Rd				Varner Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	19	24	7	1	9	109	4	0	3	15	36	0	116	35	24	0	402
7:15 AM	25	19	2	1	4	126	4	0	7	24	46	0	117	44	19	0	438
7:30 AM	26	36	9	1	18	141	0	0	1	36	49	0	157	43	13	0	530
7:45 AM	27	28	5	0	21	148	1	0	5	24	41	0	201	48	19	0	568
8:00 AM	21	30	5	2	9	94	3	0	5	18	38	0	103	38	24	0	390
8:15 AM	20	30	6	1	11	115	1	0	6	16	41	0	119	35	21	0	422
8:30 AM	29	53	8	1	6	117	1	0	5	8	30	0	120	37	27	0	442
8:45 AM	26	31	16	2	5	116	4	0	4	13	34	0	135	30	18	0	434
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	193	251	58	9	83	966	18	0	36	154	315	0	1068	310	165	0	3626
APPROACH %'s :	37.77%	49.12%	11.35%	1.76%	7.78%	90.53%	1.69%	0.00%	7.13%	30.50%	62.38%	0.00%	69.22%	20.09%	10.69%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	97	107	23	3	52	524	9	0	16	99	172	0	591	170	75	0	1938
PEAK HR FACTOR :	0.898	0.743	0.639	0.750	0.619	0.885	0.563	0.000	0.571	0.688	0.878	0.000	0.735	0.885	0.781	0.000	0.853
	0.799				0.860				0.834				0.780				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	47	98	24	5	10	91	3	0	3	23	52	0	108	40	50	0	554
4:15 PM	44	91	17	6	4	68	2	0	5	16	37	0	120	58	43	0	511
4:30 PM	50	115	20	9	7	103	0	0	4	17	49	0	83	35	42	0	534
4:45 PM	43	113	9	7	5	89	2	0	6	26	36	0	100	32	37	0	505
5:00 PM	45	116	10	6	4	111	2	0	3	18	68	0	115	35	40	0	573
5:15 PM	32	93	14	26	3	74	0	0	7	20	34	0	116	50	46	0	515
5:30 PM	44	112	14	5	9	105	3	0	8	11	41	0	96	29	47	0	524
5:45 PM	37	93	20	4	4	79	2	0	9	14	27	0	100	30	38	0	457
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	342	831	128	68	46	720	14	0	45	145	344	0	838	309	343	0	4173
APPROACH %'s :	24.98%	60.70%	9.35%	4.97%	5.90%	92.31%	1.79%	0.00%	8.43%	27.15%	64.42%	0.00%	56.24%	20.74%	23.02%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	182	435	56	28	20	371	6	0	18	77	190	0	418	160	162	0	2123
PEAK HR FACTOR :	0.910	0.938	0.700	0.778	0.714	0.836	0.750	0.000	0.750	0.740	0.699	0.000	0.871	0.690	0.942	0.000	0.926
	0.903				0.848				0.801				0.837				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Varner Rd
City: Palm Desert
Control: Signalized

Project ID: 26-030024-001
Date: 4/7/2026

Data - Buses

NS/EW Streets:	Monterey Ave				Monterey Ave				Varner Rd				Varner Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	4
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	5
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	5	0	0	1	3	0	0	0	1	5	0	0	4	1	0	21
APPROACH %'s :	16.67%	83.33%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%	0.00%	16.67%	83.33%	0.00%	0.00%	80.00%	20.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	2	0	0	0	0	5	0	0	0	1	0	9
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.417	0.000	0.000	0.000	0.250	0.000	0.563
	0.250				0.500				0.417				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0	0	4
4:30 PM	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3
4:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	2	0	0	0	3	2	0	0	0	3	0	0	8	0	0	19
APPROACH %'s :	33.33%	66.67%	0.00%	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	1	1	0	0	0	2	2	0	0	0	2	0	0	4	0	0	12
PEAK HR FACTOR :	0.250	0.250	0.000	0.000	0.000	0.500	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.750
	0.500				0.500				0.500				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Varner Rd
City: Palm Desert
Control: Signalized

Project ID: 26-030024-001
Date: 4/7/2026

Data - HT

NS/EW Streets:	Monterey Ave				Monterey Ave				Varner Rd				Varner Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	3	0	0	2	11	0	0	0	4	9	0	5	4	1	0	39
7:15 AM	0	0	0	0	0	12	1	0	0	5	11	0	8	10	6	0	53
7:30 AM	3	2	0	0	1	5	0	0	0	2	3	0	4	2	4	0	26
7:45 AM	1	2	0	0	1	8	0	0	0	3	3	0	5	3	3	0	29
8:00 AM	4	1	0	0	1	6	0	0	0	1	9	0	4	5	1	0	32
8:15 AM	3	1	0	0	0	9	0	0	0	1	7	0	4	3	1	0	29
8:30 AM	1	0	0	0	0	7	0	0	1	0	3	0	1	4	1	0	18
8:45 AM	4	1	0	0	1	4	0	0	0	1	5	0	7	5	5	0	33
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	16	10	0	0	6	62	1	0	1	17	50	0	38	36	22	0	259
APPROACH %'s :	61.54%	38.46%	0.00%	0.00%	8.70%	89.86%	1.45%	0.00%	1.47%	25.00%	73.53%	0.00%	39.58%	37.50%	22.92%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	4	7	0	0	4	36	1	0	0	14	26	0	22	19	14	0	147
PEAK HR FACTOR :	0.333	0.583	0.000	0.000	0.500	0.750	0.250	0.000	0.000	0.700	0.591	0.000	0.688	0.475	0.583	0.000	0.693
	0.550				0.788				0.625				0.573				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	4	0	0	0	1	0	0	0	2	4	0	1	3	2	0	19
4:15 PM	3	1	0	0	0	2	0	0	0	0	0	0	2	3	1	0	12
4:30 PM	1	2	2	0	1	1	0	0	0	1	3	0	1	2	2	0	16
4:45 PM	3	3	0	0	0	0	0	0	0	0	1	0	2	3	3	0	15
5:00 PM	1	1	0	0	1	0	0	0	0	1	4	0	2	3	4	0	17
5:15 PM	2	1	0	0	0	1	0	0	0	0	0	0	0	1	2	0	7
5:30 PM	0	1	0	0	0	2	0	0	0	0	1	0	0	4	1	0	9
5:45 PM	1	3	1	0	0	0	1	0	0	1	1	0	0	2	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	16	3	0	2	7	1	0	0	5	14	0	8	21	15	0	105
APPROACH %'s :	40.63%	50.00%	9.38%	0.00%	20.00%	70.00%	10.00%	0.00%	0.00%	26.32%	73.68%	0.00%	18.18%	47.73%	34.09%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	8	7	2	0	2	3	0	0	0	2	8	0	7	11	10	0	60
PEAK HR FACTOR :	0.667	0.583	0.250	0.000	0.500	0.375	0.000	0.000	0.000	0.500	0.500	0.000	0.875	0.917	0.625	0.000	0.882
	0.708				0.625				0.500				0.778				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Varner Rd
City: Palm Desert
Control: Signalized

Project ID: 26-030024-001
Date: 4/7/2026

Data - Bikes

NS/EW Streets:	Monterey Ave				Monterey Ave				Varner Rd				Varner Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
														0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	1	2	1	0	1	1.5	1.5	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Varner Rd
City: Palm Desert

Project ID: 26-030024-001
Date: 4/7/2026

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Monterey Ave		Monterey Ave		Varner Rd		Varner Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2	2
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	2	2
APPROACH %'s :							0.00%	100.00%	
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	1	1
APPROACH %'s :							0.00%	100.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	1	1
PEAK HR FACTOR :								0.250	0.250
							0.250		

Prepared by National Data & Surveying Services

Monterey Ave & Varner Rd

Peak Hour Turning Movement Count

ID: 26-030024-001
City: Palm Desert

Day: Tuesday
Date: 4/7/2026

	PEAK HOURS	COUNT PERIODS
AM	07:00 AM - 08:00 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

Monterey Ave — SOUTHBOUND

	Right	Thru	Left	U-Turn	Departing (northbound side)
AM	10	562	56	0	221
NOON	0	0	0	0	0
PM	8	376	22	0	633
Lanes	1	2	1	0	

Varner Rd — WESTBOUND

	PM	NOON	AM	Lanes
Right	172	0	90	0
Thru	175	0	189	2
Left	425	0	613	2
U-Turn	0	0	0	0
Departing	159	0	192	

Varner Rd — EASTBOUND

	AM	NOON	PM	Lanes
Departing	300	0	374	
U-Turn	0	0	0	0
Left	16	0	18	1
Thru	113	0	79	1.5
Right	203	0	200	1.5

Monterey Ave — NORTHBOUND

	Departing (southbound side)	U-Turn	Left	Thru	Right
Lanes		0	2	2	1
PM	1029	28	191	443	58
NOON	0	0	0	0	0
AM	1381	3	101	115	23

CONTROL

Signalized

	AM	NOON	PM
TEV	2094	0	2195
PHF	0.88		0.93

Cars (AM)

Approach	Left	Thru	Right
Southbound	52	524	9
Eastbound	16	99	172
Westbound	591	170	75
Northbound	97	107	23

Total Trucks (AM)

Approach	Left	Thru	Right
Southbound	4	38	1
Eastbound	0	14	31
Westbound	22	19	15
Northbound	4	8	0

Cars (NOON)

Approach	Left	Thru	Right
Southbound	0	0	0
Eastbound	0	0	0
Westbound	0	0	0
Northbound	0	0	0

Total Trucks (NOON)

Approach	Left	Thru	Right
Southbound	0	0	0
Eastbound	0	0	0
Westbound	0	0	0
Northbound	0	0	0

Cars (PM)

Approach	Left	Thru	Right
Southbound	20	371	6
Eastbound	18	77	190
Westbound	418	160	162
Northbound	182	435	56

Total Trucks (PM)

Approach	Left	Thru	Right
Southbound	2	5	2
Eastbound	0	2	10
Westbound	7	15	10
Northbound	9	8	2

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North leg (eastbound)	0	0	0
North leg (westbound)	0	0	0
South leg (eastbound)	0	0	0
South leg (westbound)	0	0	0
West leg (southbound)	0	0	1
West leg (northbound)	0	0	0
East leg (southbound)	0	0	0
East leg (northbound)	0	0	0
Northwest corner diagonal	0	0	0
Northeast corner diagonal	0	0	0
Southwest corner diagonal	0	0	0
Southeast corner diagonal	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & I-10 EB Ramps/Sonny Bono Mem Fwy
City: Palm Desert
Control: Signalized

Project ID: 26-030024-002
Date: 4/7/2026

Data - Total

NS/EW Streets:	Monterey Ave				Monterey Ave				I-10 EB Ramps/Sonny Bono Mem Fwy				I-10 EB Ramps/Sonny Bono Mem Fwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	135	61	0	37	237	0	0	9	0	171	0	0	0	0	0	650
7:15 AM	0	107	87	0	48	260	0	0	6	0	261	0	0	0	0	0	769
7:30 AM	0	147	68	0	39	305	0	0	13	0	273	0	0	0	0	0	845
7:45 AM	0	132	79	0	49	353	0	0	7	0	296	0	0	0	0	0	916
8:00 AM	0	172	82	0	36	231	0	0	7	0	201	0	0	0	0	0	729
8:15 AM	0	152	62	0	46	242	0	0	6	0	227	0	0	0	0	0	735
8:30 AM	0	177	77	0	33	233	0	0	7	1	231	0	0	0	0	0	759
8:45 AM	0	168	70	0	23	266	0	0	5	0	227	0	0	0	0	0	759
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1190	586	0	311	2127	0	0	60	1	1887	0	0	0	0	0	6162
APPROACH %'s :	0.00%	67.00%	33.00%	0.00%	12.76%	87.24%	0.00%	0.00%	3.08%	0.05%	96.87%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	558	316	0	172	1149	0	0	33	0	1031	0	0	0	0	0	3259
PEAK HR FACTOR :	0.000	0.811	0.908	0.000	0.878	0.814	0.000	0.000	0.635	0.000	0.871	0.000	0.000	0.000	0.000	0.000	0.889
		0.860				0.822				0.878							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	369	142	0	32	217	0	0	10	0	153	0	0	0	0	0	923
4:15 PM	0	365	160	0	32	184	0	0	8	0	163	0	0	0	0	0	912
4:30 PM	0	380	149	0	31	204	0	0	11	0	199	0	0	0	0	0	974
4:45 PM	0	354	151	0	33	189	0	0	8	0	185	0	0	0	0	0	920
5:00 PM	0	382	159	0	56	234	0	0	5	1	172	0	0	0	0	0	1009
5:15 PM	0	376	165	0	33	172	0	0	12	1	147	0	0	0	0	0	906
5:30 PM	0	366	148	0	34	204	0	0	15	1	163	0	0	0	0	0	931
5:45 PM	0	305	134	0	30	179	0	0	13	0	167	0	0	0	0	0	828
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2897	1208	0	281	1583	0	0	82	3	1349	0	0	0	0	0	7403
APPROACH %'s :	0.00%	70.57%	29.43%	0.00%	15.08%	84.92%	0.00%	0.00%	5.72%	0.21%	94.07%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	1481	619	0	152	811	0	0	32	1	719	0	0	0	0	0	3815
PEAK HR FACTOR :	0.000	0.969	0.967	0.000	0.679	0.866	0.000	0.000	0.727	0.250	0.903	0.000	0.000	0.000	0.000	0.000	0.945
		0.970				0.830				0.895							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & I-10 EB Ramps/Sonny Bono Mem Fwy
City: Palm Desert
Control: Signalized

Project ID: 26-030024-002
Date: 4/7/2026

Data - Cars

NS/EW Streets:	Monterey Ave				Monterey Ave				I-10 EB Ramps/Sonny Bono Mem Fwy				I-10 EB Ramps/Sonny Bono Mem Fwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	129	58	0	29	216	0	0	7	0	160	0	0	0	0	0	599
7:15 AM	0	103	84	0	37	244	0	0	5	0	245	0	0	0	0	0	718
7:30 AM	0	137	65	0	38	294	0	0	10	0	260	0	0	0	0	0	804
7:45 AM	0	126	76	0	45	338	0	0	6	0	287	0	0	0	0	0	878
8:00 AM	0	158	75	0	34	219	0	0	7	0	191	0	0	0	0	0	684
8:15 AM	0	138	61	0	38	229	0	0	6	0	215	0	0	0	0	0	687
8:30 AM	0	166	72	0	29	227	0	0	6	1	213	0	0	0	0	0	714
8:45 AM	0	157	67	0	20	251	0	0	4	0	217	0	0	0	0	0	716
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1114	558	0	270	2018	0	0	51	1	1788	0	0	0	0	0	5800
APPROACH %'s :	0.00%	66.63%	33.37%	0.00%	11.80%	88.20%	0.00%	0.00%	2.77%	0.05%	97.17%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	524	300	0	154	1095	0	0	28	0	983	0	0	0	0	0	3084
PEAK HR FACTOR :	0.000	0.829	0.893	0.000	0.856	0.810	0.000	0.000	0.700	0.000	0.856	0.000	0.000	0.000	0.000	0.000	0.878
		0.884				0.815				0.863							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	358	138	0	30	213	0	0	9	0	149	0	0	0	0	0	897
4:15 PM	0	356	157	0	30	181	0	0	8	0	160	0	0	0	0	0	892
4:30 PM	0	368	148	0	29	202	0	0	11	0	194	0	0	0	0	0	952
4:45 PM	0	344	148	0	32	188	0	0	7	0	180	0	0	0	0	0	899
5:00 PM	0	375	156	0	53	230	0	0	5	1	170	0	0	0	0	0	990
5:15 PM	0	368	163	0	33	171	0	0	12	1	147	0	0	0	0	0	895
5:30 PM	0	360	148	0	34	203	0	0	15	0	162	0	0	0	0	0	922
5:45 PM	0	293	132	0	30	177	0	0	11	0	163	0	0	0	0	0	806
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2822	1190	0	271	1565	0	0	78	2	1325	0	0	0	0	0	7253
APPROACH %'s :	0.00%	70.34%	29.66%	0.00%	14.76%	85.24%	0.00%	0.00%	5.55%	0.14%	94.31%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	1443	609	0	144	801	0	0	31	1	704	0	0	0	0	0	3733
PEAK HR FACTOR :	0.000	0.962	0.970	0.000	0.679	0.871	0.000	0.000	0.705	0.250	0.907	0.000	0.000	0.000	0.000	0.000	0.943
		0.966				0.835				0.898							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & I-10 EB Ramps/Sonny Bono Mem Fwy
City: Palm Desert
Control: Signalized

Project ID: 26-030024-002
Date: 4/7/2026

Data - Buses

NS/EW Streets:	Monterey Ave				Monterey Ave				I-10 EB Ramps/Sonny Bono Mem Fwy				I-10 EB Ramps/Sonny Bono Mem Fwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	6	0	0	5	3	0	0	0	0	4	0	0	0	0	0	18
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	62.50%	37.50%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	3	0	0	2	2	0	0	0	0	1	0	0	0	0	0	8
PEAK HR FACTOR :	0.000	0.375	0.000	0.000	0.250	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.667
		0.375				0.333				0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3	0	0	3	2	0	0	0	0	0	0	0	0	0	0	8
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	2	0	0	3	1	0	0	0	0	0	0	0	0	0	0	6
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.375	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
		0.500				0.500											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & I-10 EB Ramps/Sonny Bono Mem Fwy
City: Palm Desert
Control: Signalized

Project ID: 26-030024-002
Date: 4/7/2026

Data - HT

NS/EW Streets:	Monterey Ave				Monterey Ave				I-10 EB Ramps/Sonny Bono Mem Fwy				I-10 EB Ramps/Sonny Bono Mem Fwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	6	3	0	5	21	0	0	2	0	11	0	0	0	0	0	48
7:15 AM	0	4	3	0	9	15	0	0	1	0	16	0	0	0	0	0	48
7:30 AM	0	9	3	0	1	11	0	0	3	0	13	0	0	0	0	0	40
7:45 AM	0	6	3	0	4	14	0	0	1	0	9	0	0	0	0	0	37
8:00 AM	0	12	7	0	2	12	0	0	0	0	9	0	0	0	0	0	42
8:15 AM	0	14	1	0	8	13	0	0	0	0	12	0	0	0	0	0	48
8:30 AM	0	8	5	0	4	6	0	0	1	0	16	0	0	0	0	0	40
8:45 AM	0	11	3	0	3	14	0	0	1	0	9	0	0	0	0	0	41
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	70	28	0	36	106	0	0	9	0	95	0	0	0	0	0	344
APPROACH %'s :	0.00%	71.43%	28.57%	0.00%	25.35%	74.65%	0.00%	0.00%	8.65%	0.00%	91.35%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	31	16	0	16	52	0	0	5	0	47	0	0	0	0	0	167
PEAK HR FACTOR :	0.000	0.646	0.571	0.000	0.444	0.867	0.000	0.000	0.417	0.000	0.734	0.000	0.000	0.000	0.000	0.000	0.870
		0.618				0.708				0.765							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	11	4	0	2	4	0	0	1	0	4	0	0	0	0	0	26
4:15 PM	0	9	3	0	0	3	0	0	0	0	3	0	0	0	0	0	18
4:30 PM	0	11	1	0	1	2	0	0	0	0	5	0	0	0	0	0	20
4:45 PM	0	9	3	0	1	1	0	0	1	0	5	0	0	0	0	0	20
5:00 PM	0	7	3	0	3	3	0	0	0	0	2	0	0	0	0	0	18
5:15 PM	0	8	2	0	0	1	0	0	0	0	0	0	0	0	0	0	11
5:30 PM	0	5	0	0	0	1	0	0	0	1	1	0	0	0	0	0	8
5:45 PM	0	12	2	0	0	1	0	0	2	0	4	0	0	0	0	0	21
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	72	18	0	7	16	0	0	4	1	24	0	0	0	0	0	142
APPROACH %'s :	0.00%	80.00%	20.00%	0.00%	30.43%	69.57%	0.00%	0.00%	13.79%	3.45%	82.76%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	36	10	0	5	9	0	0	1	0	15	0	0	0	0	0	76
PEAK HR FACTOR :	0.000	0.818	0.833	0.000	0.417	0.750	0.000	0.000	0.250	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.950
		0.958				0.583				0.667							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & I-10 EB Ramps/Sonny Bono Mem Fwy
City: Palm Desert
Control: Signalized

Project ID: 26-030024-002
Date: 4/7/2026

Data - Bikes

NS/EW Streets:	Monterey Ave				Monterey Ave				I-10 EB Ramps/Sonny Bono Mem Fwy				I-10 EB Ramps/Sonny Bono Mem Fwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	2	0	0	1.3	0.3	1.3	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & I-10 EB Ramps/Sonny Bono Mem Fwy
City: Palm Desert
Project ID: 26-030024-002
Date: 4/7/2026

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Monterey Ave		Monterey Ave		I-10 EB Ramps/Sonny Bono Mem Fwy		I-10 EB Ramps/Sonny Bono Mem Fwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	1	1
APPROACH %'s :							0.00%	100.00%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	1	1
APPROACH %'s :							0.00%	100.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	1	1
PEAK HR FACTOR :								0.250	0.250
							0.250		

Prepared by National Data & Surveying Services

Monterey Ave & I-10 EB Ramps/Sonny Bono Mem Fwy

Peak Hour Turning Movement Count

ID: 26-030024-002
City: Palm Desert

Day: Tuesday
Date: 4/7/2026

PEAK HOURS		COUNT PERIODS
AM	07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

SOUTHBOUND — Monterey Ave

	Right	Thru	Left	U-Turn	Departing
AM	0	1149	172	0	591
NOON	0	0	0	0	0
PM	0	811	152	0	1513
Truck %	0	2	2	0	

EASTBOUND — I-10 EB Ramps/Sonny Bono Mem Fwy

	AM	NOON	PM	Truck %
Departing	0	0	0	
U-Turn	0	0	0	0
Left	33	0	32	1.3
Thru	0	0	1	0.3
Right	1031	0	719	1.3

WESTBOUND — I-10 EB Ramps/Sonny Bono Mem Fwy

	PM	NOON	AM	Truck %
Right	0	0	0	0
Thru	0	0	0	0
Left	0	0	0	0
U-Turn	0	0	0	0
Departing	772	0	488	

NORTHBOUND — Monterey Ave

	Departing	U-Turn	Left	Thru	Right
Truck %		0	0	3	1
PM	1530	0	0	1481	619
NOON	0	0	0	0	0
AM	2180	0	0	558	316

CONTROL

Signalized

	AM	NOON	PM
TEV	3259	0	3815
PHF	0.89		0.95

Cars (AM)

Approach	Left	Thru	Right
Southbound	154	1095	0
Eastbound	28	0	983
Westbound	0	0	0
Northbound	0	524	300

Total Trucks (AM)

Approach	Left	Thru	Right
Southbound	18	54	0
Eastbound	5	0	48
Westbound	0	0	0
Northbound	0	34	16

Cars (NOON)

Approach	Left	Thru	Right
Southbound	0	0	0
Eastbound	0	0	0
Westbound	0	0	0
Northbound	0	0	0

Total Trucks (NOON)

Approach	Left	Thru	Right
Southbound	0	0	0
Eastbound	0	0	0
Westbound	0	0	0
Northbound	0	0	0

Cars (PM)

Approach	Left	Thru	Right
Southbound	144	801	0
Eastbound	31	1	704
Westbound	0	0	0
Northbound	0	144	609

Total Trucks (PM)

Approach	Left	Thru	Right
Southbound	8	10	0
Eastbound	1	0	15
Westbound	0	0	0
Northbound	0	38	10

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North leg, westbound direction	0	0	0
North leg, eastbound direction	0	0	0
West leg, southbound direction	0	0	1
West leg, northbound direction	0	0	0
East leg, southbound direction	0	0	0
East leg, northbound direction	0	0	0
South leg, eastbound direction	0	0	0
South leg, westbound direction	0	0	0
NW diagonal	0	0	0
NE diagonal	0	0	0
SW diagonal	0	0	0
SE diagonal	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Key Largo Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-003
Date: 4/7/2026

Data - Total

NS/EW Streets:	Key Largo Ave				Key Largo Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	4	0	0	0	0	0	0	87	10	0	15	101	0	0	219
7:15 AM	2	0	8	0	0	0	0	0	0	108	3	0	11	108	0	0	240
7:30 AM	10	0	15	0	0	0	0	0	0	122	5	0	9	124	0	0	285
7:45 AM	2	0	4	0	0	0	0	0	0	135	7	0	17	123	0	1	289
8:00 AM	4	0	8	0	0	0	0	0	0	129	3	0	25	118	0	0	287
8:15 AM	2	0	6	0	0	0	0	0	0	129	9	0	16	129	0	0	291
8:30 AM	1	0	10	0	0	0	0	0	0	146	6	2	12	143	0	0	320
8:45 AM	6	0	5	0	0	0	0	0	0	181	4	2	15	113	0	0	326
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	29	0	60	0	0	0	0	0	0	1037	47	4	120	959	0	1	2257
APPROACH %'s :	32.58%	0.00%	67.42%	0.00%					0.00%	95.31%	4.32%	0.37%	11.11%	88.80%	0.00%	0.09%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	13	0	29	0	0	0	0	0	0	585	22	4	68	503	0	0	1224
PEAK HR FACTOR :	0.542	0.000	0.725	0.000	0.000	0.000	0.000	0.000	0.000	0.808	0.611	0.500	0.680	0.879	0.000	0.000	0.939
	0.875								0.817				0.921				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	0	10	0	0	0	0	0	0	177	6	0	11	257	0	0	465
4:15 PM	1	0	8	0	0	0	0	0	0	167	3	4	2	226	0	0	411
4:30 PM	2	0	8	0	0	0	0	0	0	194	5	1	4	221	0	0	435
4:45 PM	2	0	14	0	0	0	0	0	0	162	6	1	3	213	0	0	401
5:00 PM	2	0	18	0	0	0	0	0	0	180	6	0	7	198	0	0	411
5:15 PM	1	0	12	0	0	0	0	0	0	197	0	1	5	232	0	0	448
5:30 PM	2	0	9	0	0	0	0	0	0	159	3	2	8	176	0	0	359
5:45 PM	5	0	14	0	0	0	0	0	0	142	6	1	5	186	0	0	359
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	0	93	0	0	0	0	0	0	1378	35	10	45	1709	0	0	3289
APPROACH %'s :	16.96%	0.00%	83.04%	0.00%					0.00%	96.84%	2.46%	0.70%	2.57%	97.43%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	9	0	40	0	0	0	0	0	0	700	20	6	20	917	0	0	1712
PEAK HR FACTOR :	0.563	0.000	0.714	0.000	0.000	0.000	0.000	0.000	0.000	0.902	0.833	0.375	0.455	0.892	0.000	0.000	0.920
	0.766								0.908				0.874				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Key Largo Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-003
Date: 4/7/2026

Data - Cars

NS/EW Streets:	Key Largo Ave				Key Largo Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	4	0	0	0	0	0	0	85	10	0	15	92	0	0	208
7:15 AM	2	0	8	0	0	0	0	0	0	103	3	0	10	102	0	0	228
7:30 AM	10	0	14	0	0	0	0	0	0	120	5	0	9	121	0	0	279
7:45 AM	2	0	4	0	0	0	0	0	0	133	6	0	17	119	0	1	282
8:00 AM	4	0	7	0	0	0	0	0	0	124	3	0	23	111	0	0	272
8:15 AM	2	0	6	0	0	0	0	0	0	126	9	0	16	125	0	0	284
8:30 AM	1	0	10	0	0	0	0	0	0	143	5	2	11	142	0	0	314
8:45 AM	5	0	4	0	0	0	0	0	0	175	4	2	12	109	0	0	311
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	28	0	57	0	0	0	0	0	0	1009	45	4	113	921	0	1	2178
APPROACH %'s :	32.94%	0.00%	67.06%	0.00%					0.00%	95.37%	4.25%	0.38%	10.92%	88.99%	0.00%	0.10%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	12	0	27	0	0	0	0	0	0	568	21	4	62	487	0	0	1181
PEAK HR FACTOR :	0.600	0.000	0.675	0.000	0.000	0.000	0.000	0.000	0.000	0.811	0.583	0.500	0.674	0.857	0.000	0.000	0.940
	0.886								0.819				0.897				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	0	9	0	0	0	0	0	0	177	6	0	10	252	0	0	458
4:15 PM	1	0	8	0	0	0	0	0	0	167	3	4	2	224	0	0	409
4:30 PM	2	0	8	0	0	0	0	0	0	194	5	1	4	217	0	0	431
4:45 PM	2	0	14	0	0	0	0	0	0	159	6	1	3	213	0	0	398
5:00 PM	2	0	18	0	0	0	0	0	0	179	6	0	7	195	0	0	407
5:15 PM	1	0	12	0	0	0	0	0	0	195	0	1	5	231	0	0	445
5:30 PM	2	0	9	0	0	0	0	0	0	156	3	2	8	175	0	0	355
5:45 PM	5	0	13	0	0	0	0	0	0	140	6	1	5	184	0	0	354
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	0	91	0	0	0	0	0	0	1367	35	10	44	1691	0	0	3257
APPROACH %'s :	17.27%	0.00%	82.73%	0.00%					0.00%	96.81%	2.48%	0.71%	2.54%	97.46%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	9	0	39	0	0	0	0	0	0	697	20	6	19	906	0	0	1696
PEAK HR FACTOR :	0.563	0.000	0.696	0.000	0.000	0.000	0.000	0.000	0.000	0.898	0.833	0.375	0.475	0.899	0.000	0.000	0.926
	0.750								0.904				0.883				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Key Largo Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-003
Date: 4/7/2026

Data - Buses

NS/EW Streets:	Key Largo Ave				Key Largo Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	**08:00 AM - 09:00 AM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	1.000
									0.500				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	**04:00 PM - 05:00 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
									0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Key Largo Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-003
Date: 4/7/2026

Data - HT

NS/EW Streets:	Key Largo Ave				Key Largo Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	9	0	0	11
7:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	1	6	0	0	12
7:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	3	0	0	5
7:45 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	4	0	0	7
8:00 AM	0	0	1	0	0	0	0	0	0	5	0	0	2	6	0	0	14
8:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
8:30 AM	0	0	0	0	0	0	0	0	0	2	1	0	1	1	0	0	5
8:45 AM	1	0	1	0	0	0	0	0	0	6	0	0	3	3	0	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	3	0	0	0	0	0	0	25	2	0	7	36	0	0	74
APPROACH %'s :	25.00%	0.00%	75.00%	0.00%					0.00%	92.59%	7.41%	0.00%	16.28%	83.72%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	2	0	0	0	0	0	0	15	1	0	6	14	0	0	39
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.250	0.000	0.500	0.583	0.000	0.000	0.696
	0.375								0.667				0.625				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	5	0	0	7
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
5:45 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	0	9	0	0	1	16	0	0	28
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	5.88%	94.12%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	2	0	0	1	11	0	0	15
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.550	0.000	0.000	0.536
	0.250								0.250				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Key Largo Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-003
Date: 4/7/2026

Data - Bikes

NS/EW Streets:	Key Largo Ave				Key Largo Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
														0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	1	2.5	0.5	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Key Largo Ave & Dinah Shore Dr
City: Palm Desert

Project ID: 26-030024-003
Date: 4/7/2026

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Key Largo Ave		Key Largo Ave		Dinah Shore Dr		Dinah Shore Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Key Largo Ave & Dinah Shore Dr

Peak Hour Turning Movement Count

ID: 26-030024-003
City: Palm Desert

Day: Tuesday
Date: 4/7/2026

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Key Largo Ave)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Dinah Shore Dr)

AM	NOON	PM	
520	0	932	⇦
4	0	6	0
0	0	0	1
585	0	700	2.5
22	0	20	0.5

WESTBOUND (Dinah Shore Dr)

	PM	NOON	AM
0	0	0	0
3	917	0	503
1	20	0	68
0	0	0	0
⇨	740	0	614

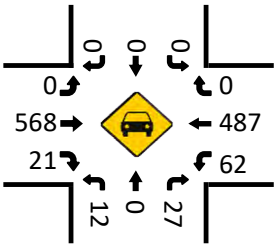
NORTHBOUND (Key Largo Ave)

PM	40	0	9	0	40	PM
NOON	0	0	0	0	0	NOON
AM	90	0	13	0	29	AM

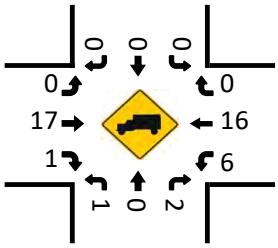
	0	1	0	1
	⇩			

CONTROL			
Signalized			
TEV	1224 AM	0 NOON	1712 PM
PHF	0.94		0.92

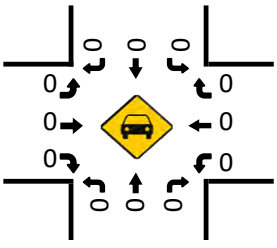
Cars (AM)



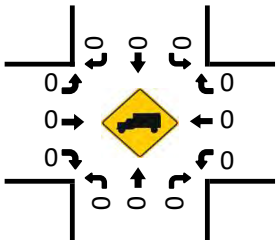
Total Trucks (AM)



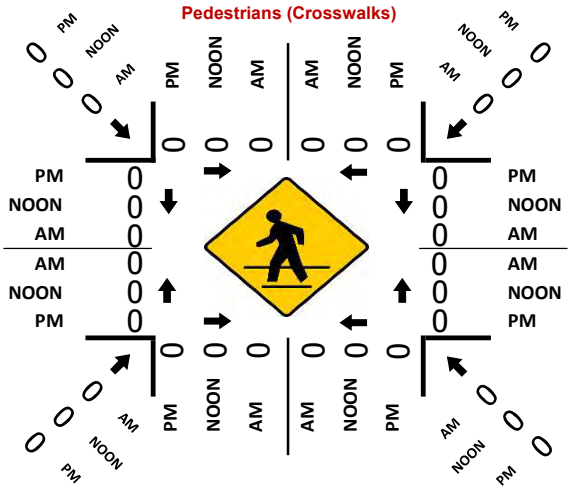
Cars (NOON)



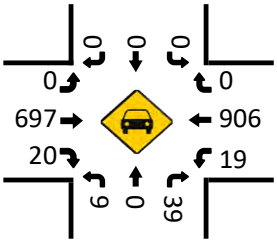
Total Trucks (NOON)



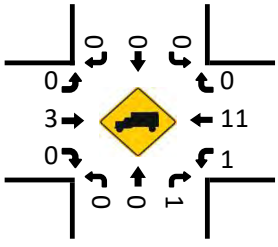
Pedestrians (Crosswalks)



Cars (PM)



Total Trucks (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Angel View Resale Dwy & Dinah Shore Dr
City: Palm Desert
Control: 1-Way Stop(NB)

Project ID: 26-030024-004
Date: 4/7/2026

Data - Total

NS/EW Streets:	Angel View Resale Dwy				Angel View Resale Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	89	0	0	4	115	0	1	209
7:15 AM	0	0	1	0	0	0	0	0	0	108	6	0	4	122	0	0	241
7:30 AM	0	0	0	0	0	0	0	0	0	137	1	0	12	142	0	0	292
7:45 AM	0	0	0	0	0	0	0	0	0	135	8	0	24	129	0	0	296
8:00 AM	0	0	1	0	0	0	0	0	0	135	2	0	8	144	0	0	290
8:15 AM	0	0	1	0	0	0	0	0	0	133	0	0	2	144	0	0	280
8:30 AM	0	0	0	0	0	0	0	0	0	157	1	0	2	155	0	0	315
8:45 AM	0	0	0	0	0	0	0	0	0	182	2	0	2	131	0	0	317
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	3	0	0	0	0	0	0	1076	20	0	58	1082	0	1	2240
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	98.18%	1.82%	0.00%	5.08%	94.83%	0.00%	0.09%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	607	5	0	14	574	0	0	1202
PEAK HR FACTOR :	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.834	0.625	0.000	0.438	0.926	0.000	0.000	0.948
			0.500							0.832				0.936			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	2	0	0	0	0	0	0	178	10	0	4	268	0	0	462
4:15 PM	0	0	2	0	0	0	0	0	0	166	5	0	0	240	0	0	413
4:30 PM	0	0	1	0	0	0	0	0	0	194	9	0	1	217	0	2	424
4:45 PM	0	0	1	0	0	0	0	0	0	177	2	0	1	213	0	1	395
5:00 PM	0	0	2	0	0	0	0	0	0	189	8	0	1	204	0	1	405
5:15 PM	0	0	1	0	0	0	0	0	0	205	5	0	1	243	0	1	456
5:30 PM	0	0	3	0	0	0	0	0	0	158	3	0	2	179	0	0	345
5:45 PM	1	0	3	0	0	0	0	0	0	159	4	0	2	189	0	0	358
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	15	0	0	0	0	0	0	1426	46	0	12	1753	0	5	3258
APPROACH %'s :	6.25%	0.00%	93.75%	0.00%					0.00%	96.88%	3.13%	0.00%	0.68%	99.04%	0.00%	0.28%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	6	0	0	0	0	0	0	715	26	0	6	938	0	3	1694
PEAK HR FACTOR :	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.921	0.650	0.000	0.375	0.875	0.000	0.375	0.917
			0.750							0.913				0.870			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Angel View Resale Dwy & Dinah Shore Dr
City: Palm Desert
Control: 1-Way Stop(NB)

Project ID: 26-030024-004
Date: 4/7/2026

Data - Cars

NS/EW Streets:	Angel View Resale Dwy				Angel View Resale Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	87	0	0	3	106	0	1	197
7:15 AM	0	0	1	0	0	0	0	0	0	103	6	0	4	115	0	0	229
7:30 AM	0	0	0	0	0	0	0	0	0	134	1	0	12	139	0	0	286
7:45 AM	0	0	0	0	0	0	0	0	0	133	8	0	24	125	0	0	290
8:00 AM	0	0	1	0	0	0	0	0	0	129	2	0	8	135	0	0	275
8:15 AM	0	0	0	0	0	0	0	0	0	130	0	0	2	140	0	0	272
8:30 AM	0	0	0	0	0	0	0	0	0	154	1	0	2	153	0	0	310
8:45 AM	0	0	0	0	0	0	0	0	0	175	2	0	2	124	0	0	303
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	0	1045	20	0	57	1037	0	1	2162
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	98.12%	1.88%	0.00%	5.21%	94.70%	0.00%	0.09%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	588	5	0	14	552	0	0	1160
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.840	0.625	0.000	0.438	0.902	0.000	0.000	0.935
	0.250								0.838				0.913				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	2	0	0	0	0	0	0	176	10	0	4	262	0	0	454
4:15 PM	0	0	2	0	0	0	0	0	0	166	5	0	0	238	0	0	411
4:30 PM	0	0	1	0	0	0	0	0	0	194	9	0	1	213	0	2	420
4:45 PM	0	0	1	0	0	0	0	0	0	174	2	0	1	213	0	1	392
5:00 PM	0	0	2	0	0	0	0	0	0	188	8	0	1	201	0	1	401
5:15 PM	0	0	1	0	0	0	0	0	0	203	5	0	1	242	0	1	453
5:30 PM	0	0	3	0	0	0	0	0	0	155	3	0	2	178	0	0	341
5:45 PM	1	0	3	0	0	0	0	0	0	156	4	0	2	187	0	0	353
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	15	0	0	0	0	0	0	1412	46	0	12	1734	0	5	3225
APPROACH %'s :	6.25%	0.00%	93.75%	0.00%					0.00%	96.84%	3.16%	0.00%	0.69%	99.03%	0.00%	0.29%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	6	0	0	0	0	0	0	710	26	0	6	926	0	3	1677
PEAK HR FACTOR :	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.915	0.650	0.000	0.375	0.884	0.000	0.375	0.923
	0.750								0.906				0.879				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Angel View Resale Dwy & Dinah Shore Dr
City: Palm Desert
Control: 1-Way Stop(NB)

Project ID: 26-030024-004
Date: 4/7/2026

Data - Buses

NS/EW Streets:	Angel View Resale Dwy				Angel View Resale Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	1.000
									0.500				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
									0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Angel View Resale Dwy & Dinah Shore Dr
City: Palm Desert
Control: 1-Way Stop(NB)

Project ID: 26-030024-004
Date: 4/7/2026

Data - HT

NS/EW Streets:	Angel View Resale Dwy				Angel View Resale Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	1	9	0	0	12
7:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0	0	12
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	8	0	0	14
8:15 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	4	0	0	7
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	6	0	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	28	0	0	1	43	0	0	73
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	2.27%	97.73%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	17	0	0	0	20	0	0	38
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.607	0.000	0.000	0.000	0.625	0.000	0.000	0.679
			0.250							0.607				0.625			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	6	0	0	8
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	12	0	0	0	17	0	0	29
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	4	0	0	0	12	0	0	16
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.500
										0.500				0.500			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Angel View Resale Dwy & Dinah Shore Dr
City: Palm Desert
Control: 1-Way Stop(NB)

Project ID: 26-030024-004
Date: 4/7/2026

Data - Bikes

NS/EW Streets:	Angel View Resale Dwy				Angel View Resale Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Angel View Resale Dwy & Dinah Shore Dr
City: Palm Desert

Project ID: 26-030024-004
Date: 4/7/2026

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Angel View Resale Dwy		Angel View Resale Dwy		Dinah Shore Dr		Dinah Shore Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Angel View Resale Dwy & Dinah Shore Dr

Peak Hour Turning Movement Count

ID: 26-030024-004
City: Palm Desert

Day: Tuesday
Date: 4/7/2026

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Angel View Resale Dwy)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Dinah Shore Dr)

AM	NOON	PM	
574	0	938	⇦
0	0	0	↶ 0
0	0	0	↱ 0
607	0	715	→ 3
5	0	26	↴ 0
AM	NOON	PM	

WESTBOUND (Dinah Shore Dr)

PM	NOON	AM	
0	0	0	0 ↰
938	0	574	3 ←
6	0	14	1 ↰
3	0	0	0 ↰
724	0	609	⇨
PM	NOON	AM	

NORTHBOUND (Angel View Resale Dwy)

PM	32	0	0	0	6	PM
NOON	0	0	0	0	0	NOON
AM	19	0	0	0	2	AM

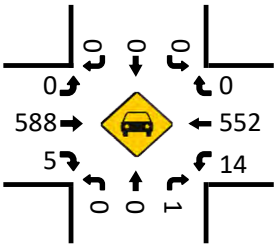
0	0	1	0
↰	↰	↑	↱

CONTROL

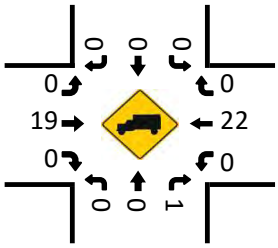
1-Way Stop(NB)

TEV	1202 AM	0 NOON	1694 PM
PHF	0.95		0.92

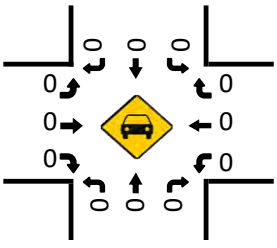
Cars (AM)



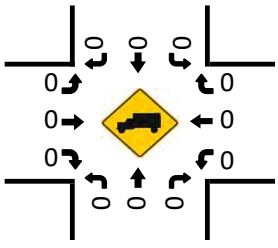
Total Trucks (AM)



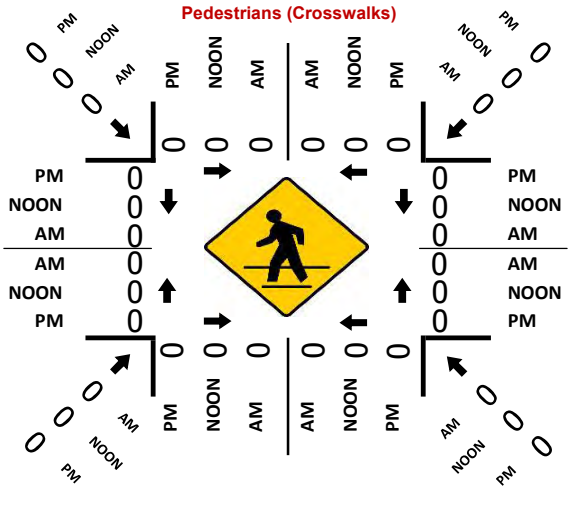
Cars (NOON)



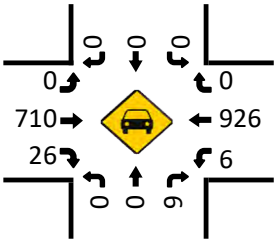
Total Trucks (NOON)



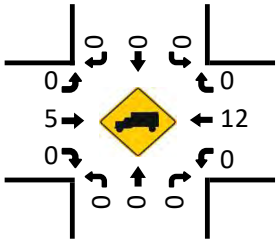
Pedestrians (Crosswalks)



Cars (PM)



Total Trucks (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Miriam Way/George Montgomery Way & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-005
Date: 4/7/2026

Data - Total

NS/EW Streets:	Miriam Way/George Montgomery Way				Miriam Way/George Montgomery Way				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	1	0	0	0	3	0	2	83	4	0	0	114	1	2	211
7:15 AM	1	1	3	0	0	1	2	0	3	99	8	0	0	123	4	0	245
7:30 AM	6	0	1	0	3	0	7	0	6	119	11	0	1	145	6	0	305
7:45 AM	3	0	3	0	6	1	1	0	5	119	8	1	3	147	2	0	299
8:00 AM	3	0	3	0	2	0	3	0	10	122	7	0	0	144	5	0	299
8:15 AM	0	0	1	0	4	0	6	0	8	120	2	0	0	139	1	0	281
8:30 AM	3	1	2	0	1	0	4	0	9	145	7	0	3	151	3	0	329
8:45 AM	4	0	3	0	1	0	6	0	14	155	9	0	3	122	2	0	319
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	21	2	17	0	17	2	32	0	57	962	56	1	10	1085	24	2	2288
APPROACH %'s :	52.50%	5.00%	42.50%	0.00%	33.33%	3.92%	62.75%	0.00%	5.30%	89.41%	5.20%	0.09%	0.89%	96.79%	2.14%	0.18%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	10	1	9	0	8	0	19	0	41	542	25	0	6	556	11	0	1228
PEAK HR FACTOR :	0.625	0.250	0.750	0.000	0.500	0.000	0.792	0.000	0.732	0.874	0.694	0.000	0.500	0.921	0.550	0.000	0.933
	0.714				0.675				0.854				0.912				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	20	1	7	0	12	1	38	0	10	153	16	0	5	220	2	0	485
4:15 PM	17	0	13	0	5	1	31	0	15	140	14	0	13	186	3	0	438
4:30 PM	10	0	18	0	2	4	30	0	11	169	15	1	11	179	4	0	454
4:45 PM	11	0	6	0	2	2	25	0	15	147	15	0	8	181	3	0	415
5:00 PM	9	1	11	0	5	2	36	0	13	166	16	0	6	159	4	0	428
5:15 PM	17	0	12	0	2	3	18	0	16	167	21	1	13	213	2	0	485
5:30 PM	15	3	11	0	6	2	18	0	11	135	12	0	7	144	0	0	364
5:45 PM	21	6	11	0	2	4	22	0	10	142	15	0	10	149	2	0	394
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	120	11	89	0	36	19	218	0	101	1219	124	2	73	1431	20	0	3463
APPROACH %'s :	54.55%	5.00%	40.45%	0.00%	13.19%	6.96%	79.85%	0.00%	6.98%	84.30%	8.58%	0.14%	4.79%	93.90%	1.31%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	58	1	44	0	21	8	124	0	51	609	60	1	37	766	12	0	1792
PEAK HR FACTOR :	0.725	0.250	0.611	0.000	0.438	0.500	0.816	0.000	0.850	0.901	0.938	0.250	0.712	0.870	0.750	0.000	0.924
	0.858				0.750				0.920				0.898				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Miriam Way/George Montgomery Way & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-005
Date: 4/7/2026

Data - Cars

NS/EW Streets:	Miriam Way/George Montgomery Way				Miriam Way/George Montgomery Way				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	1	0	0	0	2	0	2	81	4	0	0	106	1	2	200
7:15 AM	1	1	3	0	0	1	2	0	3	94	8	0	0	116	3	0	232
7:30 AM	5	0	1	0	3	0	7	0	6	117	11	0	1	141	6	0	298
7:45 AM	3	0	3	0	5	1	1	0	5	116	8	1	3	145	2	0	293
8:00 AM	2	0	3	0	2	0	3	0	10	116	7	0	0	136	4	0	283
8:15 AM	0	0	1	0	3	0	5	0	8	117	1	0	0	136	1	0	272
8:30 AM	3	1	2	0	1	0	4	0	9	142	7	0	2	149	2	0	322
8:45 AM	4	0	3	0	1	0	6	0	13	149	9	0	3	115	1	0	304
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	19	2	17	0	15	2	30	0	56	932	55	1	9	1044	20	2	2204
APPROACH %'s :	50.00%	5.26%	44.74%	0.00%	31.91%	4.26%	63.83%	0.00%	5.36%	89.27%	5.27%	0.10%	0.84%	97.12%	1.86%	0.19%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	9	1	9	0	7	0	18	0	40	524	24	0	5	536	8	0	1181
PEAK HR FACTOR :	0.563	0.250	0.750	0.000	0.583	0.000	0.750	0.000	0.769	0.879	0.667	0.000	0.417	0.899	0.500	0.000	0.917
	0.679				0.781				0.860				0.897				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	18	1	7	0	9	1	35	0	10	151	16	0	5	219	2	0	474
4:15 PM	17	0	13	0	3	1	30	0	15	140	14	0	13	185	3	0	434
4:30 PM	10	0	18	0	2	4	30	0	11	169	15	1	11	175	4	0	450
4:45 PM	11	0	5	0	2	2	25	0	15	144	15	0	8	181	3	0	411
5:00 PM	9	1	10	0	4	2	36	0	13	165	16	0	6	156	4	0	422
5:15 PM	17	0	12	0	2	3	18	0	16	167	20	1	13	212	2	0	483
5:30 PM	15	3	11	0	6	2	18	0	10	132	12	0	7	143	0	0	359
5:45 PM	21	6	11	0	2	4	22	0	10	139	15	0	10	146	2	0	388
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	118	11	87	0	30	19	214	0	100	1207	123	2	73	1417	20	0	3421
APPROACH %'s :	54.63%	5.09%	40.28%	0.00%	11.41%	7.22%	81.37%	0.00%	6.98%	84.29%	8.59%	0.14%	4.83%	93.84%	1.32%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	56	1	43	0	16	8	120	0	51	604	60	1	37	760	12	0	1769
PEAK HR FACTOR :	0.778	0.250	0.597	0.000	0.444	0.500	0.857	0.000	0.850	0.893	0.938	0.250	0.712	0.868	0.750	0.000	0.933
	0.833				0.800				0.913				0.895				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Miriam Way/George Montgomery Way & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-005
Date: 4/7/2026

Data - Buses

NS/EW Streets:	Miriam Way/George Montgomery Way				Miriam Way/George Montgomery Way				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	1.000
									0.500				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
									0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Miriam Way/George Montgomery Way & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-005
Date: 4/7/2026

Data - HT

NS/EW Streets:	Miriam Way/George Montgomery Way				Miriam Way/George Montgomery Way				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	8	0	0	11
7:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	7	1	0	13
7:30 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	6
7:45 AM	0	0	0	0	1	0	0	0	0	3	0	0	0	2	0	0	6
8:00 AM	1	0	0	0	0	0	0	0	0	6	0	0	0	7	1	0	15
8:15 AM	0	0	0	0	1	0	1	0	0	2	1	0	0	3	0	0	8
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	1	2	1	0	6
8:45 AM	0	0	0	0	0	0	0	0	1	6	0	0	0	6	1	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	2	0	2	0	1	27	1	0	1	39	4	0	79
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	3.45%	93.10%	3.45%	0.00%	2.27%	88.64%	9.09%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	1	0	1	0	1	16	1	0	1	18	3	0	43
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.667	0.250	0.000	0.250	0.643	0.750	0.000	0.717
	0.250				0.250				0.643				0.688				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	0	0	0	3	0	3	0	0	2	0	0	0	1	0	0	11
4:15 PM	0	0	0	0	2	0	1	0	0	0	0	0	0	1	0	0	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
4:45 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	3
5:00 PM	0	0	1	0	1	0	0	0	0	1	0	0	0	2	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	2	0	6	0	4	0	1	10	1	0	0	12	0	0	38
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%	60.00%	0.00%	40.00%	0.00%	8.33%	83.33%	8.33%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	2	0	1	0	5	0	4	0	0	4	0	0	0	6	0	0	22
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.417	0.000	0.333	0.000	0.000	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.500
	0.375				0.375				0.500				0.375				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Miriam Way/George Montgomery Way & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-005
Date: 4/7/2026

Data - Bikes

NS/EW Streets:	Miriam Way/George Montgomery Way				Miriam Way/George Montgomery Way				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	1	0.5	0.5	0	1	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
APPROACH %'s :													0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Miriam Way/George Montgomery Way & Dinah Shore Dr
City: Palm Desert
Project ID: 26-030024-005
Date: 4/7/2026

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Miriam Way/George Montgomery Way		Miriam Way/George Montgomery Way		Dinah Shore Dr		Dinah Shore Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Miriam Way/George Montgomery Way & Dinah Shore Dr

Peak Hour Turning Movement Count

ID: 26-030024-005
City: Palm Desert

Day: Tuesday
Date: 4/7/2026

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Miriam Way/George Montgomery Way)

AM	19	0	8	0	53	AM
NOON	0	0	0	0	0	NOON
PM	124	8	21	0	64	PM
	0.5	0.5	1	0		

EASTBOUND (Dinah Shore Dr)

AM	NOON	PM	
585	0	949	
0	0	1	0
41	0	51	2
542	0	609	3
25	0	60	0

WESTBOUND (Dinah Shore Dr)

	PM	NOON	AM
1	12	0	11
3	766	0	556
1	37	0	6
0	0	0	0
	674	0	559

NORTHBOUND (Miriam Way/George Montgomery Way)

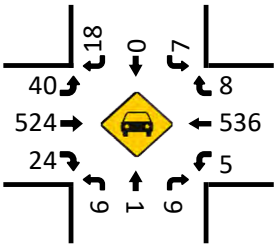
PM	105	0	58	1	44	PM
NOON	0	0	0	0	0	NOON
AM	31	0	10	1	9	AM
		0	1	0.5	0.5	

CONTROL

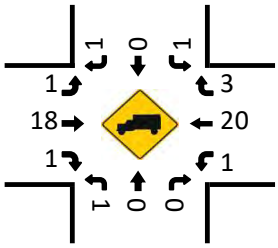
Signalized

TEV	1228 AM	0 NOON	1792 PM
PHF	0.93		0.92

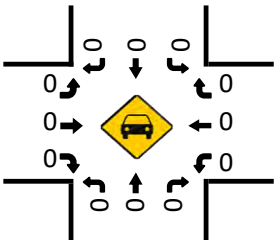
Cars (AM)



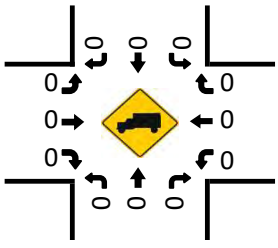
Total Trucks (AM)



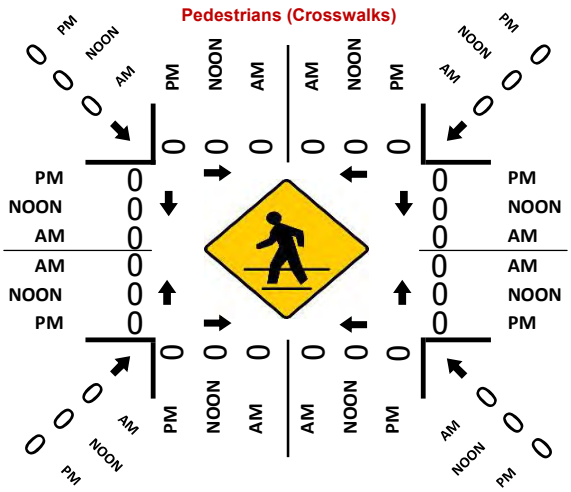
Cars (NOON)



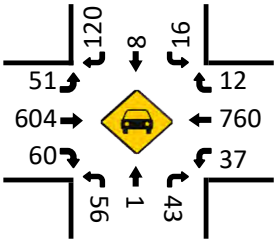
Total Trucks (NOON)



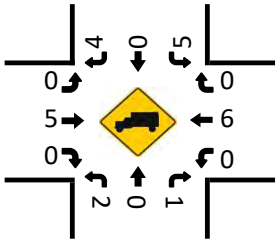
Pedestrians (Crosswalks)



Cars (PM)



Total Trucks (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Shoppers Ln/Monterey Palms Liquor Dwy & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-006
Date: 4/7/2026

Data - Total

NS/EW Streets:	Shoppers Ln/Monterey Palms Liquor Dwy				Shoppers Ln/Monterey Palms Liquor Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	1	5	0	25	1	9	0	5	76	5	0	1	103	15	5	254
7:15 AM	9	1	9	0	32	1	10	0	9	85	6	1	3	109	27	1	303
7:30 AM	7	4	7	0	25	0	9	0	16	92	12	0	5	138	18	1	334
7:45 AM	4	1	11	0	38	3	13	0	16	101	12	0	8	142	35	4	388
8:00 AM	16	3	6	0	37	3	10	0	10	104	16	0	3	111	28	2	349
8:15 AM	12	0	13	0	37	3	10	0	13	101	10	0	7	119	25	4	354
8:30 AM	21	1	11	0	42	2	10	0	20	112	15	0	6	125	22	0	387
8:45 AM	11	2	12	0	36	7	5	0	32	113	10	0	9	111	43	2	393
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	83	13	74	0	272	20	76	0	121	784	86	1	42	958	213	19	2762
APPROACH %'s :	48.82%	7.65%	43.53%	0.00%	73.91%	5.43%	20.65%	0.00%	12.20%	79.03%	8.67%	0.10%	3.41%	77.76%	17.29%	1.54%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	60	6	42	0	152	15	35	0	75	430	51	0	25	466	118	8	1483
PEAK HR FACTOR :	0.714	0.500	0.808	0.000	0.905	0.536	0.875	0.000	0.586	0.951	0.797	0.000	0.694	0.932	0.686	0.500	0.943
	0.818				0.935				0.897				0.935				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	28	6	24	0	113	6	42	0	30	142	8	0	11	144	44	5	603
4:15 PM	24	12	23	0	116	13	30	0	34	115	8	1	10	157	54	10	607
4:30 PM	14	5	22	0	138	4	32	0	34	145	7	0	5	138	46	10	600
4:45 PM	20	4	29	0	117	5	33	0	37	110	7	0	14	141	55	5	577
5:00 PM	17	7	17	0	115	5	28	0	32	144	9	0	8	133	41	9	565
5:15 PM	20	4	25	0	109	2	46	0	44	129	10	0	8	151	44	4	596
5:30 PM	13	3	17	0	118	3	30	0	27	118	7	0	14	109	34	7	500
5:45 PM	20	4	25	0	88	4	29	0	26	122	7	0	13	115	45	7	505
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	156	45	182	0	914	42	270	0	264	1025	63	1	83	1088	363	57	4553
APPROACH %'s :	40.73%	11.75%	47.52%	0.00%	74.55%	3.43%	22.02%	0.00%	19.51%	75.76%	4.66%	0.07%	5.22%	68.38%	22.82%	3.58%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	86	27	98	0	484	28	137	0	135	512	30	1	40	580	199	30	2387
PEAK HR FACTOR :	0.768	0.563	0.845	0.000	0.877	0.538	0.815	0.000	0.912	0.883	0.938	0.250	0.714	0.924	0.905	0.750	0.983
	0.894				0.932				0.911				0.919				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Shoppers Ln/Monterey Palms Liquor Dwy & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-006
Date: 4/7/2026

Data - Cars

NS/EW Streets:	Shoppers Ln/Monterey Palms Liquor Dwy				Shoppers Ln/Monterey Palms Liquor Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	1	4	0	23	1	8	0	5	74	5	0	1	95	15	5	240
7:15 AM	8	1	9	0	32	1	10	0	8	81	6	1	2	103	25	1	288
7:30 AM	7	4	5	0	23	0	9	0	16	90	12	0	5	134	15	1	321
7:45 AM	4	0	10	0	38	3	13	0	16	97	12	0	7	136	35	4	375
8:00 AM	16	3	5	0	36	3	10	0	10	99	15	0	2	106	27	2	334
8:15 AM	12	0	12	0	33	3	10	0	13	97	10	0	7	116	24	4	341
8:30 AM	20	1	11	0	40	2	10	0	20	109	15	0	5	122	20	0	375
8:45 AM	11	2	12	0	35	7	5	0	32	108	9	0	8	103	43	2	377
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	81	12	68	0	260	20	75	0	120	755	84	1	37	915	204	19	2651
APPROACH %'s :	50.31%	7.45%	42.24%	0.00%	73.24%	5.63%	21.13%	0.00%	12.50%	78.65%	8.75%	0.10%	3.15%	77.87%	17.36%	1.62%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	59	6	40	0	144	15	35	0	75	413	49	0	22	447	114	8	1427
PEAK HR FACTOR :	0.738	0.500	0.833	0.000	0.900	0.536	0.875	0.000	0.586	0.947	0.817	0.000	0.688	0.916	0.663	0.500	0.946
	0.820				0.933				0.901				0.947				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	28	6	22	0	113	6	42	0	30	139	8	0	11	143	44	5	597
4:15 PM	24	12	22	0	114	13	30	0	34	112	8	1	10	156	54	10	600
4:30 PM	13	5	22	0	136	4	31	0	34	144	7	0	5	136	46	10	593
4:45 PM	20	4	28	0	117	5	33	0	36	107	7	0	14	141	54	5	571
5:00 PM	17	7	17	0	115	5	28	0	32	142	9	0	7	130	41	9	559
5:15 PM	20	4	25	0	109	2	46	0	44	128	10	0	8	150	44	4	594
5:30 PM	13	3	16	0	117	3	30	0	27	115	7	0	14	107	34	7	493
5:45 PM	20	4	23	0	88	4	29	0	26	119	7	0	12	113	45	7	497
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	155	45	175	0	909	42	269	0	263	1006	63	1	81	1076	362	57	4504
APPROACH %'s :	41.33%	12.00%	46.67%	0.00%	74.51%	3.44%	22.05%	0.00%	19.73%	75.47%	4.73%	0.08%	5.14%	68.27%	22.97%	3.62%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	85	27	94	0	480	28	136	0	134	502	30	1	40	576	198	30	2361
PEAK HR FACTOR :	0.759	0.563	0.839	0.000	0.882	0.538	0.810	0.000	0.931	0.872	0.938	0.250	0.714	0.923	0.917	0.750	0.984
	0.888				0.942				0.901				0.917				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Shoppers Ln/Monterey Palms Liquor Dwy & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-006
Date: 4/7/2026

Data - Buses

NS/EW Streets:	Shoppers Ln/Monterey Palms Liquor Dwy				Shoppers Ln/Monterey Palms Liquor Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.750
									0.500				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
									0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Shoppers Ln/Monterey Palms Liquor Dwy & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-006
Date: 4/7/2026

Data - HT

NS/EW Streets:	Shoppers Ln/Monterey Palms Liquor Dwy				Shoppers Ln/Monterey Palms Liquor Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	2	0	1	0	0	2	0	0	0	8	0	0	14
7:15 AM	1	0	0	0	0	0	0	0	1	4	0	0	1	6	2	0	15
7:30 AM	0	0	2	0	2	0	0	0	0	1	0	0	0	4	3	0	12
7:45 AM	0	1	1	0	0	0	0	0	0	4	0	0	1	5	0	0	12
8:00 AM	0	0	1	0	1	0	0	0	0	5	1	0	1	5	1	0	15
8:15 AM	0	0	1	0	4	0	0	0	0	3	0	0	0	3	1	0	12
8:30 AM	1	0	0	0	2	0	0	0	0	2	0	0	1	3	2	0	11
8:45 AM	0	0	0	0	1	0	0	0	0	5	1	0	1	7	0	0	15
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	1	6	0	12	0	1	0	1	26	2	0	5	41	9	0	106
APPROACH %'s :	22.22%	11.11%	66.67%	0.00%	92.31%	0.00%	7.69%	0.00%	3.45%	89.66%	6.90%	0.00%	9.09%	74.55%	16.36%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	2	0	8	0	0	0	0	15	2	0	3	18	4	0	53
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.750	0.500	0.000	0.750	0.643	0.500	0.000	0.883
	0.750				0.500				0.708				0.781				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	2	0	0	0	0	0	0	3	0	0	0	1	0	0	6
4:15 PM	0	0	1	0	2	0	0	0	0	3	0	0	0	1	0	0	7
4:30 PM	1	0	0	0	2	0	1	0	0	1	0	0	0	2	0	0	7
4:45 PM	0	0	1	0	0	0	0	0	1	2	0	0	0	0	1	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:30 PM	0	0	1	0	1	0	0	0	0	2	0	0	0	2	0	0	6
5:45 PM	0	0	2	0	0	0	0	0	0	3	0	0	1	1	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	7	0	5	0	1	0	1	17	0	0	2	10	1	0	45
APPROACH %'s :	12.50%	0.00%	87.50%	0.00%	83.33%	0.00%	16.67%	0.00%	5.56%	94.44%	0.00%	0.00%	15.38%	76.92%	7.69%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	1	0	4	0	4	0	1	0	1	9	0	0	0	4	1	0	25
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.500	0.000	0.250	0.000	0.250	0.750	0.000	0.000	0.000	0.500	0.250	0.000	0.893
	0.625				0.417				0.833				0.625				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Shoppers Ln/Monterey Palms Liquor Dwy & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-006
Date: 4/7/2026

Data - Bikes

NS/EW Streets:	Shoppers Ln/Monterey Palms Liquor Dwy				Shoppers Ln/Monterey Palms Liquor Dwy				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%									0.00%	0.00%	100.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250
															0.250		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0.5	0.5	0	2	0.5	0.5	0	2	3	0	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Shoppers Ln/Monterey Palms Liquor Dwy & Dinah Shore Dr **Project ID:** 26-030024-006
City: Palm Desert **Date:** 4/7/2026

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Shoppers Ln/Monterey Palms Liquor Dwy		Shoppers Ln/Monterey Palms Liquor Dwy		Dinah Shore Dr		Dinah Shore Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	1	1	2	0	1	1	0	0	6
7:45 AM	0	0	1	1	1	0	0	0	3
8:00 AM	1	0	0	0	0	1	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	1
8:45 AM	1	1	0	0	1	0	0	0	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	2	4	1	3	2	0	0	15
APPROACH %'s :	60.00%	40.00%	80.00%	20.00%	60.00%	40.00%			
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	2	1	1	0	1	1	0	0	6
PEAK HR FACTOR :	0.500	0.250	0.250		0.250	0.250			0.500
	0.375		0.250		0.500				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	1	0	1	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	1	1	1	0	0	4
APPROACH %'s :			50.00%	50.00%	50.00%	50.00%			
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	1	1	1	0	0	0	3
PEAK HR FACTOR :			0.250	0.250	0.250				0.375
			0.500		0.250				

Prepared by National Data & Surveying Services

Shoppers Ln/Monterey Palms Liquor Dwy & Dinah Shore Dr

Peak Hour Turning Movement Count

ID: 26-030024-006
City: Palm Desert

Day: Tuesday
Date: 4/7/2026

PEAK HOURS		COUNT PERIODS	
AM	08:00 AM - 09:00 AM	AM	7:00 AM - 09:00 AM
NOON	NONE	NOON	NONE
PM	04:00 PM - 05:00 PM	PM	4:00 PM - 06:00 PM

SOUTHBOUND – Shoppers Ln/Monterey Palms Liquor Dwy

	Right	Through	Left	U-Turn	Departing
AM	35	15	152	0	199
NOON	0	0	0	0	0
PM	137	28	484	0	361
Lanes	0.5	0.5	2	0	

EASTBOUND – Dinah Shore Dr

	AM	NOON	PM	Lanes
Departing	561	0	804	
U-Turn	0	0	1	0
Left	75	0	135	2
Through	430	0	512	3
Right	51	0	30	0

WESTBOUND – Dinah Shore Dr

	PM	NOON	AM	Lanes
Right	199	0	118	1
Through	580	0	466	3
Left	40	0	25	1
U-Turn	30	0	8	0
Departing	1124	0	632	

NORTHBOUND – Shoppers Ln/Monterey Palms Liquor Dwy

	Departing	U-Turn	Left	Through	Right
Lanes		0	1	0.5	0.5
PM	98	0	86	27	98
NOON	0	0	0	0	0
AM	91	0	60	6	42

CONTROL: Signalized

	AM	NOON	PM
TEV	1483	0	2387
PHF	0.94		0.98

Cars and Total Trucks

	Cars (AM)	Cars (NOON)	Cars (PM)	Total Trucks (AM)	Total Trucks (NOON)	Total Trucks (PM)
SB Right	35	0	136	0	0	1
SB Through	15	0	28	0	0	0
SB Left	144	0	480	8	0	4
EB Left	75	0	134	0	0	1
EB Through	413	0	502	17	0	10
EB Right	49	0	30	2	0	0
WB Right	114	0	198	4	0	1
WB Through	447	0	576	19	0	4
WB Left	22	0	40	3	0	0
NB Left	59	0	85	1	0	1
NB Through	6	0	27	0	0	0
NB Right	40	0	94	2	0	4

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North (westward)	2	0	0
North (eastward)	1	0	0
South (eastward)	1	0	1
South (westward)	0	0	1
West (southward)	0	0	0
West (northward)	0	0	0
East (southward)	1	0	0
East (northward)	1	0	1
NW diagonal	0	0	0
NE diagonal	0	0	0
SW diagonal	0	0	0
SE diagonal	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-007
Date: 4/7/2026

Data - Total

NS/EW Streets:	Monterey Ave				Monterey Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	28	86	2	1	65	254	91	0	47	46	22	0	6	29	55	0	732
7:15 AM	28	87	6	0	98	299	105	0	56	55	25	1	7	36	53	0	856
7:30 AM	31	98	9	0	92	365	116	0	57	45	31	0	11	47	61	0	963
7:45 AM	39	92	6	7	91	384	144	1	60	65	36	0	11	47	67	0	1050
8:00 AM	31	107	5	1	90	276	99	1	52	67	35	1	6	60	82	0	913
8:15 AM	38	102	10	0	80	322	91	0	55	60	29	0	21	56	57	0	921
8:30 AM	50	121	11	2	87	261	103	1	64	66	44	2	15	50	77	0	954
8:45 AM	40	119	11	3	71	313	117	0	51	71	46	1	17	72	70	0	1002
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	285	812	60	14	674	2474	866	3	442	475	268	5	94	397	522	0	7391
APPROACH %'s :	24.34%	69.34%	5.12%	1.20%	16.78%	61.59%	21.56%	0.07%	37.14%	39.92%	22.52%	0.42%	9.28%	39.19%	51.53%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	139	399	30	8	353	1347	450	2	224	237	131	1	49	210	267	0	3847
PEAK HR FACTOR :	0.891	0.932	0.750	0.286	0.959	0.877	0.781	0.500	0.933	0.884	0.910	0.250	0.583	0.875	0.814	0.000	0.916
	0.960				0.868				0.921				0.889				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	88	244	13	2	84	196	90	0	125	89	66	1	14	92	157	0	1261
4:15 PM	89	246	13	3	77	165	93	0	133	84	63	0	17	105	134	0	1222
4:30 PM	69	251	13	3	72	234	86	0	143	109	73	1	20	83	149	0	1306
4:45 PM	80	237	9	0	74	191	90	0	117	89	59	0	11	92	140	0	1189
5:00 PM	73	258	18	2	81	225	94	0	126	86	65	0	17	101	155	0	1301
5:15 PM	84	286	20	2	88	165	78	0	138	91	58	0	14	88	129	0	1241
5:30 PM	65	245	10	3	78	213	87	1	118	75	62	0	18	90	142	0	1207
5:45 PM	72	217	13	2	81	154	103	0	120	89	46	0	13	53	102	0	1065
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	620	1984	109	17	635	1543	721	1	1020	712	492	2	124	704	1108	0	9792
APPROACH %'s :	22.71%	72.67%	3.99%	0.62%	21.90%	53.21%	24.86%	0.03%	45.82%	31.99%	22.10%	0.09%	6.40%	36.36%	57.23%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	306	1032	60	7	315	815	348	0	524	375	255	1	62	364	573	0	5037
PEAK HR FACTOR :	0.911	0.902	0.750	0.583	0.895	0.871	0.926	0.000	0.916	0.860	0.873	0.250	0.775	0.901	0.924	0.000	0.964
	0.896				0.924				0.886				0.915				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-007
Date: 4/7/2026

Data - Cars

NS/EW Streets:	Monterey Ave				Monterey Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	27	83	2	1	61	231	88	0	45	43	21	0	5	26	54	0	687
7:15 AM	28	81	6	0	93	283	95	0	55	54	24	1	6	36	52	0	814
7:30 AM	31	94	9	0	86	348	112	0	54	44	28	0	10	45	56	0	917
7:45 AM	39	88	6	7	91	367	139	1	58	65	34	0	11	45	64	0	1015
8:00 AM	30	97	5	1	88	264	92	1	47	64	35	1	6	59	76	0	866
8:15 AM	37	93	9	0	75	301	89	0	50	60	27	0	21	55	56	0	873
8:30 AM	48	115	10	2	81	247	99	1	58	65	44	2	15	50	73	0	910
8:45 AM	40	109	11	3	68	298	110	0	49	70	43	1	14	70	64	0	950
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	280	760	58	14	643	2339	824	3	416	465	256	5	88	386	495	0	7032
APPROACH %'s :	25.18%	68.35%	5.22%	1.26%	16.88%	61.41%	21.63%	0.08%	36.43%	40.72%	22.42%	0.44%	9.08%	39.83%	51.08%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	137	372	29	8	340	1280	432	2	209	233	124	1	48	204	252	0	3671
PEAK HR FACTOR :	0.878	0.959	0.806	0.286	0.934	0.872	0.777	0.500	0.901	0.896	0.886	0.250	0.571	0.864	0.829	0.000	0.904
	0.975				0.859				0.903				0.894				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	87	235	13	2	83	190	89	0	121	89	65	1	14	92	155	0	1236
4:15 PM	89	240	13	3	74	163	92	0	129	84	61	0	17	104	132	0	1201
4:30 PM	69	243	13	3	69	231	85	0	141	108	73	1	20	82	145	0	1283
4:45 PM	80	231	9	0	72	189	89	0	113	89	59	0	11	92	136	0	1170
5:00 PM	73	252	17	2	80	224	91	0	124	86	65	0	17	101	151	0	1283
5:15 PM	84	281	19	2	86	164	78	0	138	91	58	0	14	87	128	0	1230
5:30 PM	65	241	10	3	78	212	86	1	115	74	62	0	18	89	140	0	1194
5:45 PM	72	213	13	2	79	152	101	0	116	88	45	0	13	52	99	0	1045
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	619	1936	107	17	621	1525	711	1	997	709	488	2	124	699	1086	0	9642
APPROACH %'s :	23.11%	72.27%	3.99%	0.63%	21.73%	53.36%	24.88%	0.03%	45.40%	32.29%	22.22%	0.09%	6.50%	36.62%	56.89%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	306	1007	58	7	307	808	343	0	516	374	255	1	62	362	560	0	4966
PEAK HR FACTOR :	0.911	0.896	0.763	0.583	0.892	0.874	0.942	0.000	0.915	0.866	0.873	0.250	0.775	0.896	0.927	0.000	0.968
	0.892				0.923				0.887				0.914				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-007
Date: 4/7/2026

Data - Buses

NS/EW Streets:	Monterey Ave				Monterey Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	2	0	0	1	0	0	0	0	0	2	0	5
8:45 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	5	2	0	2	0	1	0	0	0	3	0	14
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	71.43%	28.57%	0.00%	66.67%	0.00%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	1	0	1	0	1	0	0	0	1	0	6
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.500
	0.250				0.500				0.500				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	2	0	2	0	0	0	0	0	0	0	5
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
	0.250				0.250				0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-007
Date: 4/7/2026

Data - HT

NS/EW Streets:	Monterey Ave				Monterey Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	3	0	0	4	23	3	0	2	3	1	0	1	3	1	0	45
7:15 AM	0	6	0	0	5	15	10	0	1	1	1	0	1	0	1	0	41
7:30 AM	0	4	0	0	6	17	4	0	2	1	3	0	1	2	5	0	45
7:45 AM	0	4	0	0	0	17	4	0	2	0	2	0	0	2	3	0	34
8:00 AM	1	9	0	0	2	11	7	0	5	3	0	0	0	1	5	0	44
8:15 AM	1	9	1	0	5	21	2	0	5	0	1	0	0	1	1	0	47
8:30 AM	2	6	1	0	6	12	4	0	5	1	0	0	0	0	2	0	39
8:45 AM	0	10	0	0	3	14	6	0	2	1	3	0	3	2	6	0	50
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	51	2	0	31	130	40	0	24	10	11	0	6	11	24	0	345
APPROACH %'s :	8.62%	87.93%	3.45%	0.00%	15.42%	64.68%	19.90%	0.00%	53.33%	22.22%	24.44%	0.00%	14.63%	26.83%	58.54%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	2	26	1	0	13	66	17	0	14	4	6	0	1	6	14	0	170
PEAK HR FACTOR :	0.500	0.722	0.250	0.000	0.542	0.786	0.607	0.000	0.700	0.333	0.500	0.000	0.250	0.750	0.700	0.000	0.904
		0.659				0.857				0.750				0.656			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	9	0	0	1	6	1	0	4	0	1	0	0	0	2	0	25
4:15 PM	0	6	0	0	3	2	1	0	4	0	2	0	0	1	2	0	21
4:30 PM	0	7	0	0	3	3	1	0	2	1	0	0	0	1	4	0	22
4:45 PM	0	6	0	0	2	2	1	0	3	0	0	0	0	0	4	0	18
5:00 PM	0	6	1	0	1	1	2	0	2	0	0	0	0	0	4	0	17
5:15 PM	0	5	1	0	2	1	0	0	0	0	0	0	0	1	1	0	11
5:30 PM	0	4	0	0	0	1	1	0	2	1	0	0	0	1	2	0	12
5:45 PM	0	4	0	0	2	2	1	0	4	1	1	0	0	1	3	0	19
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	47	2	0	14	18	8	0	21	3	4	0	0	5	22	0	145
APPROACH %'s :	2.00%	94.00%	4.00%	0.00%	35.00%	45.00%	20.00%	0.00%	75.00%	10.71%	14.29%	0.00%	0.00%	18.52%	81.48%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	24	2	0	8	7	4	0	7	1	0	0	0	2	13	0	68
PEAK HR FACTOR :	0.000	0.857	0.500	0.000	0.667	0.583	0.500	0.000	0.583	0.250	0.000	0.000	0.000	0.500	0.813	0.000	0.773
		0.929				0.679				0.667				0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Dinah Shore Dr
City: Palm Desert
Control: Signalized

Project ID: 26-030024-007
Date: 4/7/2026

Data - Bikes

NS/EW Streets:	Monterey Ave				Monterey Ave				Dinah Shore Dr				Dinah Shore Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%													
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
	0.250																

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
APPROACH %'s :									0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.500
									0.250				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Monterey Ave & Dinah Shore Dr
City: Palm Desert

Project ID: 26-030024-007
Date: 4/7/2026

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Monterey Ave		Monterey Ave		Dinah Shore Dr		Dinah Shore Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	2	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2	2
8:45 AM	0	0	2	0	0	0	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	4	1	0	0	0	2	7
APPROACH %'s :			80.00%	20.00%			0.00%	100.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	2	1	0	0	0	0	3
PEAK HR FACTOR :			0.250	0.250					0.375
			0.375						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	1	0	0	0	2	5
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	2	1	0	0	0	2	5
APPROACH %'s :			66.67%	33.33%			0.00%	100.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Monterey Ave & Dinah Shore Dr

Peak Hour Turning Movement Count

ID: 26-030024-007
City: Palm Desert

Day: Tuesday
Date: 4/7/2026

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Monterey Ave)

AM	450	1347	353	2	892	AM
NOON	0	0	0	0	0	NOON
PM	348	815	315	0	2129	PM

EASTBOUND (Dinah Shore Dr)

AM	NOON	PM	
800	0	1019	
1	0	1	0
224	0	524	2
237	0	375	2
131	0	255	1

WESTBOUND (Dinah Shore Dr)

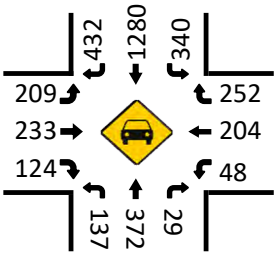
	PM	NOON	AM
1	573	0	267
2	364	0	210
2	62	0	49
0	0	0	0
	750	0	620

NORTHBOUND (Monterey Ave)

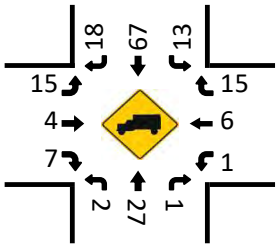
PM	1139	7	306	1032	60	PM
NOON	0	0	0	0	0	NOON
AM	1535	8	139	399	30	AM

CONTROL			
Signalized			
TEV	3847 AM	0 NOON	5037 PM
PHF	0.92		0.96

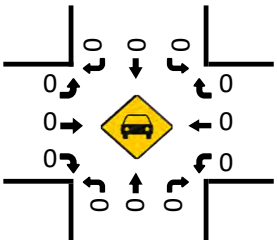
Cars (AM)



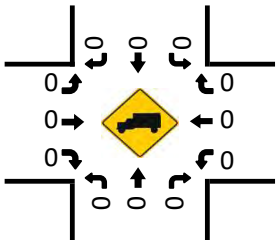
Total Trucks (AM)



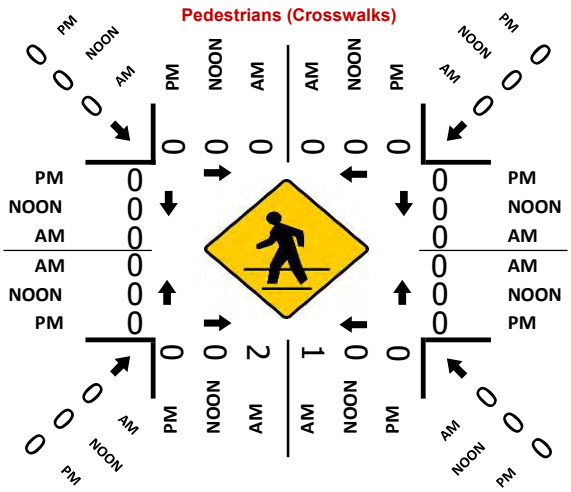
Cars (NOON)



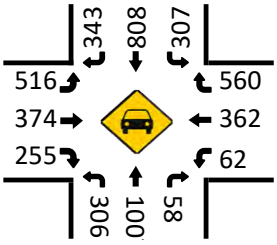
Total Trucks (NOON)



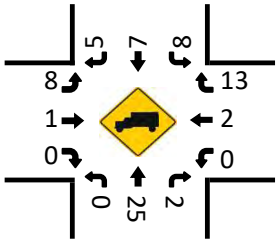
Pedestrians (Crosswalks)



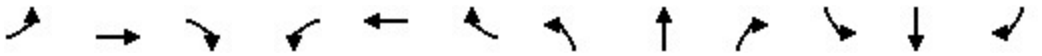
Cars (PM)



Total Trucks (PM)



Appendix D:
Existing Year 2026 AM Peak Hour Analysis Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	113	203	613	189	90	104	115	23	56	562	10
Future Volume (veh/h)	16	113	203	613	189	90	104	115	23	56	562	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	128	231	697	215	102	118	131	0	64	639	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	244	413	854	845	387	207	899		86	858	
Arrive On Green	0.02	0.13	0.13	0.25	0.36	0.36	0.06	0.25	0.00	0.05	0.24	0.00
Sat Flow, veh/h	1781	1870	3170	3456	2368	1084	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	18	128	231	697	159	158	118	131	0	64	639	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1675	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	4.9	5.2	14.6	4.9	5.1	2.5	2.2	0.0	2.7	12.7	0.0
Cycle Q Clear(g_c), s	0.8	4.9	5.2	14.6	4.9	5.1	2.5	2.2	0.0	2.7	12.7	0.0
Prop In Lane	1.00		1.00	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	244	413	854	634	598	207	899		86	858	
V/C Ratio(X)	0.49	0.52	0.56	0.82	0.25	0.26	0.57	0.15		0.74	0.74	
Avail Cap(c_a), veh/h	135	312	529	1614	992	935	361	1706		232	1798	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.1	31.1	31.3	27.2	17.4	17.5	35.1	22.2	0.0	36.0	26.9	0.0
Incr Delay (d2), s/veh	9.6	1.7	1.2	2.0	0.2	0.2	2.5	0.1	0.0	11.7	1.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.2	1.9	5.5	1.7	1.7	1.0	0.8	0.0	1.4	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.7	32.9	32.4	29.2	17.6	17.7	37.5	22.3	0.0	47.7	28.2	0.0
LnGrp LOS	D	C	C	C	B	B	D	C		D	C	
Approach Vol, veh/h		377			1014			249			703	
Approach Delay, s/veh		33.3			25.6			29.5			30.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	25.6	25.2	16.2	10.6	24.7	7.8	33.6
Change Period (Y+Rc), s	6.0	6.2	6.2	6.2	6.0	6.2	6.2	6.2
Max Green Setting (Gmax), s	10.0	36.8	35.8	12.8	8.0	38.8	5.8	42.8
Max Q Clear Time (g_c+I1), s	4.7	4.2	16.6	7.2	4.5	14.7	2.8	7.1
Green Ext Time (p_c), s	0.0	0.7	2.4	0.7	0.1	3.8	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	28.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



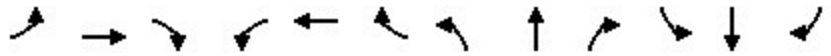
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	0	1031	0	0	0	0	558	316	172	1149	0
Future Volume (veh/h)	33	0	1031	0	0	0	0	558	316	172	1149	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	25	0	1171				0	627	0	193	1291	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	756	0	1345				0	1503		266	1528	0
Arrive On Green	0.42	0.00	0.42				0.00	0.29	0.00	0.08	0.43	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	3456	3647	0
Grp Volume(v), veh/h	25	0	1171				0	627	0	193	1291	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	1728	1777	0
Q Serve(g_s), s	0.8	0.0	32.9				0.0	9.6	0.0	5.3	31.7	0.0
Cycle Q Clear(g_c), s	0.8	0.0	32.9				0.0	9.6	0.0	5.3	31.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	756	0	1345				0	1503		266	1528	0
V/C Ratio(X)	0.03	0.00	0.87				0.00	0.42		0.73	0.85	0.00
Avail Cap(c_a), veh/h	969	0	1724				0	1844		422	1925	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.4	0.0	25.6				0.0	27.7	0.0	44.0	24.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.4				0.0	0.2	0.0	3.7	3.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	12.0				0.0	3.6	0.0	2.3	12.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.4	0.0	30.0				0.0	27.8	0.0	47.7	27.9	0.0
LnGrp LOS	B		C					C		D	C	
Approach Vol, veh/h		1196						627			1484	
Approach Delay, s/veh		29.7						27.8			30.4	
Approach LOS		C						C			C	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	13.2	35.9	48.4	49.1
Change Period (Y+Rc), s	5.7	7.2	7.0	7.2
Max Green Setting (Gmax), s	11.9	35.2	53.0	52.8
Max Q Clear Time (g_c+I1), s	7.3	11.6	34.9	33.7
Green Ext Time (p_c), s	0.2	3.7	6.5	8.2

Intersection Summary	
HCM 7th Control Delay, s/veh	29.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	585	22	68	503	0	13	0	29	0	0	0
Future Volume (veh/h)	0	585	22	68	503	0	13	0	29	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	1870	1870	1870			
Adj Flow Rate, veh/h	0	622	23	72	535	0	14	0	31			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	2	2	2	0	2	2	2			
Cap, veh/h	6	1748	64	135	2949	0	93	0	83			
Arrive On Green	0.00	0.35	0.35	0.08	0.58	0.00	0.05	0.00	0.05			
Sat Flow, veh/h	1781	5055	186	1781	5274	0	1781	0	1585			
Grp Volume(v), veh/h	0	418	227	72	535	0	14	0	31			
Grp Sat Flow(s),veh/h/ln	1781	1702	1837	1781	1702	0	1781	0	1585			
Q Serve(g_s), s	0.0	2.6	2.7	1.1	1.4	0.0	0.2	0.0	0.5			
Cycle Q Clear(g_c), s	0.0	2.6	2.7	1.1	1.4	0.0	0.2	0.0	0.5			
Prop In Lane	1.00		0.10	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	6	1177	635	135	2949	0	93	0	83			
V/C Ratio(X)	0.00	0.36	0.36	0.53	0.18	0.00	0.15	0.00	0.37			
Avail Cap(c_a), veh/h	308	5746	3100	1448	11886	0	2002	0	1782			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	7.1	7.1	12.9	2.9	0.0	13.1	0.0	13.2			
Incr Delay (d2), s/veh	0.0	0.2	0.3	3.2	0.0	0.0	0.7	0.0	2.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.4	0.0	0.0	0.1	0.0	0.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.2	7.4	16.1	2.9	0.0	13.8	0.0	16.0			
LnGrp LOS		A	A	B	A		B		B			
Approach Vol, veh/h		645			607			45				
Approach Delay, s/veh		7.3			4.5			15.3				
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	6.7	16.2			0.0	22.9		6.0				
Change Period (Y+Rc), s	4.5	6.2			4.5	6.2		4.5				
Max Green Setting (Gmax), s	23.5	48.8			5.0	67.3		32.5				
Max Q Clear Time (g_c+I1), s	3.1	4.7			0.0	3.4		2.5				
Green Ext Time (p_c), s	0.1	3.9			0.0	3.5		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.3
HCM 7th LOS	A

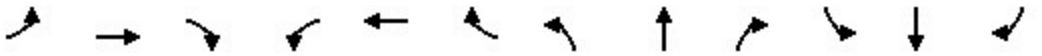
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	607	5	14	574	0	2
Future Vol, veh/h	607	5	14	574	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	639	5	15	604	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	644	0	-	322
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-	3.92
Pot Cap-1 Maneuver	-	-	579	-	0	575
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	579	-	-	575
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.27	11.29
HCM LOS			B

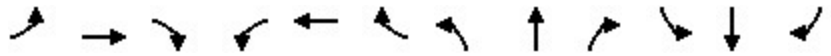
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	575	-	-	579	-
HCM Lane V/C Ratio	0.004	-	-	0.025	-
HCM Ctrl Dly (s/v)	11.3	-	-	11.4	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	542	25	6	556	11	10	1	9	8	0	19
Future Volume (veh/h)	41	542	25	6	556	11	10	1	9	8	0	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	583	27	6	598	12	11	1	10	9	0	20
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	1708	79	14	1528	474	26	7	72	21	0	74
Arrive On Green	0.05	0.34	0.34	0.01	0.30	0.30	0.01	0.05	0.05	0.01	0.00	0.05
Sat Flow, veh/h	3456	5002	230	1781	5106	1585	1781	146	1461	1781	0	1585
Grp Volume(v), veh/h	44	396	214	6	598	12	11	0	11	9	0	20
Grp Sat Flow(s),veh/h/ln	1728	1702	1829	1781	1702	1585	1781	0	1607	1781	0	1585
Q Serve(g_s), s	0.4	2.9	2.9	0.1	3.1	0.2	0.2	0.0	0.2	0.2	0.0	0.4
Cycle Q Clear(g_c), s	0.4	2.9	2.9	0.1	3.1	0.2	0.2	0.0	0.2	0.2	0.0	0.4
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.91	1.00		1.00
Lane Grp Cap(c), veh/h	173	1162	624	14	1528	474	26	0	79	21	0	74
V/C Ratio(X)	0.25	0.34	0.34	0.42	0.39	0.03	0.43	0.00	0.14	0.42	0.00	0.27
Avail Cap(c_a), veh/h	1086	4259	2288	506	6235	1936	506	0	1900	506	0	1874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	8.2	8.2	16.5	9.3	8.3	16.3	0.0	15.2	16.4	0.0	15.4
Incr Delay (d2), s/veh	0.8	0.2	0.3	17.9	0.2	0.0	10.7	0.0	0.8	12.6	0.0	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.6	0.1	0.6	0.0	0.1	0.0	0.1	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.0	8.4	8.5	34.4	9.5	8.3	27.0	0.0	16.0	29.0	0.0	17.3
LnGrp LOS	B	A	A	C	A	A	C		B	C		B
Approach Vol, veh/h		654			616			22			29	
Approach Delay, s/veh		8.9			9.7			21.5			21.0	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	17.6	5.0	6.1	6.2	16.2	4.9	6.1
Change Period (Y+Rc), s	4.5	6.2	4.5	4.5	4.5	6.2	4.5	4.5
Max Green Setting (Gmax), s	9.5	41.8	9.5	39.5	10.5	40.8	9.5	39.5
Max Q Clear Time (g_c+I1), s	2.1	4.9	2.2	2.4	2.4	5.1	2.2	2.2
Green Ext Time (p_c), s	0.0	3.7	0.0	0.1	0.0	4.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.8
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	430	51	33	466	118	60	6	42	152	15	35
Future Volume (veh/h)	75	430	51	33	466	118	60	6	42	152	15	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	457	54	35	496	126	64	6	45	162	16	37
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	1224	142	71	1185	368	111	19	143	343	69	160
Arrive On Green	0.07	0.26	0.26	0.04	0.23	0.23	0.06	0.10	0.10	0.10	0.14	0.14
Sat Flow, veh/h	3456	4638	539	1781	5106	1585	1781	190	1424	3456	502	1160
Grp Volume(v), veh/h	80	333	178	35	496	126	64	0	51	162	0	53
Grp Sat Flow(s),veh/h/ln	1728	1702	1773	1781	1702	1585	1781	0	1614	1728	0	1662
Q Serve(g_s), s	0.9	3.4	3.5	0.8	3.6	2.9	1.5	0.0	1.3	1.9	0.0	1.2
Cycle Q Clear(g_c), s	0.9	3.4	3.5	0.8	3.6	2.9	1.5	0.0	1.3	1.9	0.0	1.2
Prop In Lane	1.00		0.30	1.00		1.00	1.00		0.88	1.00		0.70
Lane Grp Cap(c), veh/h	247	898	468	71	1185	368	111	0	162	343	0	229
V/C Ratio(X)	0.32	0.37	0.38	0.49	0.42	0.34	0.58	0.00	0.31	0.47	0.00	0.23
Avail Cap(c_a), veh/h	866	2591	1350	446	3887	1206	599	0	1479	1243	0	1562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.0	12.9	13.0	20.3	14.1	13.8	19.7	0.0	18.0	18.3	0.0	16.5
Incr Delay (d2), s/veh	0.8	0.3	0.5	5.3	0.2	0.5	4.7	0.0	1.1	1.0	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.0	1.1	0.4	1.0	0.9	0.7	0.0	0.5	0.7	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.8	13.2	13.5	25.5	14.3	14.4	24.4	0.0	19.1	19.3	0.0	17.1
LnGrp LOS	B	B	B	C	B	B	C		B	B		B
Approach Vol, veh/h		591			657			115			215	
Approach Delay, s/veh		14.2			14.9			22.0			18.8	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	17.6	7.2	10.4	9.3	16.2	8.8	8.8
Change Period (Y+Rc), s	6.2	6.2	4.5	4.5	6.2	6.2	4.5	4.5
Max Green Setting (Gmax), s	10.8	32.8	14.5	40.5	10.8	32.8	15.5	39.5
Max Q Clear Time (g_c+I1), s	2.8	5.5	3.5	3.2	2.9	5.6	3.9	3.3
Green Ext Time (p_c), s	0.0	2.9	0.1	0.3	0.1	3.5	0.4	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	15.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	237	131	49	210	267	147	399	30	355	1347	450
Future Volume (veh/h)	225	237	131	49	210	267	147	399	30	355	1347	450
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	245	258	142	53	228	0	160	434	33	386	1464	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	340	646	288	150	451		242	1554	117	499	2018	
Arrive On Green	0.10	0.18	0.18	0.04	0.13	0.00	0.07	0.32	0.32	0.14	0.40	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	4845	364	3456	5106	1585
Grp Volume(v), veh/h	245	258	142	53	228	0	160	303	164	386	1464	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1805	1728	1702	1585
Q Serve(g_s), s	5.4	5.1	6.3	1.2	4.7	0.0	3.6	5.2	5.3	8.5	19.2	0.0
Cycle Q Clear(g_c), s	5.4	5.1	6.3	1.2	4.7	0.0	3.6	5.2	5.3	8.5	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	340	646	288	150	451		242	1092	579	499	2018	
V/C Ratio(X)	0.72	0.40	0.49	0.35	0.51		0.66	0.28	0.28	0.77	0.73	
Avail Cap(c_a), veh/h	570	1704	760	219	1343		394	1416	751	877	2836	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.5	28.5	29.0	36.6	32.1	0.0	35.7	20.0	20.0	32.5	20.2	0.0
Incr Delay (d2), s/veh	2.9	0.4	1.3	1.4	0.9	0.0	3.1	0.1	0.3	2.6	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.0	2.3	0.5	1.9	0.0	1.5	1.8	2.0	3.4	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.4	28.9	30.3	38.0	33.0	0.0	38.8	20.1	20.3	35.1	20.8	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		645			281			627			1850	
Approach Delay, s/veh		32.4			33.9			24.9			23.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.4	31.5	9.4	20.5	11.5	37.4	13.8	16.2
Change Period (Y+Rc), s	6.0	6.2	6.0	6.2	6.0	6.2	6.0	6.2
Max Green Setting (Gmax), s	31.4	32.8	5.0	37.8	9.0	43.8	13.0	29.8
Max Q Clear Time (g_c+I1), s	10.5	7.3	3.2	8.3	5.6	21.2	7.4	6.7
Green Ext Time (p_c), s	0.9	2.5	0.0	1.9	0.1	10.0	0.4	1.2

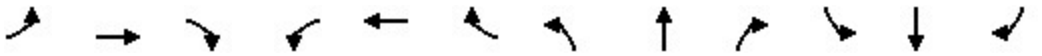
Intersection Summary	
HCM 7th Control Delay, s/veh	26.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix E:
Existing Year 2026 PM Peak Hour Analysis Worksheets

HCM 7th Signalized Intersection Summary
1: Monterey Avenue & Varner Road 2026 Existing PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	79	200	425	175	172	219	443	58	22	376	8
Future Volume (veh/h)	18	79	200	425	175	172	219	443	58	22	376	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	85	215	457	188	185	235	476	0	24	404	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	294	499	618	557	497	356	888		48	618	
Arrive On Green	0.02	0.16	0.16	0.18	0.31	0.31	0.10	0.25	0.00	0.03	0.17	0.00
Sat Flow, veh/h	1781	1870	3170	3456	1777	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	19	85	215	457	188	185	235	476	0	24	404	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	2.6	3.9	8.0	5.2	5.8	4.2	7.4	0.0	0.8	6.7	0.0
Cycle Q Clear(g_c), s	0.7	2.6	3.9	8.0	5.2	5.8	4.2	7.4	0.0	0.8	6.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	294	499	618	557	497	356	888		48	618	
V/C Ratio(X)	0.48	0.29	0.43	0.74	0.34	0.37	0.66	0.54		0.50	0.65	
Avail Cap(c_a), veh/h	191	406	688	1457	945	843	870	2728		168	2169	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.7	23.6	24.2	24.7	16.7	17.0	27.4	20.7	0.0	30.5	24.5	0.0
Incr Delay (d2), s/veh	8.5	0.5	0.6	1.8	0.4	0.5	2.1	0.5	0.0	7.6	1.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.1	1.3	2.9	1.8	1.8	1.6	2.6	0.0	0.4	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.2	24.2	24.8	26.5	17.1	17.4	29.5	21.2	0.0	38.1	25.7	0.0
LnGrp LOS	D	C	C	C	B	B	C	C		D	C	
Approach Vol, veh/h		319			830			711			428	
Approach Delay, s/veh		25.5			22.3			23.9			26.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	22.1	17.6	16.2	12.6	17.3	7.6	26.1
Change Period (Y+Rc), s	6.0	6.2	6.2	6.2	6.0	6.2	6.2	6.2
Max Green Setting (Gmax), s	6.0	48.8	26.8	13.8	16.0	38.8	6.8	33.8
Max Q Clear Time (g_c+I1), s	2.8	9.4	10.0	5.9	6.2	8.7	2.7	7.8
Green Ext Time (p_c), s	0.0	2.9	1.4	0.7	0.5	2.3	0.0	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	24.0
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	0	719	0	0	0	0	1481	619	152	811	0
Future Volume (veh/h)	32	0	719	0	0	0	0	1481	619	152	811	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	23	0	769				0	1559	0	160	854	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	522	0	929				0	2105		237	1938	0
Arrive On Green	0.29	0.00	0.29				0.00	0.41	0.00	0.07	0.55	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	3456	3647	0
Grp Volume(v), veh/h	23	0	769				0	1559	0	160	854	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	1728	1777	0
Q Serve(g_s), s	0.8	0.0	19.9				0.0	22.7	0.0	4.0	12.6	0.0
Cycle Q Clear(g_c), s	0.8	0.0	19.9				0.0	22.7	0.0	4.0	12.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	522	0	929				0	2105		237	1938	0
V/C Ratio(X)	0.04	0.00	0.83				0.00	0.74		0.68	0.44	0.00
Avail Cap(c_a), veh/h	790	0	1406				0	2944		409	2699	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.3	0.0	29.0				0.0	21.9	0.0	40.0	12.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.0				0.0	0.6	0.0	3.4	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	7.3				0.0	7.8	0.0	1.7	4.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.3	0.0	32.0				0.0	22.5	0.0	43.4	12.1	0.0
LnGrp LOS	C		C					C		D	B	
Approach Vol, veh/h		792						1559			1014	
Approach Delay, s/veh		31.7						22.5			17.0	
Approach LOS		C						C			B	

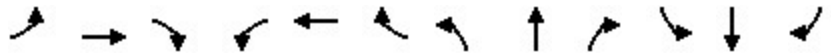
Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	11.7	43.5	32.8	55.2
Change Period (Y+Rc), s	5.7	7.2	7.0	7.2
Max Green Setting (Gmax), s	10.4	50.7	39.0	66.8
Max Q Clear Time (g_c+I1), s	6.0	24.7	21.9	14.6
Green Ext Time (p_c), s	0.2	11.5	3.9	6.0

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	700	20	20	917	0	9	0	40	0	0	0
Future Volume (veh/h)	0	700	20	20	917	0	9	0	40	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	1870	1870	1870			
Adj Flow Rate, veh/h	0	761	22	22	997	0	10	0	43			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	0	2	2	2			
Cap, veh/h	6	1858	54	50	2831	0	108	0	96			
Arrive On Green	0.00	0.36	0.36	0.03	0.55	0.00	0.06	0.00	0.06			
Sat Flow, veh/h	1781	5101	147	1781	5274	0	1781	0	1585			
Grp Volume(v), veh/h	0	507	276	22	997	0	10	0	43			
Grp Sat Flow(s),veh/h/ln	1781	1702	1844	1781	1702	0	1781	0	1585			
Q Serve(g_s), s	0.0	3.1	3.1	0.3	3.0	0.0	0.1	0.0	0.7			
Cycle Q Clear(g_c), s	0.0	3.1	3.1	0.3	3.0	0.0	0.1	0.0	0.7			
Prop In Lane	1.00		0.08	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	6	1240	672	50	2831	0	108	0	96			
V/C Ratio(X)	0.00	0.41	0.41	0.44	0.35	0.00	0.09	0.00	0.45			
Avail Cap(c_a), veh/h	321	6960	3770	930	12187	0	2148	0	1912			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	6.6	6.6	13.3	3.4	0.0	12.3	0.0	12.6			
Incr Delay (d2), s/veh	0.0	0.2	0.4	6.0	0.1	0.0	0.4	0.0	3.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.2	0.0	0.0	0.1	0.0	0.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	6.8	7.0	19.2	3.5	0.0	12.7	0.0	15.9			
LnGrp LOS		A	A	B	A		B		B			
Approach Vol, veh/h		783			1019			53				
Approach Delay, s/veh		6.9			3.8			15.3				
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	5.3	16.3			0.0	21.6		6.2				
Change Period (Y+Rc), s	4.5	6.2			4.5	6.2		4.5				
Max Green Setting (Gmax), s	4.5	56.8			5.0	66.3		33.5				
Max Q Clear Time (g_c+I1), s	2.3	5.1			0.0	5.0		2.7				
Green Ext Time (p_c), s	0.0	5.0			0.0	7.6		0.2				

Intersection Summary		
HCM 7th Control Delay, s/veh	5.5	
HCM 7th LOS	A	

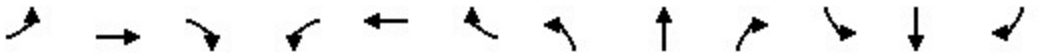
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	715	26	9	938	0	6
Future Vol, veh/h	715	26	9	938	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	777	28	10	1020	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	805	0	-	403
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-	3.92
Pot Cap-1 Maneuver	-	-	485	-	0	510
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	485	-	-	510
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.12	12.15
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	510	-	-	485	-
HCM Lane V/C Ratio	0.013	-	-	0.02	-
HCM Ctrl Dly (s/v)	12.1	-	-	12.6	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	609	60	37	766	12	58	1	44	21	8	124
Future Volume (veh/h)	52	609	60	37	766	12	58	1	44	21	8	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	662	65	40	833	13	63	1	48	23	9	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	1503	146	78	1556	483	108	6	271	49	14	212
Arrive On Green	0.06	0.32	0.32	0.04	0.30	0.30	0.06	0.17	0.17	0.03	0.14	0.14
Sat Flow, veh/h	3456	4731	461	1781	5106	1585	1781	32	1558	1781	100	1500
Grp Volume(v), veh/h	57	475	252	40	833	13	63	0	49	23	0	144
Grp Sat Flow(s),veh/h/ln	1728	1702	1787	1781	1702	1585	1781	0	1590	1781	0	1600
Q Serve(g_s), s	0.7	5.0	5.1	1.0	6.1	0.3	1.6	0.0	1.2	0.6	0.0	3.8
Cycle Q Clear(g_c), s	0.7	5.0	5.1	1.0	6.1	0.3	1.6	0.0	1.2	0.6	0.0	3.8
Prop In Lane	1.00		0.26	1.00		1.00	1.00		0.98	1.00		0.94
Lane Grp Cap(c), veh/h	196	1081	568	78	1556	483	108	0	277	49	0	226
V/C Ratio(X)	0.29	0.44	0.44	0.51	0.54	0.03	0.58	0.00	0.18	0.47	0.00	0.64
Avail Cap(c_a), veh/h	575	2627	1380	375	4167	1294	533	0	1675	336	0	1508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.4	12.2	12.2	21.1	13.0	11.0	20.6	0.0	15.9	21.6	0.0	18.3
Incr Delay (d2), s/veh	0.8	0.3	0.5	5.2	0.3	0.0	4.9	0.0	0.3	6.7	0.0	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.4	1.5	0.4	1.7	0.1	0.7	0.0	0.4	0.3	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	12.5	12.8	26.3	13.3	11.0	25.6	0.0	16.2	28.2	0.0	21.2
LnGrp LOS	C	B	B	C	B	B	C		B	C		C
Approach Vol, veh/h		784			886			112			167	
Approach Delay, s/veh		13.2			13.9			21.5			22.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	20.5	7.2	10.9	7.1	19.9	5.8	12.3
Change Period (Y+Rc), s	4.5	6.2	4.5	4.5	4.5	6.2	4.5	4.5
Max Green Setting (Gmax), s	9.5	34.8	13.5	42.5	7.5	36.8	8.5	47.5
Max Q Clear Time (g_c+I1), s	3.0	7.1	3.6	5.8	2.7	8.1	2.6	3.2
Green Ext Time (p_c), s	0.0	4.4	0.1	1.0	0.0	5.6	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	14.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	512	30	70	580	199	86	27	98	484	28	137
Future Volume (veh/h)	136	512	30	70	580	199	86	27	98	484	28	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	522	31	71	592	203	88	28	100	494	29	140
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1167	69	106	1110	345	118	45	159	688	72	346
Arrive On Green	0.08	0.24	0.24	0.06	0.22	0.22	0.07	0.12	0.12	0.20	0.26	0.26
Sat Flow, veh/h	3456	4931	291	1781	5106	1585	1781	359	1281	3456	279	1348
Grp Volume(v), veh/h	139	359	194	71	592	203	88	0	128	494	0	169
Grp Sat Flow(s),veh/h/ln	1728	1702	1818	1781	1702	1585	1781	0	1640	1728	0	1628
Q Serve(g_s), s	2.2	5.1	5.1	2.2	5.8	6.5	2.7	0.0	4.2	7.5	0.0	4.8
Cycle Q Clear(g_c), s	2.2	5.1	5.1	2.2	5.8	6.5	2.7	0.0	4.2	7.5	0.0	4.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.78	1.00		0.83
Lane Grp Cap(c), veh/h	272	805	430	106	1110	345	118	0	204	688	0	418
V/C Ratio(X)	0.51	0.45	0.45	0.67	0.53	0.59	0.74	0.00	0.63	0.72	0.00	0.40
Avail Cap(c_a), veh/h	602	1380	737	342	2161	671	396	0	1152	1567	0	1520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	18.3	18.3	25.9	19.5	19.7	25.8	0.0	23.4	21.0	0.0	17.3
Incr Delay (d2), s/veh	1.5	0.4	0.7	7.1	0.4	1.6	8.9	0.0	3.2	1.4	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.7	1.9	1.0	1.9	2.4	1.4	0.0	1.7	3.0	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.3	18.7	19.1	33.0	19.9	21.4	34.6	0.0	26.6	22.5	0.0	18.0
LnGrp LOS	C	B	B	C	B	C	C		C	C		B
Approach Vol, veh/h		692			866			216			663	
Approach Delay, s/veh		20.3			21.3			29.9			21.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	19.5	8.2	18.9	10.6	18.4	15.7	11.5
Change Period (Y+Rc), s	6.2	6.2	4.5	4.5	6.2	6.2	4.5	4.5
Max Green Setting (Gmax), s	10.8	22.8	12.5	52.5	9.8	23.8	25.5	39.5
Max Q Clear Time (g_c+I1), s	4.2	7.1	4.7	6.8	4.2	8.5	9.5	6.2
Green Ext Time (p_c), s	0.1	2.7	0.1	1.2	0.2	3.8	1.7	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	525	375	255	62	364	573	313	1032	60	315	815	348
Future Volume (veh/h)	525	375	255	62	364	573	313	1032	60	315	815	348
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	547	391	266	65	379	0	326	1075	62	328	849	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	644	1023	456	154	520		406	1367	79	411	1421	
Arrive On Green	0.19	0.29	0.29	0.04	0.15	0.00	0.12	0.28	0.28	0.12	0.28	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	4939	285	3456	5106	1585
Grp Volume(v), veh/h	547	391	266	65	379	0	326	741	396	328	849	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1819	1728	1702	1585
Q Serve(g_s), s	13.7	7.9	12.9	1.6	9.2	0.0	8.3	18.1	18.1	8.3	12.9	0.0
Cycle Q Clear(g_c), s	13.7	7.9	12.9	1.6	9.2	0.0	8.3	18.1	18.1	8.3	12.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	644	1023	456	154	520		406	942	503	411	1421	
V/C Ratio(X)	0.85	0.38	0.58	0.42	0.73		0.80	0.79	0.79	0.80	0.60	
Avail Cap(c_a), veh/h	808	1812	808	192	1179		500	1167	624	539	1808	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.3	25.6	27.4	41.8	36.6	0.0	38.6	30.0	30.0	38.5	28.1	0.0
Incr Delay (d2), s/veh	7.1	0.2	1.2	1.8	2.0	0.0	7.5	2.9	5.4	6.2	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	3.1	4.6	0.7	3.9	0.0	3.7	7.0	7.9	3.6	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.4	25.8	28.5	43.6	38.6	0.0	46.2	32.9	35.4	44.8	28.5	0.0
LnGrp LOS	D	C	C	D	D		D	C	D	D	C	
Approach Vol, veh/h		1204			444			1463			1177	
Approach Delay, s/veh		34.0			39.3			36.5			33.0	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	31.1	10.0	32.1	16.6	31.2	22.7	19.3
Change Period (Y+Rc), s	6.0	6.2	6.0	6.2	6.0	6.2	6.0	6.2
Max Green Setting (Gmax), s	14.0	30.8	5.0	45.8	13.0	31.8	21.0	29.8
Max Q Clear Time (g_c+I1), s	10.3	20.1	3.6	14.9	10.3	14.9	15.7	11.2
Green Ext Time (p_c), s	0.4	4.8	0.0	3.3	0.3	4.7	1.0	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	35.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix F:
Traffic Volume Development Worksheets

Cumulative Projects List

Other Projects Summary List

	Project	Jurisdiction	Land Use	Intensity	ADT	AM Peak Hour			PM Peak Hour		
						Total	Inbound	Outbound	Total	Inbound	Outbound
1	Rosette Apartments (Via Vail Village)	Rancho Mirage	Affordable Housing (223)	236 DU	1,135	85	24	61	109	64	45
2	Rancho Mirage Affordable Housing	Rancho Mirage	Affordable Housing (223)	150 DU	722	54	15	39	70	41	29
3	TTM 38041	Rancho Mirage	Single Family Units (210)	17 DU	160	13	3	10	17	11	6
	Priviere Villas	Rancho Mirage	Single Family Units (210)	28 DU	264	20	5	15	26	16	10
	TTM 38224	Rancho Mirage	Single Family Units (210)	9 DU	82	6	2	4	8	5	3
	TTM 38636	Rancho Mirage	Single Family Units (210)	9 DU	82	6	2	4	8	5	3
	Linea North	Rancho Mirage	Single Family Units (210)	9 DU	82	6	2	4	8	5	3
	Linea Rancho Mirage	Rancho Mirage	Single Family Units (210)	9 DU	82	6	2	4	8	5	3
	PM 38380	Rancho Mirage	Single Family Units (210)	4 DU	36	3	1	2	4	2	2
	TTM 38266	Rancho Mirage	Single Family Units (210)	9 DU	82	6	2	4	8	5	3
	TTM 38273	Rancho Mirage	Single Family Units (210)	9 DU	82	6	2	4	8	5	3
	TTM 38447 (Aura Circle)	Rancho Mirage	Single Family Units (210)	8 DU	73	6	2	4	7	5	2
4	TOTAL	Rancho Mirage	Single Family Units (210)	66 DU	601	45	15	30	59	37	22
7	Rancho Monterey Specific Plan Amendment	Rancho Mirage	MF Medium (220) and Shopping Center (820)		7,696	305	121	184	534	286	247
8	Section 31 Cotino	Rancho Mirage			22,764	1,254	433	821	1,919	1,091	828
	Total Cumulative Project Trips				33,078	1,756	611	1,145	2,708	1,530	1,177

Note: all volumes are in passenger car equivalents (PCE's)
SBC = San Bernardino County; KSF = Thousand Square Feet; VFP = Vehical Fuel Pump; DU=Dwelling Unit

Cumulative Projects Peak Hour Trip Assignment

Inbound Outbound

Int. 1

	Rosette Apartments (Via Vail Village)				Rancho Mirage Affordable Housing				TTM 38041				TOTAL				Rancho Monterey Specific Plan Amendment				Section 31 Cotino				Total	
	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	AM	PM
NBL																									0	0
NBT																			3	10			17	17	20	27
NBR																							164	168	164	168
SBL																									0	0
SBT																			4	9			9	21	13	30
SBR																									0	0
EBL																									0	0
EBT																									0	0
EBR																									0	0
WBL																			16	38			29	75	45	113
WBT																									0	0
WBR																									0	0

Int. 2

	Rosette Apartments (Via Vail Village)				Rancho Mirage Affordable Housing				TTM 38041				TOTAL				Rancho Monterey Specific Plan Amendment				Section 31 Cotino				Total	
	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	AM	PM
NBL																									0	0
NBT																			69	80			181	185	250	265
NBR																			32	30			43	38	75	68
SBL																									0	0
SBT																			20	47			38	96	58	143
SBR																									0	0
EBL																									0	0
EBT																									0	0
EBR																			36	86			66	167	102	253
WBL																									0	0
WBT																									0	0
WBR																									0	0

Int. 3

	Rosette Apartments (Via Vail Village)				Rancho Mirage Affordable Housing				TTM 38041				TOTAL				Rancho Monterey Specific Plan Amendment				Section 31 Cotino				Total	
	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	AM	PM
NBL		22%	13	10		22%	9	6		22%	2	1							12	22					36	39
NBT																									0	0
NBR		73%	45	33		73%	28	21		73%	7	4							60	24					140	82
SBL																									0	0
SBT																									0	0
SBR																									0	0
EBL																									0	0
EBT														5%	2	1							47	70	49	71
EBR	22%		5	14	22%		3	9	22%		1	2							10	24					19	49
WBL	73%		18	47	73%		11	9	73%		2	8							6	15					37	79
WBT													5%		1	2							40	90	41	92
WBR																									0	0

Int. 4

	Rosette Apartments (Via Vail Village)				Rancho Mirage Affordable Housing				TTM 38041				TOTAL				Rancho Monterey Specific Plan Amendment				Section 31 Cotino				Total	
	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	AM	PM
NBL																									0	0
NBT		95%	58	43		95%	37	28		95%	10	6							72	46					177	123
NBR																									0	0
SBL																									0	0
SBT	95%		23	61	95%		14	39	95%		3	10							16	39					56	149
SBR																									0	0
EBL																									0	0
EBT																									0	0
EBR																									0	0
WBL																									0	0
WBT																									0	0
WBR																									0	0

Int. 5

	Rosette Apartments (Via Vail Village)				Rancho Mirage Affordable Housing				TTM 38041				TOTAL				Rancho Monterey Specific Plan Amendment				Section 31 Cotino				Total	
	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	AM	PM
NBL																									0	0
NBT																									0	0
NBR																									0	0
SBL																									0	0
SBT																									0	0
SBR																									0	0
EBL																									0	0
EBT		73%	45	33		73%	28	21		73%	7	4		5%	2	1			60	24			47	70	189	153
EBR																									0	0
WBL																									0	0
WBT	73%		18	47	73%		11	9	73%		2	8	5%		1	2			6	15			40	90	78	171
WBR																									0	0

Int. 6

	Rosette Apartments (Via Vail Village)				Rancho Mirage Affordable Housing				TTM 38041				TOTAL				Rancho Monterey Specific Plan Amendment				Section 31 Cotino				Total	
	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	AM	PM
NBL	2%		0	1	2%		0	1	2%		0	0													0	2
NBT																									0	0
NBR																									0	0
SBL																									0	0
SBT																									0	0
SBR	1%		0	1	1%		0	0	1%		0	0													0	1
EBL		1%	1	0		1%	0	0		1%	0	0													1	0
EBT		70%	43	32		70%	27	20		70%	7	4		5%	2	1			60	24			47	70	186	151
EBR		2%	1	1		2%	1	1		2%	0	0													2	2
WBL																									0	0
WBT	70%		18	45	70%		11	29	70%		2	8	5%		1	2			6	15			40	90	78	189
WBR																									0	0

Int. 7

	Rosette Apartments (Via Vail Village)				Rancho Mirage Affordable Housing				TTM 38041				TOTAL				Rancho Monterey Specific Plan Amendment				Section 31 Cotino				Total	
	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	AM	PM
NBL	2%		1	1	2%		0	1	2%		0	0													1	2
NBT																									0	0
NBR																									0	0
SBL																									0	0
SBT																									0	0
SBR	3%		1	2	3%		0	1	3%		0	0													1	3
EBL		3%	2	2		3%	1	1		3%	0	0													3	3
EBT		65%	40	29		65%	25	19		65%	7	4		5%	2	1			60	24			47	70	181	147
EBR		2%	1	1		2%	1	1		2%	0	0													2	2
WBL																									0	0
WBT	65%		16	42	65%		10	27	65%		2	7	5%		1	2			6	15			40	90	75	183
WBR																									0	0

Int. 8

	Rosette Apartments (Via Vail Village)				Rancho Mirage Affordable Housing				TTM 38041				TOTAL				Rancho Monterey Specific Plan Amendment				Section 31 Cotino				Total	
	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	IN	OUT	AM. Vol.	PM Vol.	AM	PM
NBL	20%		5	13	20%		3	8	20%		1	2											32	66	41	89
NBT																			41	86			202	209	243	295
NBR																									0	0
SBL																									0	0
SBT																			50	118			96	239	146	357
SBR	40%		10	26	40%		6	16	40%		1	4	5%		1	2			6	15			8	24	32	87
EBL		40%	25	18		40%	16	12		40%	4	2		5%	2	1			60	24			21	14	128	71
EBT		5%	3	2		5%	2	1		5%	1	0													6	3
EBR		20%	12	9		20%	8	6		20%	2	1											26	56	48	72
WBL																									0	0
WBT	5%		1	3	5%		1	2	5%		0	1													2	6
WBR																									0	0

1 Study Intersection: Monterey Avenue / Varner Road

North/South: Monterey Avenue

East/West: Varner Road

OY Year: 2027

Ambient Growth: 2%

Years till opening: 1

	Trip Gen						
	ADT	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
net trip gen	4216	106	76	30	250	120	130
passby	411	2	1	1	113	61	52

Straightline Growth: ROUND((1+$K$4*$K$3)*D10,0)

Compound Growth: ROUND(((1+$K$3)^$K$4)*D10,0)

	Existing		Net Trips				Trip Gen Balance		Intersection Balance		Project Only		Existing With Project		Cum. Proj. Only		OY		OY With Proj	
	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
NBL	104	219			0	0					0	0	104	219	0	0	106	223	106	223
NBT	115	443		5%	2	7					2	7	117	450	20	27	137	479	139	486
NBR	23	58			0	0					0	0	23	58	164	168	187	227	187	227
SBL	56	22			0	0					0	0	56	22	0	0	57	22	57	22
SBT	562	376	5%		4	6					4	6	566	382	13	30	586	414	590	420
SBR	10	8			0	0					0	0	10	8	0	0	10	8	10	8
EBL	16	18			0	0					0	0	16	18	0	0	16	18	16	18
EBT	113	79			0	0					0	0	113	79	0	0	115	81	115	81
EBR	203	200			0	0					0	0	203	200	0	0	207	204	207	204
WBL	613	425	20%		15	24					15	24	628	449	45	113	670	547	685	571
WBT	189	175			0	0					0	0	189	175	0	0	193	179	193	179
WBR	90	172			0	0					0	0	90	172	0	0	92	175	92	175

PHF: 0.88 0.93

2 Study Intersection: Monterey Avenue / I-10 EB On Ramp
North/South: Monterey Avenue
East/West: I-10 EB On Ramp

OY Year: 2027
Ambient Growth: 2%
Years till opening: 1

	Trip Gen						
		AM Peak Hour			PM Peak Hour		
	ADT	Total	In	Out	Total	In	Out
net trip gen	4216	106	76	30	250	120	130
passby	411	2	1	1	113	61	52

Straightline Growth: ROUND((1+$K$4*$K$3)*D10,0)
Compound Growth: ROUND(((1+$K$3)^$K$4)*D10,0)

	Existing		Net Trips				Trip Gen Balance		Intersection Balance		Project Only		Existing With Proj.		Cum. Proj. Only		OY		OY With Proj	
	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
NBL					0	0					0	0	0	0	0	0	0	0	0	0
NBT	558	1,481		25%	8	33					8	33	566	1,514	250	265	819	1,776	827	1,809
NBR	316	619		20%	6	26					6	26	322	645	75	68	397	699	403	725
SBL	172	152			0	0					0	0	172	152	0	0	175	155	175	155
SBT	1,149	811	25%		19	30					19	30	1,168	841	58	143	1,230	970	1,249	1,000
SBR					0	0					0	0	0	0	0	0	0	0	0	0
EBL	33	32			0	0					0	0	33	32	0	0	34	33	34	33
EBT					0	0					0	0	0	0	0	0	0	0	0	0
EBR	1,031	719	20%		15	24					15	24	1,046	743	102	253	1,154	986	1,169	1,010
WBL					0	0					0	0	0	0	0	0	0	0	0	0
WBT					0	0					0	0	0	0	0	0	0	0	0	0
WBR					0	0					0	0	0	0	0	0	0	0	0	0

PHF: 0.89 0.95

3 Study Intersection: Key Largo Avenue / Dinah Shore Drive
North/South: Key Largo Avenue
East/West: Dinah Shore Drive

OY Year: 2027
Ambient Growth: 2%
Years till opening: 1

	Trip Gen						
		AM Peak Hour			PM Peak Hour		
	ADT	Total	In	Out	Total	In	Out
net trip gen	4216	106	76	30	250	120	130
passby	411	2	1	1	113	61	52

Straightline Growth: ROUND((1+$K$4*$K$3)*D10,0)
Compound Growth: ROUND(((1+$K$3)^$K$4)*D10,0)

	Existing		Net Trips				Pass-By				Trip Gen Balance		Intersection Balance		Project Only		Existing With Proj.		Cum. Proj. Only		OY		OY With Proj	
	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
NBL	13	9		15%	5	20		65%	1	34	-1				5	54	18	63	36	39	49	48	54	102
NBT					0	0			0	0					0	0	0	0	0	0	0	0	0	0
NBR	29	40		40%	12	52			0	0		-1			12	51	41	91	140	82	170	123	182	174
SBL					0	0			0	0					0	0	0	0	0	0	0	0	0	0
SBT					0	0			0	0					0	0	0	0	0	0	0	0	0	0
SBR					0	0			0	0					0	0	0	0	0	0	0	0	0	0
EBL					0	0			0	0					0	0	0	0	0	0	0	0	0	0
EBT	585	700			0	0	-35%		0	-21	-1				-1	-21	584	679	49	71	646	785	645	764
EBR	22	20	15%		11	18	35%		0	21	2	2			13	41	35	61	19	49	41	69	54	110
WBL	68	20	40%		30	48	30%		0	18		-1			30	65	98	85	37	79	106	99	136	164
WBT	503	917			0	0	-65%		-1	-40	1	1			0	-39	503	878	41	92	554	1,027	554	988
WBR					0	0			0	0					0	0	0	0	0	0	0	0	0	0

PHF: 0.94 0.92

4 Study Intersection: Key Largo Avenue / Project Driveway A
North/South: Key Largo Avenue
East/West: Project Driveway A

OY Year: 2027
Ambient Growth: 2%
Years till opening: 1

	Trip Gen						
		AM Peak Hour			PM Peak Hour		
	ADT	Total	In	Out	Total	In	Out
net trip gen	4216	106	76	30	250	120	130
passby	411	2	1	1	113	61	52

Straightline Growth: ROUND((1+$K$4*$K$3)*D10,0)
Compound Growth: ROUND(((1+$K$3)^$K$4)*D10,0)

	Existing		Net Trips				Pass-By				Trip Gen Balance		Intersection Balance		Project Only		Existing With Proj.		Cum. Proj. Only		OY		OY With Proj	
	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
NBL					0	0			0	0					0	0	0	0	0	0	0	0	0	0
NBT					0	0			0	0					0	0	0	0	177	123	177	123	177	123
NBR					0	0			0	0					0	0	0	0	0	0	0	0	0	0
SBL			55%		42	66	65%		1	40					43	106	43	106	0	0	0	0	43	106
SBT					0	0			0	0					0	0	0	0	56	149	56	149	56	149
SBR					0	0			0	0					0	0	0	0	0	0	0	0	0	0
EBL					0	0			0	0					0	0	0	0	0	0	0	0	0	0
EBT					0	0			0	0					0	0	0	0	0	0	0	0	0	0
EBR					0	0			0	0					0	0	0	0	0	0	0	0	0	0
WBL					0	0			0	0					0	0	0	0	0	0	0	0	0	0
WBT					0	0			0	0					0	0	0	0	0	0	0	0	0	0
WBR				55%	17	72		65%	1	34	-1	-1			17	105	17	105	0	0	0	0	17	105

PHF:

5 Study Intersection: Project Driveway B / Dinah Shore Drive
North/South: Project Driveway B
East/West: Dinah Shore Drive

OY Year: 2027
Ambient Growth: 2%
Years till opening: 1

	Trip Gen						
		AM Peak Hour			PM Peak Hour		
	ADT	Total	In	Out	Total	In	Out
net trip gen	4216	106	76	30	250	120	130
passby	411	2	1	1	113	61	52

Straightline Growth: ROUND((1+$K$4*$K$3)*D10,0)
Compound Growth: ROUND((1+$K$3)^$K$4)*D10,0)

	Existing		Net Trips				Pass-By				Trip Gen Balance		Intersection Balance		Project Only		Existing With Proj.		Cum. Proj. Only		OY		OY With Proj	
	AM	PM	Dist. %		AM	PM	Dist. %		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
			IN	OUT			IN	OUT																
NBL					0	0			0	0					0	0	0	0	0	0	0	0	0	0
NBT					0	0			0	0					0	0	0	0	0	0	0	0	0	0
NBR	2	6		45%	14	59		35%	0	18					14	77	16	83	0	0	2	6	16	83
SBL					0	0			0	0					0	0	0	0	0	0	0	0	0	0
SBT					0	0			0	0					0	0	0	0	0	0	0	0	0	0
SBR					0	0			0	0					0	0	0	0	0	0	0	0	0	0
EBL					0	0			0	0					0	0	0	0	0	0	0	0	0	0
EBT	607	715		40%	12	52	-35%		0	-21	-1	-1			11	30	618	745	189	153	808	882	819	912
EBR	5	26			0	0			0	0					0	0	5	26	0	0	5	27	5	27
WBL	14	9	45%		34	54	35%		0	21					34	75	48	84	0	0	14	9	48	84
WBT	574	938	40%		30	48	-35%		0	-21		-2			30	25	604	963	78	171	663	1,128	693	1,153
WBR					0	0			0	0					0	0	0	0	0	0	0	0	0	0

PHF: 0.95 0.92

6 Study Intersection: Miriam Way / Dinah Shore Drive
North/South: Miriam Way
East/West: Dinah Shore Drive

OY Year: 2027
Ambient Growth: 2%
Years till opening: 1

	Trip Gen						
		AM Peak Hour			PM Peak Hour		
	ADT	Total	In	Out	Total	In	Out
net trip gen	4216	106	76	30	250	120	130
passby	411	2	1	1	113	61	52

Straightline Growth: ROUND((1+$K$4*$K$3)*D10,0)
Compound Growth: ROUND(((1+$K$3)^$K$4)*D10,0)

	Existing		Net Trips				Trip Gen Balance		Intersection Balance		Project Only		Existing With Proj.		Cum. Proj. Only		OY		OY With Proj	
	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
NBL	10	58	2%		2	2	-1	-1			1	1	11	59	0	2	10	61	11	62
NBT	1	1			0	0					0	0	1	1	0	0	1	1	1	1
NBR	9	44			0	0					0	0	9	44	0	0	9	45	9	45
SBL	8	21			0	0					0	0	8	21	0	0	8	21	8	21
SBT	0	8			0	0					0	0	0	8	0	0	0	8	0	8
SBR	19	124	1%		1	1					1	1	20	125	0	1	19	127	20	128
EBL	41	52		1%	0	1	1				1	1	42	53	1	0	43	53	44	54
EBT	542	609		82%	25	107	-1	1			24	108	566	717	186	151	739	772	763	880
EBR	25	60		2%	1	3		-2			1	1	26	61	2	2	28	63	29	64
WBL	6	37			0	0					0	0	6	37	0	0	6	38	6	38
WBT	556	766	82%		62	98					62	98	618	864	78	189	645	970	707	1,068
WBR	11	12			0	0					0	0	11	12	0	0	11	12	11	12

PHF: 0.93 0.92

7 Study Intersection: Shoppers Lane / Dinah Shore Drive

North/South: Shoppers Lane

East/West: Dinah Shore Drive

OY Year: 2027

Ambient Growth: 2%

Years till opening: 1

	Trip Gen						
		AM Peak Hour			PM Peak Hour		
	ADT	Total	In	Out	Total	In	Out
net trip gen	4216	106	76	30	250	120	130
passby	411	2	1	1	113	61	52

Straightline Growth: ROUND((1+$K$4*$K$3)*D10,0)

Compound Growth: ROUND(((1+$K$3)^$K$4)*D10,0)

	Existing		Net Trips				Trip Gen Balance		Intersection Balance		Project Only		Existing With Proj.		Cum. Proj. Only		OY		OY With Proj	
	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
NBL	60	86	1%		1	1					1	1	61	87	1	2	62	90	63	91
NBT	6	27			0	0					0	0	6	27	0	0	6	28	6	28
NBR	42	98			0	0					0	0	42	98	0	0	43	100	43	100
SBL	152	484			0	0					0	0	152	484	0	0	155	494	155	494
SBT	15	28			0	0					0	0	15	28	0	0	15	29	15	29
SBR	35	137	1%		1	1					1	1	36	138	1	3	37	143	38	144
EBL	75	136		1%	0	1					0	1	75	137	3	3	80	142	80	143
EBT	430	512		80%	24	104		2			24	106	454	618	181	147	620	669	644	775
EBR	51	30		1%	0	1					0	1	51	31	2	2	54	33	54	34
WBL	33	70			0	0					0	0	33	70	0	0	34	71	34	71
WBT	466	580	80%		61	96	-1				60	96	526	676	75	183	550	775	610	871
WBR	118	199			0	0					0	0	118	199	0	0	120	203	120	203

PHF: 0.94 0.98

8 Study Intersection: Monterey Avenue / Dinah Shore Drive
North/South: Monterey Avenue
East/West: Dinah Shore Drive

OY Year: 2027
Ambient Growth: 2%
Years till opening: 1

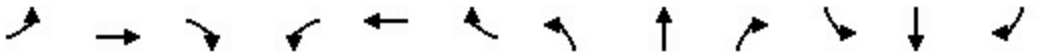
	Trip Gen						
		AM Peak Hour			PM Peak Hour		
	ADT	Total	In	Out	Total	In	Out
net trip gen	4216	106	76	30	250	120	130
passby	411	2	1	1	113	61	52

Straightline Growth: ROUND((1+$K$4*$K$3)*D10,0)
Compound Growth: ROUND(((1+$K$3)^$K$4)*D10,0)

	Existing		Net Trips				Trip Gen Balance		Intersection Balance		Project Only		Existing With Proj.		Cum. Proj. Only		OY		OY With Proj	
	AM	PM	Dist. % IN	Dist. % OUT	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
NBL	147	313	20%		15	24					15	24	162	337	41	89	191	408	206	432
NBT	399	1,032			0	0					0	0	399	1,032	243	295	650	1,348	650	1,348
NBR	30	60			0	0					0	0	30	60	0	0	31	61	31	61
SBL	355	315			0	0					0	0	355	315	0	0	362	321	362	321
SBT	1,347	815			0	0					0	0	1,347	815	146	357	1,520	1,188	1,520	1,188
SBR	450	348	45%		34	54					34	54	484	402	32	87	491	442	525	496
EBL	225	525		45%	14	59					14	59	239	584	128	71	358	607	372	666
EBT	237	375		15%	5	20	-1	1			4	21	241	396	6	3	248	386	252	407
EBR	131	255		20%	6	26					6	26	137	281	48	72	182	332	188	358
WBL	49	62			0	0					0	0	49	62	0	0	50	63	50	63
WBT	210	364	15%		11	18					11	18	221	382	2	6	216	377	227	395
WBR	267	573			0	0					0	0	267	573	0	0	272	584	272	584

PHF: 0.92 0.96

Appendix G:
Existing Year 2026 With Project AM Peak Hour Analysis Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	113	203	628	189	90	104	117	23	56	566	10
Future Volume (veh/h)	16	113	203	628	189	90	104	117	23	56	566	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	128	231	714	215	102	118	133	0	64	643	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	241	409	871	853	390	205	900		86	861	
Arrive On Green	0.02	0.13	0.13	0.25	0.36	0.36	0.06	0.25	0.00	0.05	0.24	0.00
Sat Flow, veh/h	1781	1870	3170	3456	2368	1084	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	18	128	231	714	159	158	118	133	0	64	643	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1675	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	5.0	5.3	15.1	4.9	5.2	2.6	2.2	0.0	2.7	13.0	0.0
Cycle Q Clear(g_c), s	0.8	5.0	5.3	15.1	4.9	5.2	2.6	2.2	0.0	2.7	13.0	0.0
Prop In Lane	1.00		1.00	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	241	409	871	640	604	205	900		86	861	
V/C Ratio(X)	0.49	0.53	0.56	0.82	0.25	0.26	0.57	0.15		0.74	0.75	
Avail Cap(c_a), veh/h	133	309	524	1596	981	925	357	1688		230	1779	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	31.6	31.7	27.3	17.4	17.5	35.5	22.4	0.0	36.4	27.2	0.0
Incr Delay (d2), s/veh	9.6	1.8	1.2	2.0	0.2	0.2	2.5	0.1	0.0	12.0	1.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.2	1.9	5.7	1.7	1.7	1.1	0.8	0.0	1.4	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.2	33.4	32.9	29.3	17.6	17.7	38.0	22.5	0.0	48.4	28.5	0.0
LnGrp LOS	D	C	C	C	B	B	D	C		D	C	
Approach Vol, veh/h		377			1031			251			707	
Approach Delay, s/veh		33.8			25.7			29.8			30.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	25.8	25.7	16.2	10.6	25.0	7.8	34.1
Change Period (Y+Rc), s	6.0	6.2	6.2	6.2	6.0	6.2	6.2	6.2
Max Green Setting (Gmax), s	10.0	36.8	35.8	12.8	8.0	38.8	5.8	42.8
Max Q Clear Time (g_c+I1), s	4.7	4.2	17.1	7.3	4.6	15.0	2.8	7.2
Green Ext Time (p_c), s	0.0	0.7	2.4	0.7	0.1	3.8	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	28.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	0	1046	0	0	0	0	566	322	172	1168	0
Future Volume (veh/h)	33	0	1046	0	0	0	0	566	322	172	1168	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	25	0	1188				0	636	0	193	1312	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	760	0	1353				0	1525		264	1535	0
Arrive On Green	0.43	0.00	0.43				0.00	0.30	0.00	0.08	0.43	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	3456	3647	0
Grp Volume(v), veh/h	25	0	1188				0	636	0	193	1312	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	1728	1777	0
Q Serve(g_s), s	0.8	0.0	34.5				0.0	10.0	0.0	5.5	33.4	0.0
Cycle Q Clear(g_c), s	0.8	0.0	34.5				0.0	10.0	0.0	5.5	33.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	760	0	1353				0	1525		264	1535	0
V/C Ratio(X)	0.03	0.00	0.88				0.00	0.42		0.73	0.85	0.00
Avail Cap(c_a), veh/h	941	0	1674				0	1791		410	1869	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.7	0.0	26.4				0.0	28.2	0.0	45.3	25.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	5.0				0.0	0.2	0.0	3.9	3.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	12.8				0.0	3.8	0.0	2.4	13.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.8	0.0	31.4				0.0	28.4	0.0	49.2	29.2	0.0
LnGrp LOS	B		C					C		D	C	
Approach Vol, veh/h		1213						636			1505	
Approach Delay, s/veh		31.1						28.4			31.7	
Approach LOS		C						C			C	

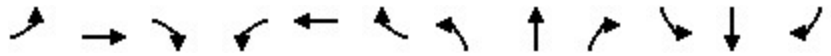
Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	13.4	37.2	49.8	50.5
Change Period (Y+Rc), s	5.7	7.2	7.0	7.2
Max Green Setting (Gmax), s	11.3	35.2	53.0	52.8
Max Q Clear Time (g_c+I1), s	7.5	12.0	36.5	35.4
Green Ext Time (p_c), s	0.2	3.8	6.3	8.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.9
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	584	35	98	503	0	18	0	41	0	0	0
Future Volume (veh/h)	0	584	35	98	503	0	18	0	41	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	1870	1870	1870			
Adj Flow Rate, veh/h	0	621	37	104	535	0	19	0	44			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	2	2	2	0	2	2	2			
Cap, veh/h	6	1635	97	172	2947	0	121	0	108			
Arrive On Green	0.00	0.33	0.33	0.10	0.58	0.00	0.07	0.00	0.07			
Sat Flow, veh/h	1781	4930	292	1781	5274	0	1781	0	1585			
Grp Volume(v), veh/h	0	428	230	104	535	0	19	0	44			
Grp Sat Flow(s),veh/h/ln	1781	1702	1818	1781	1702	0	1781	0	1585			
Q Serve(g_s), s	0.0	2.9	2.9	1.7	1.5	0.0	0.3	0.0	0.8			
Cycle Q Clear(g_c), s	0.0	2.9	2.9	1.7	1.5	0.0	0.3	0.0	0.8			
Prop In Lane	1.00		0.16	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	6	1129	603	172	2947	0	121	0	108			
V/C Ratio(X)	0.00	0.38	0.38	0.61	0.18	0.00	0.16	0.00	0.41			
Avail Cap(c_a), veh/h	295	5508	2941	1388	11395	0	1920	0	1708			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	7.7	7.7	13.1	3.0	0.0	13.2	0.0	13.5			
Incr Delay (d2), s/veh	0.0	0.2	0.4	3.4	0.0	0.0	0.6	0.0	2.5			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.5	0.6	0.0	0.0	0.1	0.0	0.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	7.9	8.1	16.5	3.0	0.0	13.8	0.0	15.9			
LnGrp LOS		A	A	B	A		B		B			
Approach Vol, veh/h		658			639			63				
Approach Delay, s/veh		8.0			5.2			15.3				
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	7.4	16.2			0.0	23.6		6.6				
Change Period (Y+Rc), s	4.5	6.2			4.5	6.2		4.5				
Max Green Setting (Gmax), s	23.5	48.8			5.0	67.3		32.5				
Max Q Clear Time (g_c+I1), s	3.7	4.9			0.0	3.5		2.8				
Green Ext Time (p_c), s	0.2	4.1			0.0	3.5		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	7.0
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	0	0	43	0
Future Vol, veh/h	0	17	0	0	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	0	0	47	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	93	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	93	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	906	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	906	-	-	-	-	-
Mov Cap-2 Maneuver	906	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-

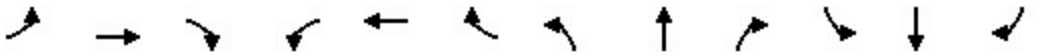
Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	618	5	48	604	0	16
Future Vol, veh/h	618	5	48	604	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	651	5	51	636	0	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	656	0	-	328
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-	3.92
Pot Cap-1 Maneuver	-	-	572	-	0	570
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	572	-	-	570
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.88	11.51
HCM LOS			B

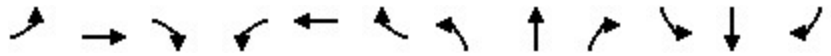
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	570	-	-	572	-
HCM Lane V/C Ratio	0.03	-	-	0.088	-
HCM Ctrl Dly (s/v)	11.5	-	-	11.9	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	566	26	6	618	11	11	1	9	8	0	20
Future Volume (veh/h)	42	566	26	6	618	11	11	1	9	8	0	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	609	28	6	665	12	12	1	10	9	0	22
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	1706	78	14	1521	472	28	8	76	21	0	77
Arrive On Green	0.05	0.34	0.34	0.01	0.30	0.30	0.02	0.05	0.05	0.01	0.00	0.05
Sat Flow, veh/h	3456	5004	229	1781	5106	1585	1781	146	1461	1781	0	1585
Grp Volume(v), veh/h	45	413	224	6	665	12	12	0	11	9	0	22
Grp Sat Flow(s),veh/h/ln	1728	1702	1829	1781	1702	1585	1781	0	1607	1781	0	1585
Q Serve(g_s), s	0.4	3.1	3.1	0.1	3.5	0.2	0.2	0.0	0.2	0.2	0.0	0.4
Cycle Q Clear(g_c), s	0.4	3.1	3.1	0.1	3.5	0.2	0.2	0.0	0.2	0.2	0.0	0.4
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.91	1.00		1.00
Lane Grp Cap(c), veh/h	176	1160	624	14	1521	472	28	0	84	21	0	77
V/C Ratio(X)	0.26	0.36	0.36	0.42	0.44	0.03	0.43	0.00	0.13	0.42	0.00	0.29
Avail Cap(c_a), veh/h	1081	4240	2278	504	6207	1927	504	0	1892	504	0	1865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	8.3	8.3	16.6	9.5	8.3	16.4	0.0	15.2	16.5	0.0	15.4
Incr Delay (d2), s/veh	0.8	0.2	0.3	17.9	0.2	0.0	9.9	0.0	0.7	12.6	0.0	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.7	0.1	0.7	0.0	0.2	0.0	0.1	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.1	8.5	8.7	34.5	9.7	8.4	26.3	0.0	15.9	29.1	0.0	17.5
LnGrp LOS	B	A	A	C	A	A	C		B	C		B
Approach Vol, veh/h		682			683			23			31	
Approach Delay, s/veh		9.0			9.9			21.3			20.8	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	17.6	5.0	6.1	6.2	16.2	4.9	6.2
Change Period (Y+Rc), s	4.5	6.2	4.5	4.5	4.5	6.2	4.5	4.5
Max Green Setting (Gmax), s	9.5	41.8	9.5	39.5	10.5	40.8	9.5	39.5
Max Q Clear Time (g_c+I1), s	2.1	5.1	2.2	2.4	2.4	5.5	2.2	2.2
Green Ext Time (p_c), s	0.0	3.9	0.0	0.1	0.0	4.5	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.9
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	454	51	33	526	118	61	6	42	152	15	36
Future Volume (veh/h)	75	454	51	33	526	118	61	6	42	152	15	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	483	54	35	560	126	65	6	45	162	16	38
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	1231	136	71	1184	368	112	19	144	343	68	161
Arrive On Green	0.07	0.26	0.26	0.04	0.23	0.23	0.06	0.10	0.10	0.10	0.14	0.14
Sat Flow, veh/h	3456	4668	514	1781	5106	1585	1781	190	1424	3456	492	1168
Grp Volume(v), veh/h	80	350	187	35	560	126	65	0	51	162	0	54
Grp Sat Flow(s),veh/h/ln	1728	1702	1778	1781	1702	1585	1781	0	1614	1728	0	1660
Q Serve(g_s), s	0.9	3.6	3.7	0.8	4.1	2.9	1.5	0.0	1.3	1.9	0.0	1.3
Cycle Q Clear(g_c), s	0.9	3.6	3.7	0.8	4.1	2.9	1.5	0.0	1.3	1.9	0.0	1.3
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.88	1.00		0.70
Lane Grp Cap(c), veh/h	247	898	469	71	1184	368	112	0	163	343	0	228
V/C Ratio(X)	0.32	0.39	0.40	0.49	0.47	0.34	0.58	0.00	0.31	0.47	0.00	0.24
Avail Cap(c_a), veh/h	866	2590	1353	446	3885	1206	599	0	1479	1242	0	1560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.0	13.0	13.1	20.3	14.3	13.8	19.7	0.0	18.0	18.3	0.0	16.6
Incr Delay (d2), s/veh	0.8	0.3	0.5	5.3	0.3	0.6	4.7	0.0	1.1	1.0	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.0	1.1	0.4	1.2	0.9	0.7	0.0	0.5	0.7	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.8	13.3	13.6	25.5	14.6	14.4	24.4	0.0	19.1	19.4	0.0	17.1
LnGrp LOS	B	B	B	C	B	B	C		B	B		B
Approach Vol, veh/h		617			721			116			216	
Approach Delay, s/veh		14.2			15.1			22.0			18.8	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	17.6	7.2	10.4	9.3	16.2	8.8	8.8
Change Period (Y+Rc), s	6.2	6.2	4.5	4.5	6.2	6.2	4.5	4.5
Max Green Setting (Gmax), s	10.8	32.8	14.5	40.5	10.8	32.8	15.5	39.5
Max Q Clear Time (g_c+I1), s	2.8	5.7	3.5	3.3	2.9	6.1	3.9	3.3
Green Ext Time (p_c), s	0.0	3.1	0.1	0.3	0.1	3.9	0.4	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	15.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	241	137	49	221	267	162	399	30	355	1347	484
Future Volume (veh/h)	239	241	137	49	221	267	162	399	30	355	1347	484
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	260	262	149	53	240	0	176	434	33	386	1464	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	654	292	149	444		259	1569	118	498	2006	
Arrive On Green	0.10	0.18	0.18	0.04	0.12	0.00	0.07	0.32	0.32	0.14	0.39	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	4845	364	3456	5106	1585
Grp Volume(v), veh/h	260	262	149	53	240	0	176	303	164	386	1464	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1805	1728	1702	1585
Q Serve(g_s), s	5.8	5.2	6.8	1.2	5.1	0.0	4.0	5.3	5.4	8.6	19.5	0.0
Cycle Q Clear(g_c), s	5.8	5.2	6.8	1.2	5.1	0.0	4.0	5.3	5.4	8.6	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	354	654	292	149	444		259	1102	584	498	2006	
V/C Ratio(X)	0.73	0.40	0.51	0.35	0.54		0.68	0.28	0.28	0.78	0.73	
Avail Cap(c_a), veh/h	561	1678	749	216	1323		389	1395	740	863	2794	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.9	28.8	29.4	37.2	32.9	0.0	36.1	20.1	20.1	33.0	20.7	0.0
Incr Delay (d2), s/veh	3.0	0.4	1.4	1.4	1.0	0.0	3.1	0.1	0.3	2.6	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	2.5	0.5	2.1	0.0	1.6	1.9	2.0	3.4	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	29.2	30.8	38.6	33.9	0.0	39.2	20.2	20.4	35.7	21.3	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		671			293			643			1850	
Approach Delay, s/veh		32.9			34.7			25.5			24.3	
Approach LOS		C			C			C			C	

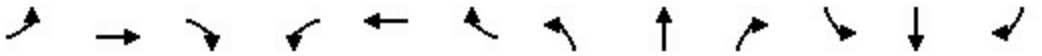
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	32.1	9.5	20.9	12.0	37.7	14.2	16.2
Change Period (Y+Rc), s	6.0	6.2	6.0	6.2	6.0	6.2	6.0	6.2
Max Green Setting (Gmax), s	20.0	32.8	5.0	37.8	9.0	43.8	13.0	29.8
Max Q Clear Time (g_c+I1), s	10.6	7.4	3.2	8.8	6.0	21.5	7.8	7.1
Green Ext Time (p_c), s	0.9	2.5	0.0	2.0	0.1	9.9	0.4	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	27.1
HCM 7th LOS	C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix H:
Existing Year 2026 With Project PM Peak Hour Analysis Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	79	200	449	175	172	219	450	58	22	382	8
Future Volume (veh/h)	18	79	200	449	175	172	219	450	58	22	382	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	85	215	483	188	185	235	484	0	24	411	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	290	491	643	566	505	355	892		48	623	
Arrive On Green	0.02	0.15	0.15	0.19	0.32	0.32	0.10	0.25	0.00	0.03	0.18	0.00
Sat Flow, veh/h	1781	1870	3170	3456	1777	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	19	85	215	483	188	185	235	484	0	24	411	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	2.6	4.0	8.5	5.2	5.8	4.2	7.6	0.0	0.9	7.0	0.0
Cycle Q Clear(g_c), s	0.7	2.6	4.0	8.5	5.2	5.8	4.2	7.6	0.0	0.9	7.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	290	491	643	566	505	355	892		48	623	
V/C Ratio(X)	0.48	0.29	0.44	0.75	0.33	0.37	0.66	0.54		0.50	0.66	
Avail Cap(c_a), veh/h	188	400	677	1434	930	830	856	2685		166	2135	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.2	24.2	24.7	24.9	16.8	17.0	27.9	21.0	0.0	31.0	24.8	0.0
Incr Delay (d2), s/veh	8.6	0.6	0.6	1.8	0.3	0.4	2.1	0.5	0.0	7.7	1.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.1	1.3	3.1	1.8	1.8	1.6	2.7	0.0	0.4	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.8	24.7	25.4	26.7	17.1	17.4	30.0	21.5	0.0	38.7	26.0	0.0
LnGrp LOS	D	C	C	C	B	B	C	C		D	C	
Approach Vol, veh/h		319			856			719			435	
Approach Delay, s/veh		26.0			22.6			24.3			26.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	22.4	18.2	16.2	12.6	17.5	7.6	26.8
Change Period (Y+Rc), s	6.0	6.2	6.2	6.2	6.0	6.2	6.2	6.2
Max Green Setting (Gmax), s	6.0	48.8	26.8	13.8	16.0	38.8	6.8	33.8
Max Q Clear Time (g_c+I1), s	2.9	9.6	10.5	6.0	6.2	9.0	2.7	7.8
Green Ext Time (p_c), s	0.0	2.9	1.5	0.7	0.5	2.4	0.0	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	24.3
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	0	743	0	0	0	0	1514	645	152	841	0
Future Volume (veh/h)	32	0	743	0	0	0	0	1514	645	152	841	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	23	0	794				0	1594	0	160	885	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	532	0	948				0	2117		234	1937	0
Arrive On Green	0.30	0.00	0.30				0.00	0.41	0.00	0.07	0.55	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	3456	3647	0
Grp Volume(v), veh/h	23	0	794				0	1594	0	160	885	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	1728	1777	0
Q Serve(g_s), s	0.8	0.0	21.3				0.0	24.2	0.0	4.1	13.7	0.0
Cycle Q Clear(g_c), s	0.8	0.0	21.3				0.0	24.2	0.0	4.1	13.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	532	0	948				0	2117		234	1937	0
V/C Ratio(X)	0.04	0.00	0.84				0.00	0.75		0.68	0.46	0.00
Avail Cap(c_a), veh/h	764	0	1359				0	2845		395	2609	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.7	0.0	29.8				0.0	22.7	0.0	41.4	12.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.6				0.0	0.8	0.0	3.5	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	8.0				0.0	8.5	0.0	1.8	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.7	0.0	33.4				0.0	23.5	0.0	44.9	12.7	0.0
LnGrp LOS	C		C					C		D	B	
Approach Vol, veh/h		817						1594			1045	
Approach Delay, s/veh		33.1						23.5			17.6	
Approach LOS		C						C			B	

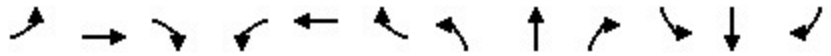
Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	11.9	44.9	34.2	56.8
Change Period (Y+Rc), s	5.7	7.2	7.0	7.2
Max Green Setting (Gmax), s	10.4	50.7	39.0	66.8
Max Q Clear Time (g_c+I1), s	6.1	26.2	23.3	15.7
Green Ext Time (p_c), s	0.2	11.5	3.9	6.2

Intersection Summary	
HCM 7th Control Delay, s/veh	24.0
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	679	61	85	878	0	63	0	91	0	0	0
Future Volume (veh/h)	0	679	61	85	878	0	63	0	91	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	1870	1870	1870			
Adj Flow Rate, veh/h	0	738	66	92	954	0	68	0	99			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	0	2	2	2			
Cap, veh/h	5	1618	144	153	2861	0	210	0	187			
Arrive On Green	0.00	0.34	0.34	0.09	0.56	0.00	0.12	0.00	0.12			
Sat Flow, veh/h	1781	4774	424	1781	5274	0	1781	0	1585			
Grp Volume(v), veh/h	0	525	279	92	954	0	68	0	99			
Grp Sat Flow(s),veh/h/ln	1781	1702	1794	1781	1702	0	1781	0	1585			
Q Serve(g_s), s	0.0	4.0	4.1	1.7	3.4	0.0	1.2	0.0	2.0			
Cycle Q Clear(g_c), s	0.0	4.0	4.1	1.7	3.4	0.0	1.2	0.0	2.0			
Prop In Lane	1.00		0.24	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	5	1154	608	153	2861	0	210	0	187			
V/C Ratio(X)	0.00	0.45	0.46	0.60	0.33	0.00	0.32	0.00	0.53			
Avail Cap(c_a), veh/h	268	5810	3062	776	10173	0	1793	0	1596			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	8.6	8.6	14.7	4.0	0.0	13.5	0.0	13.8			
Incr Delay (d2), s/veh	0.0	0.3	0.5	3.7	0.1	0.0	0.9	0.0	2.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.9	0.6	0.1	0.0	0.4	0.0	0.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	8.9	9.1	18.4	4.0	0.0	14.3	0.0	16.1			
LnGrp LOS		A	A	B	A		B		B			
Approach Vol, veh/h		804			1046			167				
Approach Delay, s/veh		9.0			5.3			15.4				
Approach LOS		A			A			B				
Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	7.4	17.5			0.0	24.8		8.4				
Change Period (Y+Rc), s	4.5	6.2			4.5	6.2		4.5				
Max Green Setting (Gmax), s	4.5	56.8			5.0	66.3		33.5				
Max Q Clear Time (g_c+I1), s	3.7	6.1			0.0	5.4		4.0				
Green Ext Time (p_c), s	0.1	5.2			0.0	7.2		0.8				
Intersection Summary												
HCM 7th Control Delay, s/veh			7.6									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	105	0	0	106	0
Future Vol, veh/h	0	105	0	0	106	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	114	0	0	115	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	230	0	0	0	0	0
Stage 1	0	-	-	-	-	-
Stage 2	230	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	758	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	758	-	-	-	-	-
Mov Cap-2 Maneuver	758	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	808	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v		0	
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-

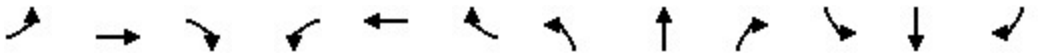
Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	745	26	84	963	0	83
Future Vol, veh/h	745	26	84	963	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	810	28	91	1047	0	90

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	838	0	-	419
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-	3.92
Pot Cap-1 Maneuver	-	-	468	-	0	498
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	468	-	-	498
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1.17	13.82
HCM LOS			B

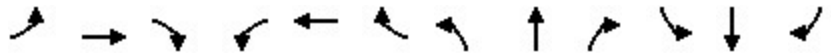
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	498	-	-	468	-
HCM Lane V/C Ratio	0.181	-	-	0.195	-
HCM Ctrl Dly (s/v)	13.8	-	-	14.5	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.7	-	-	0.7	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	717	61	37	864	12	59	1	44	21	8	125
Future Volume (veh/h)	53	717	61	37	864	12	59	1	44	21	8	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	779	66	40	939	13	64	1	48	23	9	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	1641	138	77	1679	521	107	6	269	49	14	211
Arrive On Green	0.06	0.34	0.34	0.04	0.33	0.33	0.06	0.17	0.17	0.03	0.14	0.14
Sat Flow, veh/h	3456	4797	404	1781	5106	1585	1781	32	1558	1781	99	1501
Grp Volume(v), veh/h	58	552	293	40	939	13	64	0	49	23	0	145
Grp Sat Flow(s),veh/h/ln	1728	1702	1798	1781	1702	1585	1781	0	1590	1781	0	1600
Q Serve(g_s), s	0.8	6.0	6.1	1.0	7.2	0.3	1.7	0.0	1.3	0.6	0.0	4.1
Cycle Q Clear(g_c), s	0.8	6.0	6.1	1.0	7.2	0.3	1.7	0.0	1.3	0.6	0.0	4.1
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.98	1.00		0.94
Lane Grp Cap(c), veh/h	194	1164	615	77	1679	521	107	0	275	49	0	225
V/C Ratio(X)	0.30	0.47	0.48	0.52	0.56	0.02	0.60	0.00	0.18	0.47	0.00	0.65
Avail Cap(c_a), veh/h	545	2492	1316	356	3953	1227	506	0	1589	319	0	1431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.5	12.3	12.3	22.3	13.1	10.8	21.8	0.0	16.8	22.8	0.0	19.3
Incr Delay (d2), s/veh	0.8	0.3	0.6	5.4	0.3	0.0	5.3	0.0	0.3	6.8	0.0	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.7	1.8	0.5	2.0	0.1	0.8	0.0	0.4	0.3	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.4	12.6	12.9	27.6	13.4	10.8	27.1	0.0	17.1	29.6	0.0	22.4
LnGrp LOS	C	B	B	C	B	B	C		B	C		C
Approach Vol, veh/h		903			992			113			168	
Approach Delay, s/veh		13.3			13.9			22.7			23.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	22.5	7.4	11.2	7.2	21.8	5.8	12.7
Change Period (Y+Rc), s	4.5	6.2	4.5	4.5	4.5	6.2	4.5	4.5
Max Green Setting (Gmax), s	9.5	34.8	13.5	42.5	7.5	36.8	8.5	47.5
Max Q Clear Time (g_c+I1), s	3.0	8.1	3.7	6.1	2.8	9.2	2.6	3.3
Green Ext Time (p_c), s	0.0	5.2	0.1	1.0	0.0	6.4	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	14.9
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	618	31	70	676	199	87	27	98	484	28	138
Future Volume (veh/h)	137	618	31	70	676	199	87	27	98	484	28	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	140	631	32	71	690	203	89	28	100	494	29	141
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1235	62	105	1172	364	117	44	158	683	71	344
Arrive On Green	0.08	0.25	0.25	0.06	0.23	0.23	0.07	0.12	0.12	0.20	0.25	0.25
Sat Flow, veh/h	3456	4978	251	1781	5106	1585	1781	359	1281	3456	278	1350
Grp Volume(v), veh/h	140	431	232	71	690	203	89	0	128	494	0	170
Grp Sat Flow(s),veh/h/ln	1728	1702	1825	1781	1702	1585	1781	0	1640	1728	0	1627
Q Serve(g_s), s	2.2	6.3	6.3	2.2	6.9	6.5	2.8	0.0	4.3	7.7	0.0	5.0
Cycle Q Clear(g_c), s	2.2	6.3	6.3	2.2	6.9	6.5	2.8	0.0	4.3	7.7	0.0	5.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.78	1.00		0.83
Lane Grp Cap(c), veh/h	268	845	453	105	1172	364	117	0	202	683	0	415
V/C Ratio(X)	0.52	0.51	0.51	0.68	0.59	0.56	0.76	0.00	0.63	0.72	0.00	0.41
Avail Cap(c_a), veh/h	589	1349	723	334	2112	656	387	0	1126	1532	0	1485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.5	18.6	18.6	26.5	19.7	19.6	26.4	0.0	24.0	21.6	0.0	17.8
Incr Delay (d2), s/veh	1.6	0.5	0.9	7.4	0.5	1.3	9.5	0.0	3.3	1.5	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.1	2.3	1.0	2.3	2.4	1.5	0.0	1.8	3.1	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.1	19.1	19.5	33.9	20.2	20.9	35.9	0.0	27.3	23.1	0.0	18.5
LnGrp LOS	C	B	B	C	C	C	D		C	C		B
Approach Vol, veh/h		803			964			217			664	
Approach Delay, s/veh		20.6			21.4			30.8			21.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	20.5	8.3	19.2	10.7	19.4	15.9	11.6
Change Period (Y+Rc), s	6.2	6.2	4.5	4.5	6.2	6.2	4.5	4.5
Max Green Setting (Gmax), s	10.8	22.8	12.5	52.5	9.8	23.8	25.5	39.5
Max Q Clear Time (g_c+I1), s	4.2	8.3	4.8	7.0	4.2	8.9	9.7	6.3
Green Ext Time (p_c), s	0.1	3.2	0.1	1.2	0.2	4.3	1.7	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	22.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	584	396	281	62	382	573	337	1032	60	315	815	402
Future Volume (veh/h)	584	396	281	62	382	573	337	1032	60	315	815	402
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	608	412	293	65	398	0	351	1075	62	328	849	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	691	1090	486	150	535		424	1343	77	407	1362	
Arrive On Green	0.20	0.31	0.31	0.04	0.15	0.00	0.12	0.27	0.27	0.12	0.27	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	4939	285	3456	5106	1585
Grp Volume(v), veh/h	608	412	293	65	398	0	351	741	396	328	849	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1819	1728	1702	1585
Q Serve(g_s), s	16.0	8.5	14.8	1.7	10.1	0.0	9.3	19.0	19.0	8.7	13.7	0.0
Cycle Q Clear(g_c), s	16.0	8.5	14.8	1.7	10.1	0.0	9.3	19.0	19.0	8.7	13.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	691	1090	486	150	535		424	926	495	407	1362	
V/C Ratio(X)	0.88	0.38	0.60	0.43	0.74		0.83	0.80	0.80	0.81	0.62	
Avail Cap(c_a), veh/h	773	1734	774	184	1128		479	1117	597	516	1730	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.5	25.5	27.7	43.8	38.1	0.0	40.2	31.8	31.8	40.4	30.3	0.0
Incr Delay (d2), s/veh	10.6	0.2	1.2	2.0	2.1	0.0	10.4	3.5	6.5	7.3	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	3.4	5.3	0.7	4.3	0.0	4.3	7.5	8.5	3.9	5.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.1	25.7	28.9	45.7	40.2	0.0	50.6	35.3	38.3	47.7	30.7	0.0
LnGrp LOS	D	C	C	D	D		D	D	D	D	C	
Approach Vol, veh/h		1313			463			1488			1177	
Approach Delay, s/veh		36.3			41.0			39.7			35.5	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	31.7	10.1	35.0	17.5	31.2	24.8	20.3
Change Period (Y+Rc), s	6.0	6.2	6.0	6.2	6.0	6.2	6.0	6.2
Max Green Setting (Gmax), s	11.0	30.8	5.0	45.8	13.0	31.8	21.0	29.8
Max Q Clear Time (g_c+I1), s	10.7	21.0	3.7	16.8	11.3	15.7	18.0	12.1
Green Ext Time (p_c), s	0.4	4.5	0.0	3.5	0.2	4.6	0.7	2.1

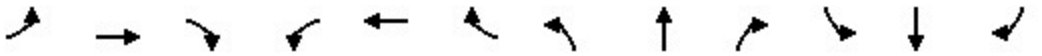
Intersection Summary	
HCM 7th Control Delay, s/veh	37.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix I:
Opening Year 2027 Without Project AM Peak Hour Analysis Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	115	207	670	193	92	106	137	187	57	586	10
Future Volume (veh/h)	16	115	207	670	193	92	106	137	187	57	586	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	131	235	761	219	105	120	156	0	65	666	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	233	395	916	871	403	200	912		85	875	
Arrive On Green	0.02	0.12	0.12	0.27	0.37	0.37	0.06	0.26	0.00	0.05	0.25	0.00
Sat Flow, veh/h	1781	1870	3170	3456	2359	1091	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	18	131	235	761	163	161	120	156	0	65	666	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1674	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	5.3	5.6	16.7	5.1	5.4	2.7	2.7	0.0	2.9	14.0	0.0
Cycle Q Clear(g_c), s	0.8	5.3	5.6	16.7	5.1	5.4	2.7	2.7	0.0	2.9	14.0	0.0
Prop In Lane	1.00		1.00	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	233	395	916	656	618	200	912		85	875	
V/C Ratio(X)	0.49	0.56	0.60	0.83	0.25	0.26	0.60	0.17		0.77	0.76	
Avail Cap(c_a), veh/h	129	298	505	1626	991	933	344	1584		200	1628	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.9	33.1	33.3	27.8	17.6	17.7	36.9	23.2	0.0	37.8	28.1	0.0
Incr Delay (d2), s/veh	9.8	2.1	1.4	2.0	0.2	0.2	2.9	0.1	0.0	13.3	1.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.4	2.0	6.3	1.8	1.8	1.1	1.0	0.0	1.5	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.7	35.2	34.7	29.8	17.8	17.9	39.8	23.3	0.0	51.1	29.5	0.0
LnGrp LOS	D	D	C	C	B	B	D	C		D	C	
Approach Vol, veh/h		384			1085			276			731	
Approach Delay, s/veh		35.5			26.3			30.5			31.4	
Approach LOS		D			C			C			C	

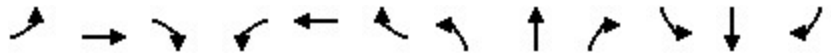
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	26.8	27.5	16.2	10.7	26.0	7.9	35.8
Change Period (Y+Rc), s	6.0	6.2	6.2	6.2	6.0	6.2	6.2	6.2
Max Green Setting (Gmax), s	9.0	35.8	37.8	12.8	8.0	36.8	5.8	44.8
Max Q Clear Time (g_c+I1), s	4.9	4.7	18.7	7.6	4.7	16.0	2.8	7.4
Green Ext Time (p_c), s	0.0	0.8	2.6	0.7	0.1	3.8	0.0	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	29.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	0	1154	0	0	0	0	819	397	175	1230	0
Future Volume (veh/h)	34	0	1154	0	0	0	0	819	397	175	1230	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	25	0	1311				0	920	0	197	1382	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	796	0	1416				0	1544		260	1521	0
Arrive On Green	0.45	0.00	0.45				0.00	0.30	0.00	0.08	0.43	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	3456	3647	0
Grp Volume(v), veh/h	25	0	1311				0	920	0	197	1382	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	1728	1777	0
Q Serve(g_s), s	0.9	0.0	44.2				0.0	17.4	0.0	6.3	41.3	0.0
Cycle Q Clear(g_c), s	0.9	0.0	44.2				0.0	17.4	0.0	6.3	41.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	796	0	1416				0	1544		260	1521	0
V/C Ratio(X)	0.03	0.00	0.93				0.00	0.60		0.76	0.91	0.00
Avail Cap(c_a), veh/h	849	0	1511				0	1544		375	1624	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.6	0.0	29.6				0.0	33.6	0.0	51.4	30.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	9.9				0.0	0.6	0.0	5.3	7.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	17.4				0.0	6.8	0.0	2.8	17.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.6	0.0	39.4				0.0	34.3	0.0	56.7	37.9	0.0
LnGrp LOS	B		D					C		E	D	
Approach Vol, veh/h		1336						920			1579	
Approach Delay, s/veh		39.0						34.3			40.3	
Approach LOS		D						C			D	

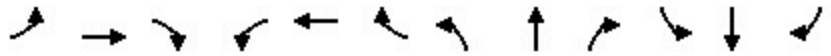
Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	14.2	41.5	57.6	55.7
Change Period (Y+Rc), s	5.7	7.2	7.0	7.2
Max Green Setting (Gmax), s	12.3	33.8	54.0	51.8
Max Q Clear Time (g_c+I1), s	8.3	19.4	46.2	43.3
Green Ext Time (p_c), s	0.2	4.8	4.4	5.3

Intersection Summary	
HCM 7th Control Delay, s/veh	38.4
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	646	41	106	554	0	49	0	170	0	0	0
Future Volume (veh/h)	0	646	41	106	554	0	49	0	170	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	1870	1870	1870			
Adj Flow Rate, veh/h	0	687	44	113	589	0	52	0	181			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	2	2	2	0	2	2	2			
Cap, veh/h	5	1458	93	168	2645	0	323	0	288			
Arrive On Green	0.00	0.30	0.30	0.09	0.52	0.00	0.18	0.00	0.18			
Sat Flow, veh/h	1781	4906	313	1781	5274	0	1781	0	1585			
Grp Volume(v), veh/h	0	476	255	113	589	0	52	0	181			
Grp Sat Flow(s),veh/h/ln	1781	1702	1814	1781	1702	0	1781	0	1585			
Q Serve(g_s), s	0.0	4.1	4.1	2.2	2.2	0.0	0.9	0.0	3.8			
Cycle Q Clear(g_c), s	0.0	4.1	4.1	2.2	2.2	0.0	0.9	0.0	3.8			
Prop In Lane	1.00		0.17	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	5	1012	539	168	2645	0	323	0	288			
V/C Ratio(X)	0.00	0.47	0.47	0.67	0.22	0.00	0.16	0.00	0.63			
Avail Cap(c_a), veh/h	250	3708	1976	1375	8788	0	1925	0	1713			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	10.2	10.2	15.6	4.7	0.0	12.3	0.0	13.5			
Incr Delay (d2), s/veh	0.0	0.3	0.6	4.6	0.0	0.0	0.2	0.0	2.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.9	1.0	0.8	0.2	0.0	0.3	0.0	1.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	10.6	10.9	20.2	4.7	0.0	12.5	0.0	15.7			
LnGrp LOS		B	B	C	A		B		B			
Approach Vol, veh/h		731			702			233				
Approach Delay, s/veh		10.7			7.2			15.0				
Approach LOS		B			A			B				

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	7.9	16.8			0.0	24.7		11.0				
Change Period (Y+Rc), s	4.5	6.2			4.5	6.2		4.5				
Max Green Setting (Gmax), s	27.5	38.8			5.0	61.3		38.5				
Max Q Clear Time (g_c+I1), s	4.2	6.1			0.0	4.2		5.8				
Green Ext Time (p_c), s	0.3	4.5			0.0	4.0		1.4				

Intersection Summary		
HCM 7th Control Delay, s/veh	9.8	
HCM 7th LOS	A	

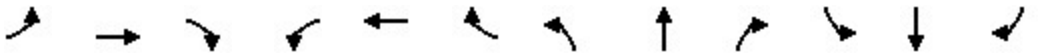
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	808	5	14	663	0	2
Future Vol, veh/h	808	5	14	663	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	851	5	15	698	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	856	0	-	428
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-	3.92
Pot Cap-1 Maneuver	-	-	459	-	0	492
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	459	-	-	492
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.27	12.35
HCM LOS			B

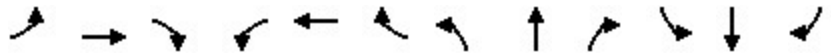
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	492	-	-	459	-
HCM Lane V/C Ratio	0.004	-	-	0.032	-
HCM Ctrl Dly (s/v)	12.4	-	-	13.1	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	739	28	6	645	11	10	1	9	8	0	19
Future Volume (veh/h)	43	739	28	6	645	11	10	1	9	8	0	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	795	30	6	694	12	11	1	10	9	0	20
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	1770	67	14	1567	486	26	7	71	21	0	73
Arrive On Green	0.05	0.35	0.35	0.01	0.31	0.31	0.01	0.05	0.05	0.01	0.00	0.05
Sat Flow, veh/h	3456	5050	190	1781	5106	1585	1781	146	1461	1781	0	1585
Grp Volume(v), veh/h	46	535	290	6	694	12	11	0	11	9	0	20
Grp Sat Flow(s),veh/h/ln	1728	1702	1836	1781	1702	1585	1781	0	1607	1781	0	1585
Q Serve(g_s), s	0.4	4.1	4.1	0.1	3.7	0.2	0.2	0.0	0.2	0.2	0.0	0.4
Cycle Q Clear(g_c), s	0.4	4.1	4.1	0.1	3.7	0.2	0.2	0.0	0.2	0.2	0.0	0.4
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.91	1.00		1.00
Lane Grp Cap(c), veh/h	179	1193	644	14	1567	486	26	0	78	21	0	73
V/C Ratio(X)	0.26	0.45	0.45	0.42	0.44	0.02	0.43	0.00	0.14	0.42	0.00	0.27
Avail Cap(c_a), veh/h	967	4394	2370	446	6440	1999	446	0	1871	446	0	1845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	8.5	8.5	16.7	9.4	8.2	16.6	0.0	15.5	16.6	0.0	15.6
Incr Delay (d2), s/veh	0.7	0.3	0.5	17.9	0.2	0.0	10.7	0.0	0.8	12.7	0.0	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.9	0.1	0.8	0.0	0.2	0.0	0.1	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.2	8.8	9.0	34.7	9.6	8.2	27.3	0.0	16.3	29.3	0.0	17.6
LnGrp LOS	B	A	A	C	A	A	C		B	C		B
Approach Vol, veh/h		871			712			22			29	
Approach Delay, s/veh		9.2			9.8			21.8			21.2	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	18.1	5.0	6.1	6.3	16.6	4.9	6.2
Change Period (Y+Rc), s	4.5	6.2	4.5	4.5	4.5	6.2	4.5	4.5
Max Green Setting (Gmax), s	8.5	43.8	8.5	39.5	9.5	42.8	8.5	39.5
Max Q Clear Time (g_c+I1), s	2.1	6.1	2.2	2.4	2.4	5.7	2.2	2.2
Green Ext Time (p_c), s	0.0	5.3	0.0	0.1	0.0	4.7	0.0	0.0

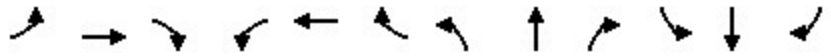
Intersection Summary	
HCM 7th Control Delay, s/veh	9.9
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	620	54	34	550	120	62	6	43	155	15	37
Future Volume (veh/h)	80	620	54	34	550	120	62	6	43	155	15	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	660	57	36	585	128	66	6	46	165	16	39
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	1302	112	72	1219	378	112	19	143	342	66	160
Arrive On Green	0.07	0.27	0.27	0.04	0.24	0.24	0.06	0.10	0.10	0.10	0.14	0.14
Sat Flow, veh/h	3456	4790	411	1781	5106	1585	1781	186	1427	3456	483	1176
Grp Volume(v), veh/h	85	468	249	36	585	128	66	0	52	165	0	55
Grp Sat Flow(s),veh/h/ln	1728	1702	1796	1781	1702	1585	1781	0	1613	1728	0	1659
Q Serve(g_s), s	1.0	5.1	5.1	0.9	4.3	2.9	1.6	0.0	1.3	2.0	0.0	1.3
Cycle Q Clear(g_c), s	1.0	5.1	5.1	0.9	4.3	2.9	1.6	0.0	1.3	2.0	0.0	1.3
Prop In Lane	1.00		0.23	1.00		1.00	1.00		0.88	1.00		0.71
Lane Grp Cap(c), veh/h	254	925	488	72	1219	378	112	0	162	342	0	226
V/C Ratio(X)	0.33	0.51	0.51	0.50	0.48	0.34	0.59	0.00	0.32	0.48	0.00	0.24
Avail Cap(c_a), veh/h	773	2705	1428	399	4057	1260	549	0	1455	1144	0	1534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.3	13.5	13.5	20.6	14.3	13.8	20.0	0.0	18.3	18.7	0.0	16.9
Incr Delay (d2), s/veh	0.8	0.4	0.8	5.3	0.3	0.5	4.8	0.0	1.1	1.1	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.4	1.6	0.4	1.2	1.0	0.7	0.0	0.5	0.8	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.0	13.9	14.3	25.8	14.6	14.3	24.8	0.0	19.5	19.7	0.0	17.5
LnGrp LOS	C	B	B	C	B	B	C		B	B		B
Approach Vol, veh/h		802			749			118			220	
Approach Delay, s/veh		14.7			15.1			22.4			19.2	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	18.1	7.3	10.5	9.4	16.7	8.8	8.9
Change Period (Y+Rc), s	6.2	6.2	4.5	4.5	6.2	6.2	4.5	4.5
Max Green Setting (Gmax), s	9.8	34.8	13.5	40.5	9.8	34.8	14.5	39.5
Max Q Clear Time (g_c+I1), s	2.9	7.1	3.6	3.3	3.0	6.3	4.0	3.3
Green Ext Time (p_c), s	0.0	4.3	0.1	0.3	0.1	4.1	0.4	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	15.9
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	248	182	50	216	272	191	650	31	362	1520	491
Future Volume (veh/h)	358	248	182	50	216	272	191	650	31	362	1520	491
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	389	270	198	54	235	0	208	707	34	393	1652	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	471	729	325	141	390		280	1719	82	489	2068	
Arrive On Green	0.14	0.21	0.21	0.04	0.11	0.00	0.08	0.34	0.34	0.14	0.40	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	4992	239	3456	5106	1585
Grp Volume(v), veh/h	389	270	198	54	235	0	208	481	260	393	1652	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1827	1728	1702	1585
Q Serve(g_s), s	10.0	5.9	10.3	1.4	5.7	0.0	5.4	9.8	9.9	10.0	25.9	0.0
Cycle Q Clear(g_c), s	10.0	5.9	10.3	1.4	5.7	0.0	5.4	9.8	9.9	10.0	25.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	471	729	325	141	390		280	1172	629	489	2068	
V/C Ratio(X)	0.83	0.37	0.61	0.38	0.60		0.74	0.41	0.41	0.80	0.80	
Avail Cap(c_a), veh/h	570	1554	693	190	1164		304	1172	629	759	2401	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.3	31.1	32.9	42.5	38.6	0.0	40.9	22.8	22.8	37.8	23.8	0.0
Incr Delay (d2), s/veh	8.3	0.3	1.8	1.7	1.5	0.0	8.8	0.2	0.4	3.5	1.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.4	3.9	0.6	2.4	0.0	2.5	3.6	3.9	4.2	9.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.5	31.4	34.7	44.2	40.1	0.0	49.7	23.0	23.2	41.4	25.6	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	D	C	
Approach Vol, veh/h		857			289			949			2045	
Approach Delay, s/veh		39.0			40.9			28.9			28.6	
Approach LOS		D			D			C			C	

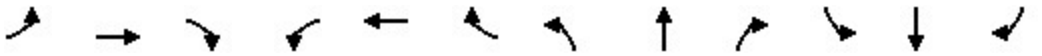
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	37.5	9.7	24.9	13.4	43.1	18.4	16.2
Change Period (Y+Rc), s	6.0	6.2	6.0	6.2	6.0	6.2	6.0	6.2
Max Green Setting (Gmax), s	20.0	30.8	5.0	39.8	8.0	42.8	15.0	29.8
Max Q Clear Time (g_c+I1), s	12.0	11.9	3.4	12.3	7.4	27.9	12.0	7.7
Green Ext Time (p_c), s	0.8	3.9	0.0	2.2	0.0	9.0	0.4	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix J:
Opening Year 2027 Without Project PM Peak Hour Analysis Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	81	204	547	179	175	223	479	227	22	414	8
Future Volume (veh/h)	18	81	204	547	179	175	223	479	227	22	414	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	87	219	588	192	188	240	515	0	24	445	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	270	457	751	603	538	349	914		48	649	
Arrive On Green	0.02	0.14	0.14	0.22	0.34	0.34	0.10	0.26	0.00	0.03	0.18	0.00
Sat Flow, veh/h	1781	1870	3170	3456	1777	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	19	87	219	588	192	188	240	515	0	24	445	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	2.9	4.4	11.1	5.5	6.2	4.7	8.7	0.0	0.9	8.1	0.0
Cycle Q Clear(g_c), s	0.7	2.9	4.4	11.1	5.5	6.2	4.7	8.7	0.0	0.9	8.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	39	270	457	751	603	538	349	914		48	649	
V/C Ratio(X)	0.48	0.32	0.48	0.78	0.32	0.35	0.69	0.56		0.50	0.69	
Avail Cap(c_a), veh/h	149	318	539	1585	969	864	698	2399		128	1937	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.5	26.6	27.3	25.6	17.0	17.2	30.1	22.4	0.0	33.3	26.5	0.0
Incr Delay (d2), s/veh	8.9	0.7	0.8	1.8	0.3	0.4	2.4	0.5	0.0	8.0	1.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.2	1.5	4.1	1.9	1.9	1.8	3.2	0.0	0.5	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.4	27.3	28.1	27.4	17.3	17.6	32.5	22.9	0.0	41.3	27.8	0.0
LnGrp LOS	D	C	C	C	B	B	C	C		D	C	
Approach Vol, veh/h		325			968			755			469	
Approach Delay, s/veh		28.7			23.5			26.0			28.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	24.0	21.3	16.2	13.0	18.9	7.7	29.7
Change Period (Y+Rc), s	6.0	6.2	6.2	6.2	6.0	6.2	6.2	6.2
Max Green Setting (Gmax), s	5.0	46.8	31.8	11.8	14.0	37.8	5.8	37.8
Max Q Clear Time (g_c+I1), s	2.9	10.7	13.1	6.4	6.7	10.1	2.7	8.2
Green Ext Time (p_c), s	0.0	3.1	1.9	0.6	0.4	2.6	0.0	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	25.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	0	986	0	0	0	0	1776	699	155	970	0
Future Volume (veh/h)	33	0	986	0	0	0	0	1776	699	155	970	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	23	0	1051				0	1869	0	163	1021	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	626	0	1113				0	2121		217	1872	0
Arrive On Green	0.35	0.00	0.35				0.00	0.42	0.00	0.06	0.53	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	3456	3647	0
Grp Volume(v), veh/h	23	0	1051				0	1869	0	163	1021	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	1728	1777	0
Q Serve(g_s), s	1.0	0.0	37.5				0.0	39.3	0.0	5.4	22.2	0.0
Cycle Q Clear(g_c), s	1.0	0.0	37.5				0.0	39.3	0.0	5.4	22.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	626	0	1113				0	2121		217	1872	0
V/C Ratio(X)	0.04	0.00	0.94				0.00	0.88		0.75	0.55	0.00
Avail Cap(c_a), veh/h	642	0	1143				0	2227		217	1946	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.8	0.0	36.7				0.0	31.4	0.0	53.7	18.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	15.0				0.0	4.4	0.0	13.8	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	16.0				0.0	15.5	0.0	2.7	8.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.9	0.0	51.7				0.0	35.8	0.0	67.5	18.6	0.0
LnGrp LOS	C		D					D		E	B	
Approach Vol, veh/h		1074						1869			1184	
Approach Delay, s/veh		51.1						35.8			25.3	
Approach LOS		D						D			C	

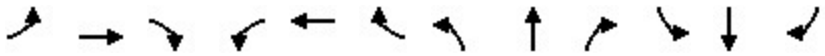
Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	13.0	55.6	47.9	68.6
Change Period (Y+Rc), s	5.7	7.2	7.0	7.2
Max Green Setting (Gmax), s	7.3	50.8	42.0	63.8
Max Q Clear Time (g_c+I1), s	17.4	41.3	39.5	24.2
Green Ext Time (p_c), s	0.0	7.1	1.4	7.5

Intersection Summary	
HCM 7th Control Delay, s/veh	36.8
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	785	69	99	1027	0	48	0	123	0	0	0
Future Volume (veh/h)	0	785	69	99	1027	0	48	0	123	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	1870	1870	1870			
Adj Flow Rate, veh/h	0	853	75	108	1116	0	52	0	134			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	0	2	2	2			
Cap, veh/h	5	1715	150	162	2919	0	246	0	219			
Arrive On Green	0.00	0.36	0.36	0.09	0.57	0.00	0.14	0.00	0.14			
Sat Flow, veh/h	1781	4780	419	1781	5274	0	1781	0	1585			
Grp Volume(v), veh/h	0	606	322	108	1116	0	52	0	134			
Grp Sat Flow(s),veh/h/ln	1781	1702	1795	1781	1702	0	1781	0	1585			
Q Serve(g_s), s	0.0	5.1	5.2	2.2	4.4	0.0	1.0	0.0	2.9			
Cycle Q Clear(g_c), s	0.0	5.1	5.2	2.2	4.4	0.0	1.0	0.0	2.9			
Prop In Lane	1.00		0.23	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	5	1221	644	162	2919	0	246	0	219			
V/C Ratio(X)	0.00	0.50	0.50	0.67	0.38	0.00	0.21	0.00	0.61			
Avail Cap(c_a), veh/h	242	3768	1987	1329	8770	0	1764	0	1570			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	9.2	9.2	16.2	4.3	0.0	14.1	0.0	15.0			
Incr Delay (d2), s/veh	0.0	0.3	0.6	4.7	0.1	0.0	0.4	0.0	2.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	1.1	1.2	0.8	0.3	0.0	0.4	0.0	1.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	9.5	9.8	20.9	4.4	0.0	14.5	0.0	17.7			
LnGrp LOS		A	A	C	A		B		B			
Approach Vol, veh/h		928			1224			186				
Approach Delay, s/veh		9.6			5.9			16.8				
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	7.8	19.4			0.0	27.3		9.6				
Change Period (Y+Rc), s	4.5	6.2			4.5	6.2		4.5				
Max Green Setting (Gmax), s	27.5	40.8			5.0	63.3		36.5				
Max Q Clear Time (g_c+I1), s	4.2	7.2			0.0	6.4		4.9				
Green Ext Time (p_c), s	0.2	6.1			0.0	8.9		1.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	8.2	
HCM 7th LOS	A	

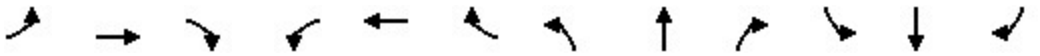
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	882	27	9	1128	0	6
Future Vol, veh/h	882	27	9	1128	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	959	29	10	1226	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	988	0	-	494
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-	3.92
Pot Cap-1 Maneuver	-	-	397	-	0	446
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	397	-	-	446
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.11	13.2
HCM LOS			B

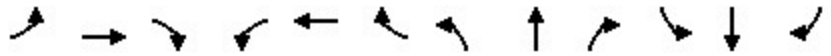
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	446	-	-	397	-
HCM Lane V/C Ratio	0.015	-	-	0.025	-
HCM Ctrl Dly (s/v)	13.2	-	-	14.3	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	772	63	38	970	12	61	1	45	21	8	127
Future Volume (veh/h)	53	772	63	38	970	12	61	1	45	21	8	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	839	68	41	1054	13	66	1	49	23	9	138
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	1782	144	77	1829	568	106	5	268	49	14	209
Arrive On Green	0.06	0.37	0.37	0.04	0.36	0.36	0.06	0.17	0.17	0.03	0.14	0.14
Sat Flow, veh/h	3456	4816	389	1781	5106	1585	1781	32	1558	1781	98	1502
Grp Volume(v), veh/h	58	592	315	41	1054	13	66	0	50	23	0	147
Grp Sat Flow(s),veh/h/ln	1728	1702	1800	1781	1702	1585	1781	0	1590	1781	0	1600
Q Serve(g_s), s	0.8	6.7	6.8	1.1	8.5	0.3	1.8	0.0	1.4	0.6	0.0	4.4
Cycle Q Clear(g_c), s	0.8	6.7	6.8	1.1	8.5	0.3	1.8	0.0	1.4	0.6	0.0	4.4
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.98	1.00		0.94
Lane Grp Cap(c), veh/h	190	1259	666	77	1829	568	106	0	273	49	0	223
V/C Ratio(X)	0.31	0.47	0.47	0.53	0.58	0.02	0.62	0.00	0.18	0.47	0.00	0.66
Avail Cap(c_a), veh/h	442	2800	1481	263	4301	1335	403	0	1392	228	0	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.1	12.2	12.2	23.8	13.2	10.6	23.3	0.0	18.0	24.4	0.0	20.7
Incr Delay (d2), s/veh	0.9	0.3	0.5	5.6	0.3	0.0	5.8	0.0	0.3	7.0	0.0	3.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.9	2.0	0.5	2.4	0.1	0.9	0.0	0.5	0.4	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.0	12.5	12.7	29.4	13.5	10.6	29.1	0.0	18.3	31.3	0.0	24.0
LnGrp LOS	C	B	B	C	B	B	C		B	C		C
Approach Vol, veh/h		965			1108			116			170	
Approach Delay, s/veh		13.3			14.0			24.5			25.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	25.0	7.5	11.6	7.3	24.4	5.9	13.2
Change Period (Y+Rc), s	4.5	6.2	4.5	4.5	4.5	6.2	4.5	4.5
Max Green Setting (Gmax), s	7.5	41.8	11.5	39.5	6.5	42.8	6.5	44.5
Max Q Clear Time (g_c+I1), s	3.1	8.8	3.8	6.4	2.8	10.5	2.6	3.4
Green Ext Time (p_c), s	0.0	5.9	0.1	1.0	0.0	7.7	0.0	0.3

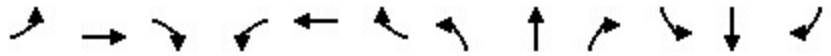
Intersection Summary	
HCM 7th Control Delay, s/veh	15.0
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	669	33	71	775	203	90	28	100	494	29	143
Future Volume (veh/h)	142	669	33	71	775	203	90	28	100	494	29	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	145	683	34	72	791	207	92	29	102	504	30	146
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	1349	67	103	1295	402	120	45	157	679	70	340
Arrive On Green	0.08	0.27	0.27	0.06	0.25	0.25	0.07	0.12	0.12	0.20	0.25	0.25
Sat Flow, veh/h	3456	4983	247	1781	5106	1585	1781	363	1277	3456	277	1350
Grp Volume(v), veh/h	145	466	251	72	791	207	92	0	131	504	0	176
Grp Sat Flow(s),veh/h/ln	1728	1702	1826	1781	1702	1585	1781	0	1640	1728	0	1627
Q Serve(g_s), s	2.5	7.0	7.1	2.4	8.3	6.8	3.1	0.0	4.6	8.3	0.0	5.5
Cycle Q Clear(g_c), s	2.5	7.0	7.1	2.4	8.3	6.8	3.1	0.0	4.6	8.3	0.0	5.5
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.78	1.00		0.83
Lane Grp Cap(c), veh/h	260	922	494	103	1295	402	120	0	202	679	0	410
V/C Ratio(X)	0.56	0.51	0.51	0.70	0.61	0.52	0.77	0.00	0.65	0.74	0.00	0.43
Avail Cap(c_a), veh/h	500	1500	805	258	2250	699	378	0	1066	1336	0	1341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.1	18.7	18.7	28.1	20.0	19.5	27.9	0.0	25.4	23.0	0.0	19.1
Incr Delay (d2), s/veh	1.9	0.4	0.8	8.2	0.5	1.0	9.7	0.0	3.5	1.6	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.4	2.6	1.1	2.8	2.5	1.6	0.0	1.9	3.4	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.0	19.2	19.6	36.4	20.5	20.5	37.6	0.0	28.9	24.6	0.0	19.8
LnGrp LOS	C	B	B	D	C	C	D		C	C		B
Approach Vol, veh/h		862			1070			223			680	
Approach Delay, s/veh		20.9			21.6			32.5			23.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	22.7	8.6	19.8	10.8	21.6	16.5	12.0
Change Period (Y+Rc), s	6.2	6.2	4.5	4.5	6.2	6.2	4.5	4.5
Max Green Setting (Gmax), s	3.5	26.8	12.9	50.1	8.8	26.8	23.5	39.5
Max Q Clear Time (g_c+I1), s	4.4	9.1	5.1	7.5	4.5	10.3	10.3	6.6
Green Ext Time (p_c), s	0.0	3.8	0.1	1.3	0.1	5.1	1.6	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	607	386	332	63	377	584	408	1348	61	321	1188	442
Future Volume (veh/h)	607	386	332	63	377	584	408	1348	61	321	1188	442
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	632	402	346	66	393	0	425	1404	64	334	1238	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	640	1027	458	143	516		438	1626	74	370	1560	
Arrive On Green	0.19	0.29	0.29	0.04	0.15	0.00	0.13	0.32	0.32	0.11	0.31	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5005	228	3456	5106	1585
Grp Volume(v), veh/h	632	402	346	66	393	0	425	955	513	334	1238	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1829	1728	1702	1585
Q Serve(g_s), s	18.7	9.3	20.4	1.9	10.9	0.0	12.6	27.0	27.0	9.8	22.8	0.0
Cycle Q Clear(g_c), s	18.7	9.3	20.4	1.9	10.9	0.0	12.6	27.0	27.0	9.8	22.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	640	1027	458	143	516		438	1106	594	370	1560	
V/C Ratio(X)	0.99	0.39	0.76	0.46	0.76		0.97	0.86	0.86	0.90	0.79	
Avail Cap(c_a), veh/h	640	1516	676	168	1031		438	1187	638	370	1681	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	29.3	33.2	48.1	42.2	0.0	44.6	32.5	32.5	45.3	32.7	0.0
Incr Delay (d2), s/veh	32.5	0.2	2.8	2.3	2.4	0.0	35.5	6.5	11.2	24.4	2.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	3.8	7.6	0.8	4.7	0.0	7.2	11.1	12.7	5.2	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.2	29.5	36.0	50.4	44.5	0.0	80.1	39.0	43.7	69.7	35.2	0.0
LnGrp LOS	E	C	D	D	D		F	D	D	E	D	
Approach Vol, veh/h		1380			459			1893			1572	
Approach Delay, s/veh		51.6			45.4			49.5			42.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	39.6	10.2	35.9	19.0	37.6	25.0	21.1
Change Period (Y+Rc), s	6.0	6.2	6.0	6.2	6.0	6.2	6.0	6.2
Max Green Setting (Gmax), s	11.0	35.8	5.0	43.8	13.0	33.8	19.0	29.8
Max Q Clear Time (g_c+I1), s	11.8	29.0	3.9	22.4	14.6	24.8	20.7	12.9
Green Ext Time (p_c), s	0.0	4.3	0.0	3.5	0.0	4.8	0.0	2.0

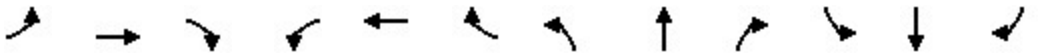
Intersection Summary	
HCM 7th Control Delay, s/veh	47.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix K:
Opening Year 2027 With Project AM Peak Hour Analysis Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	115	207	685	193	92	106	139	187	57	590	10
Future Volume (veh/h)	16	115	207	685	193	92	106	139	187	57	590	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	131	235	778	219	105	120	158	0	65	670	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	230	390	932	879	406	199	913		84	877	
Arrive On Green	0.02	0.12	0.12	0.27	0.37	0.37	0.06	0.26	0.00	0.05	0.25	0.00
Sat Flow, veh/h	1781	1870	3170	3456	2359	1091	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	18	131	235	778	163	161	120	158	0	65	670	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1674	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	5.4	5.7	17.2	5.1	5.4	2.8	2.8	0.0	2.9	14.2	0.0
Cycle Q Clear(g_c), s	0.8	5.4	5.7	17.2	5.1	5.4	2.8	2.8	0.0	2.9	14.2	0.0
Prop In Lane	1.00		1.00	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	230	390	932	662	623	199	913		84	877	
V/C Ratio(X)	0.49	0.57	0.60	0.83	0.25	0.26	0.60	0.17		0.77	0.76	
Avail Cap(c_a), veh/h	127	295	500	1608	980	923	340	1566		197	1610	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.4	33.6	33.7	27.9	17.6	17.7	37.4	23.5	0.0	38.3	28.4	0.0
Incr Delay (d2), s/veh	9.9	2.2	1.5	2.0	0.2	0.2	2.9	0.1	0.0	13.7	1.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.4	2.1	6.5	1.9	1.8	1.2	1.1	0.0	1.5	5.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.2	35.8	35.2	30.0	17.8	17.9	40.3	23.6	0.0	51.9	29.8	0.0
LnGrp LOS	D	D	D	C	B	B	D	C		D	C	
Approach Vol, veh/h		384			1102			278			735	
Approach Delay, s/veh		36.1			26.4			30.8			31.8	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	27.1	28.1	16.2	10.7	26.2	7.9	36.4
Change Period (Y+Rc), s	6.0	6.2	6.2	6.2	6.0	6.2	6.2	6.2
Max Green Setting (Gmax), s	9.0	35.8	37.8	12.8	8.0	36.8	5.8	44.8
Max Q Clear Time (g_c+I1), s	4.9	4.8	19.2	7.7	4.8	16.2	2.8	7.4
Green Ext Time (p_c), s	0.0	0.8	2.7	0.7	0.1	3.8	0.0	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	30.0
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	0	1169	0	0	0	0	827	403	175	1249	0
Future Volume (veh/h)	34	0	1169	0	0	0	0	827	403	175	1249	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	25	0	1327				0	929	0	197	1403	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	797	0	1419				0	1555		259	1525	0
Arrive On Green	0.45	0.00	0.45				0.00	0.30	0.00	0.07	0.43	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	3456	3647	0
Grp Volume(v), veh/h	25	0	1327				0	929	0	197	1403	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	1728	1777	0
Q Serve(g_s), s	0.9	0.0	45.8				0.0	17.8	0.0	6.4	42.9	0.0
Cycle Q Clear(g_c), s	0.9	0.0	45.8				0.0	17.8	0.0	6.4	42.9	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	797	0	1419				0	1555		259	1525	0
V/C Ratio(X)	0.03	0.00	0.94				0.00	0.60		0.76	0.92	0.00
Avail Cap(c_a), veh/h	836	0	1487				0	1555		369	1599	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.8	0.0	30.2				0.0	34.0	0.0	52.2	31.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	11.1				0.0	0.6	0.0	5.6	8.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	18.3				0.0	7.0	0.0	2.9	18.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.8	0.0	41.3				0.0	34.7	0.0	57.9	39.8	0.0
LnGrp LOS	B		D					C		E	D	
Approach Vol, veh/h		1352						929			1600	
Approach Delay, s/veh		40.9						34.7			42.1	
Approach LOS		D						C			D	

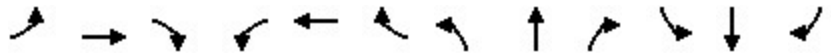
Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	14.3	42.3	58.5	56.6
Change Period (Y+Rc), s	5.7	7.2	7.0	7.2
Max Green Setting (Gmax), s	12.3	33.8	54.0	51.8
Max Q Clear Time (g_c+I1), s	8.4	19.8	47.8	44.9
Green Ext Time (p_c), s	0.2	4.8	3.8	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	39.9
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	645	54	136	554	0	54	0	182	0	0	0
Future Volume (veh/h)	0	645	54	136	554	0	54	0	182	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	1870	1870	1870			
Adj Flow Rate, veh/h	0	686	57	145	589	0	57	0	194			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	2	2	2	0	2	2	2			
Cap, veh/h	5	1411	117	196	2673	0	342	0	304			
Arrive On Green	0.00	0.29	0.29	0.11	0.52	0.00	0.19	0.00	0.19			
Sat Flow, veh/h	1781	4806	397	1781	5274	0	1781	0	1585			
Grp Volume(v), veh/h	0	485	258	145	589	0	57	0	194			
Grp Sat Flow(s),veh/h/ln	1781	1702	1799	1781	1702	0	1781	0	1585			
Q Serve(g_s), s	0.0	4.4	4.5	3.0	2.3	0.0	1.0	0.0	4.2			
Cycle Q Clear(g_c), s	0.0	4.4	4.5	3.0	2.3	0.0	1.0	0.0	4.2			
Prop In Lane	1.00		0.22	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	5	1000	528	196	2673	0	342	0	304			
V/C Ratio(X)	0.00	0.48	0.49	0.74	0.22	0.00	0.17	0.00	0.64			
Avail Cap(c_a), veh/h	237	3515	1857	1304	8329	0	1825	0	1624			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	10.9	10.9	16.2	4.8	0.0	12.7	0.0	14.0			
Incr Delay (d2), s/veh	0.0	0.4	0.7	5.4	0.0	0.0	0.2	0.0	2.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	1.1	1.2	1.2	0.3	0.0	0.4	0.0	1.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	11.3	11.6	21.6	4.9	0.0	12.9	0.0	16.2			
LnGrp LOS		B	B	C	A		B		B			
Approach Vol, veh/h		743			734			251				
Approach Delay, s/veh		11.4			8.2			15.5				
Approach LOS		B			A			B				

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	8.6	17.2			0.0	25.9		11.7				
Change Period (Y+Rc), s	4.5	6.2			4.5	6.2		4.5				
Max Green Setting (Gmax), s	27.5	38.8			5.0	61.3		38.5				
Max Q Clear Time (g_c+I1), s	5.0	6.5			0.0	4.3		6.2				
Green Ext Time (p_c), s	0.3	4.6			0.0	4.0		1.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	10.6	
HCM 7th LOS	B	

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	177	0	43	56
Future Vol, veh/h	0	17	177	0	43	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	192	0	47	61

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	347	192	0	0	192	0
Stage 1	192	-	-	-	-	-
Stage 2	154	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	650	849	-	-	1381	-
Stage 1	840	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	627	849	-	-	1381	-
Mov Cap-2 Maneuver	627	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	843	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.33	0	3.34
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	849	782	-
HCM Lane V/C Ratio	-	-	0.022	0.034	-
HCM Ctrl Dly (s/v)	-	-	9.3	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

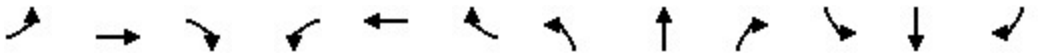
Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	819	5	48	693	0	16
Future Vol, veh/h	819	5	48	693	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	862	5	51	729	0	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	867	0	-	434
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-	3.92
Pot Cap-1 Maneuver	-	-	453	-	0	488
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	453	-	-	488
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.9	12.65
HCM LOS			B

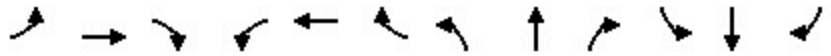
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	488	-	-	453	-
HCM Lane V/C Ratio	0.035	-	-	0.111	-
HCM Ctrl Dly (s/v)	12.6	-	-	13.9	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	763	29	6	707	11	11	1	9	8	0	20
Future Volume (veh/h)	44	763	29	6	707	11	11	1	9	8	0	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	820	31	6	760	12	12	1	10	9	0	22
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1860	70	14	1655	514	28	8	75	21	0	76
Arrive On Green	0.05	0.37	0.37	0.01	0.32	0.32	0.02	0.05	0.05	0.01	0.00	0.05
Sat Flow, veh/h	3456	5050	190	1781	5106	1585	1781	146	1461	1781	0	1585
Grp Volume(v), veh/h	47	552	299	6	760	12	12	0	11	9	0	22
Grp Sat Flow(s),veh/h/ln	1728	1702	1836	1781	1702	1585	1781	0	1607	1781	0	1585
Q Serve(g_s), s	0.5	4.3	4.3	0.1	4.2	0.2	0.2	0.0	0.2	0.2	0.0	0.5
Cycle Q Clear(g_c), s	0.5	4.3	4.3	0.1	4.2	0.2	0.2	0.0	0.2	0.2	0.0	0.5
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.91	1.00		1.00
Lane Grp Cap(c), veh/h	181	1254	676	14	1655	514	28	0	83	21	0	76
V/C Ratio(X)	0.26	0.44	0.44	0.42	0.46	0.02	0.43	0.00	0.13	0.42	0.00	0.29
Avail Cap(c_a), veh/h	933	4239	2286	430	6213	1929	430	0	1805	430	0	1780
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.0	8.4	8.4	17.4	9.4	8.1	17.2	0.0	15.9	17.3	0.0	16.2
Incr Delay (d2), s/veh	0.8	0.2	0.5	18.0	0.2	0.0	10.0	0.0	0.7	12.7	0.0	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.9	0.1	0.9	0.1	0.2	0.0	0.1	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.8	8.6	8.8	35.4	9.6	8.1	27.2	0.0	16.6	30.0	0.0	18.3
LnGrp LOS	B	A	A	D	A	A	C		B	C		B
Approach Vol, veh/h		898			778			23			31	
Approach Delay, s/veh		9.1			9.8			22.1			21.7	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	19.2	5.1	6.2	6.3	17.6	4.9	6.3
Change Period (Y+Rc), s	4.5	6.2	4.5	4.5	4.5	6.2	4.5	4.5
Max Green Setting (Gmax), s	8.5	43.8	8.5	39.5	9.5	42.8	8.5	39.5
Max Q Clear Time (g_c+I1), s	2.1	6.3	2.2	2.5	2.5	6.2	2.2	2.2
Green Ext Time (p_c), s	0.0	5.5	0.0	0.1	0.0	5.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.8
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	644	54	34	610	120	63	6	43	155	15	38
Future Volume (veh/h)	80	644	54	34	610	120	63	6	43	155	15	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	685	57	36	649	128	67	6	46	165	16	40
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1383	114	72	1303	405	112	18	141	335	63	157
Arrive On Green	0.07	0.29	0.29	0.04	0.26	0.26	0.06	0.10	0.10	0.10	0.13	0.13
Sat Flow, veh/h	3456	4806	397	1781	5106	1585	1781	186	1427	3456	474	1184
Grp Volume(v), veh/h	85	484	258	36	649	128	67	0	52	165	0	56
Grp Sat Flow(s),veh/h/ln	1728	1702	1799	1781	1702	1585	1781	0	1613	1728	0	1657
Q Serve(g_s), s	1.1	5.3	5.4	0.9	4.9	2.9	1.6	0.0	1.3	2.0	0.0	1.4
Cycle Q Clear(g_c), s	1.1	5.3	5.4	0.9	4.9	2.9	1.6	0.0	1.3	2.0	0.0	1.4
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.88	1.00		0.71
Lane Grp Cap(c), veh/h	251	979	518	72	1303	405	112	0	159	335	0	220
V/C Ratio(X)	0.34	0.49	0.50	0.50	0.50	0.32	0.60	0.00	0.33	0.49	0.00	0.25
Avail Cap(c_a), veh/h	754	2636	1393	388	3954	1227	535	0	1418	1115	0	1494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	13.3	13.3	21.1	14.3	13.6	20.5	0.0	18.9	19.2	0.0	17.5
Incr Delay (d2), s/veh	0.8	0.4	0.7	5.3	0.3	0.4	5.0	0.0	1.2	1.1	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.5	1.6	0.4	1.4	1.0	0.8	0.0	0.5	0.8	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.6	13.7	14.1	26.5	14.6	14.0	25.5	0.0	20.0	20.4	0.0	18.1
LnGrp LOS	C	B	B	C	B	B	C		C	C		B
Approach Vol, veh/h		827			813			119			221	
Approach Delay, s/veh		14.5			15.0			23.1			19.8	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	19.1	7.3	10.5	9.5	17.7	8.9	8.9
Change Period (Y+Rc), s	6.2	6.2	4.5	4.5	6.2	6.2	4.5	4.5
Max Green Setting (Gmax), s	9.8	34.8	13.5	40.5	9.8	34.8	14.5	39.5
Max Q Clear Time (g_c+I1), s	2.9	7.4	3.6	3.4	3.1	6.9	4.0	3.3
Green Ext Time (p_c), s	0.0	4.5	0.1	0.3	0.1	4.6	0.4	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	15.8
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	372	252	188	50	227	272	206	650	31	362	1520	525
Future Volume (veh/h)	372	252	188	50	227	272	206	650	31	362	1520	525
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	404	274	204	54	247	0	224	707	34	393	1652	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	483	737	329	140	385		294	1729	83	487	2055	
Arrive On Green	0.14	0.21	0.21	0.04	0.11	0.00	0.08	0.35	0.35	0.14	0.40	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	4992	239	3456	5106	1585
Grp Volume(v), veh/h	404	274	204	54	247	0	224	481	260	393	1652	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1827	1728	1702	1585
Q Serve(g_s), s	10.5	6.1	10.8	1.4	6.1	0.0	5.9	9.9	10.0	10.2	26.4	0.0
Cycle Q Clear(g_c), s	10.5	6.1	10.8	1.4	6.1	0.0	5.9	9.9	10.0	10.2	26.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	483	737	329	140	385		294	1179	633	487	2055	
V/C Ratio(X)	0.84	0.37	0.62	0.38	0.64		0.76	0.41	0.41	0.81	0.80	
Avail Cap(c_a), veh/h	562	1533	684	187	1148		300	1179	633	749	2369	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.7	31.4	33.3	43.1	39.4	0.0	41.3	22.9	23.0	38.4	24.3	0.0
Incr Delay (d2), s/veh	9.5	0.3	1.9	1.7	1.8	0.0	10.8	0.2	0.4	3.8	1.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	2.5	4.0	0.6	2.6	0.0	2.8	3.6	3.9	4.2	9.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.1	31.7	35.2	44.9	41.2	0.0	52.1	23.2	23.4	42.2	26.2	0.0
LnGrp LOS	D	C	D	D	D		D	C	C	D	C	
Approach Vol, veh/h		882			301			965			2045	
Approach Delay, s/veh		40.0			41.8			30.0			29.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	38.2	9.7	25.3	13.8	43.3	18.9	16.2
Change Period (Y+Rc), s	6.0	6.2	6.0	6.2	6.0	6.2	6.0	6.2
Max Green Setting (Gmax), s	20.0	30.8	5.0	39.8	8.0	42.8	15.0	29.8
Max Q Clear Time (g_c+I1), s	12.8	12.0	3.4	12.8	7.9	28.4	12.5	8.1
Green Ext Time (p_c), s	0.8	3.9	0.0	2.2	0.0	8.8	0.4	1.3

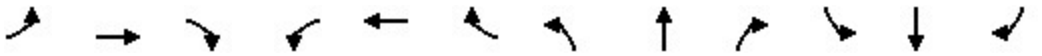
Intersection Summary	
HCM 7th Control Delay, s/veh	32.6
HCM 7th LOS	C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix L:
Opening Year 2027 With Project AM Peak Hour Analysis Worksheets

HCM 7th Signalized Intersection Summary
1: Monterey Avenue & Varner Road 2027 OY+P PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	81	204	571	179	175	223	486	227	22	420	8
Future Volume (veh/h)	18	81	204	571	179	175	223	486	227	22	420	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	87	219	614	192	188	240	523	0	24	452	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	265	450	776	612	546	348	917		47	654	
Arrive On Green	0.02	0.14	0.14	0.22	0.34	0.34	0.10	0.26	0.00	0.03	0.18	0.00
Sat Flow, veh/h	1781	1870	3170	3456	1777	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	19	87	219	614	192	188	240	523	0	24	452	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1777	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	3.0	4.5	11.8	5.6	6.2	4.7	9.0	0.0	0.9	8.4	0.0
Cycle Q Clear(g_c), s	0.7	3.0	4.5	11.8	5.6	6.2	4.7	9.0	0.0	0.9	8.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	39	265	450	776	612	546	348	917		47	654	
V/C Ratio(X)	0.48	0.33	0.49	0.79	0.31	0.34	0.69	0.57		0.51	0.69	
Avail Cap(c_a), veh/h	147	313	531	1559	953	850	686	2359		126	1905	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	27.2	27.9	25.8	17.0	17.2	30.6	22.7	0.0	33.9	26.9	0.0
Incr Delay (d2), s/veh	9.0	0.7	0.8	1.9	0.3	0.4	2.4	0.6	0.0	8.1	1.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.3	1.6	4.4	2.0	1.9	1.9	3.3	0.0	0.5	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.0	27.9	28.7	27.6	17.3	17.6	33.1	23.3	0.0	42.0	28.2	0.0
LnGrp LOS	D	C	C	C	B	B	C	C		D	C	
Approach Vol, veh/h		325			994			763			476	
Approach Delay, s/veh		29.3			23.7			26.4			28.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	24.4	22.0	16.2	13.1	19.2	7.8	30.5
Change Period (Y+Rc), s	6.0	6.2	6.2	6.2	6.0	6.2	6.2	6.2
Max Green Setting (Gmax), s	5.0	46.8	31.8	11.8	14.0	37.8	5.8	37.8
Max Q Clear Time (g_c+I1), s	2.9	11.0	13.8	6.5	6.7	10.4	2.7	8.2
Green Ext Time (p_c), s	0.0	3.2	2.0	0.6	0.4	2.6	0.0	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	26.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	0	1010	0	0	0	0	1809	725	155	1000	0
Future Volume (veh/h)	33	0	1010	0	0	0	0	1809	725	155	1000	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	23	0	1076				0	1904	0	163	1053	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	630	0	1121				0	2124		214	1870	0
Arrive On Green	0.35	0.00	0.35				0.00	0.42	0.00	0.06	0.53	0.00
Sat Flow, veh/h	1781	0	3170				0	5274	1585	3456	3647	0
Grp Volume(v), veh/h	23	0	1076				0	1904	0	163	1053	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1702	1585	1728	1777	0
Q Serve(g_s), s	1.0	0.0	39.2				0.0	41.0	0.0	5.5	23.5	0.0
Cycle Q Clear(g_c), s	1.0	0.0	39.2				0.0	41.0	0.0	5.5	23.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	630	0	1121				0	2124		214	1870	0
V/C Ratio(X)	0.04	0.00	0.96				0.00	0.90		0.76	0.56	0.00
Avail Cap(c_a), veh/h	634	0	1129				0	2199		214	1922	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.0	0.0	37.3				0.0	32.1	0.0	54.5	18.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	18.0				0.0	5.2	0.0	14.8	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	17.1				0.0	16.3	0.0	2.7	8.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.0	0.0	55.3				0.0	37.3	0.0	69.3	19.2	0.0
LnGrp LOS	C		E					D		E	B	
Approach Vol, veh/h		1099						1904			1216	
Approach Delay, s/veh		54.7						37.3			25.9	
Approach LOS		D						D			C	

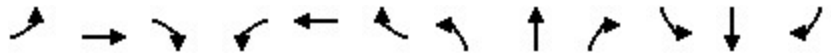
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.0	56.3		48.7		69.3
Change Period (Y+Rc), s	5.7	7.2		7.0		7.2
Max Green Setting (Gmax), s	7.3	50.8		42.0		63.8
Max Q Clear Time (g_c+I1), s	7.5	43.0		41.2		25.5
Green Ext Time (p_c), s	0.0	6.1		0.5		7.8

Intersection Summary	
HCM 7th Control Delay, s/veh	38.5
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	764	110	164	988	0	102	0	174	0	0	0
Future Volume (veh/h)	0	764	110	164	988	0	102	0	174	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	0	1870	1870	1870			
Adj Flow Rate, veh/h	0	830	120	178	1074	0	111	0	189			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	0	2	2	2			
Cap, veh/h	4	1518	218	239	2920	0	334	0	297			
Arrive On Green	0.00	0.34	0.34	0.13	0.57	0.00	0.19	0.00	0.19			
Sat Flow, veh/h	1781	4509	648	1781	5274	0	1781	0	1585			
Grp Volume(v), veh/h	0	625	325	178	1074	0	111	0	189			
Grp Sat Flow(s),veh/h/ln	1781	1702	1754	1781	1702	0	1781	0	1585			
Q Serve(g_s), s	0.0	6.6	6.7	4.3	5.1	0.0	2.4	0.0	4.9			
Cycle Q Clear(g_c), s	0.0	6.6	6.7	4.3	5.1	0.0	2.4	0.0	4.9			
Prop In Lane	1.00		0.37	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	4	1146	590	239	2920	0	334	0	297			
V/C Ratio(X)	0.00	0.55	0.55	0.75	0.37	0.00	0.33	0.00	0.64			
Avail Cap(c_a), veh/h	201	3127	1611	1103	7278	0	1464	0	1303			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	12.0	12.0	18.5	5.2	0.0	15.6	0.0	16.7			
Incr Delay (d2), s/veh	0.0	0.4	0.8	4.6	0.1	0.0	0.6	0.0	2.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	1.7	1.9	1.7	0.7	0.0	0.9	0.0	1.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	12.4	12.8	23.1	5.2	0.0	16.2	0.0	18.9			
LnGrp LOS		B	B	C	A		B		B			
Approach Vol, veh/h		950			1252			300				
Approach Delay, s/veh		12.5			7.8			17.9				
Approach LOS		B			A			B				

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	10.5	21.1			0.0	31.6		12.8				
Change Period (Y+Rc), s	4.5	6.2			4.5	6.2		4.5				
Max Green Setting (Gmax), s	27.5	40.8			5.0	63.3		36.5				
Max Q Clear Time (g_c+I1), s	16.3	8.7			0.0	7.1		6.9				
Green Ext Time (p_c), s	0.4	6.3			0.0	8.4		1.6				

Intersection Summary		
HCM 7th Control Delay, s/veh		10.8
HCM 7th LOS		B

Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	105	123	0	106	149
Future Vol, veh/h	0	105	123	0	106	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	114	134	0	115	162

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	526	134	0	0	134	0
Stage 1	134	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	512	915	-	-	1451	-
Stage 1	893	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	467	915	-	-	1451	-
Mov Cap-2 Maneuver	467	-	-	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	623	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.49	0	3.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	915	748	-
HCM Lane V/C Ratio	-	-	0.125	0.079	-
HCM Ctrl Dly (s/v)	-	-	9.5	7.7	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.3	-

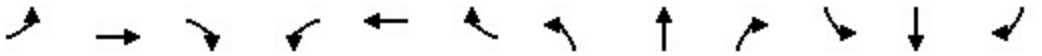
Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	912	27	84	1153	0	83
Future Vol, veh/h	912	27	84	1153	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	125	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	991	29	91	1253	0	90

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1021	0	-	510
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-	3.92
Pot Cap-1 Maneuver	-	-	383	-	0	435
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	383	-	-	435
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1.18	15.43
HCM LOS			C

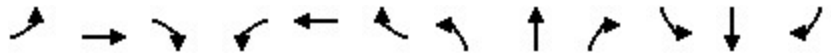
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	435	-	-	383	-
HCM Lane V/C Ratio	0.207	-	-	0.239	-
HCM Ctrl Dly (s/v)	15.4	-	-	17.3	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.8	-	-	0.9	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	880	64	38	1068	12	62	1	45	21	8	128
Future Volume (veh/h)	54	880	64	38	1068	12	62	1	45	21	8	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	957	70	41	1161	13	67	1	49	23	9	139
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	1908	139	76	1945	604	105	5	265	48	13	208
Arrive On Green	0.05	0.39	0.39	0.04	0.38	0.38	0.06	0.17	0.17	0.03	0.14	0.14
Sat Flow, veh/h	3456	4856	354	1781	5106	1585	1781	32	1558	1781	97	1503
Grp Volume(v), veh/h	59	670	357	41	1161	13	67	0	50	23	0	148
Grp Sat Flow(s),veh/h/ln	1728	1702	1807	1781	1702	1585	1781	0	1590	1781	0	1600
Q Serve(g_s), s	0.9	8.0	8.0	1.2	9.8	0.3	2.0	0.0	1.4	0.7	0.0	4.7
Cycle Q Clear(g_c), s	0.9	8.0	8.0	1.2	9.8	0.3	2.0	0.0	1.4	0.7	0.0	4.7
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.98	1.00		0.94
Lane Grp Cap(c), veh/h	188	1337	710	76	1945	604	105	0	271	48	0	221
V/C Ratio(X)	0.31	0.50	0.50	0.54	0.60	0.02	0.64	0.00	0.18	0.48	0.00	0.67
Avail Cap(c_a), veh/h	419	2652	1408	249	4074	1265	382	0	1319	216	0	1178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.4	12.3	12.3	25.2	13.3	10.4	24.7	0.0	19.1	25.7	0.0	21.9
Incr Delay (d2), s/veh	0.9	0.3	0.6	5.9	0.3	0.0	6.3	0.0	0.3	7.2	0.0	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.2	2.4	0.6	2.8	0.1	1.0	0.0	0.5	0.4	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.3	12.6	12.9	31.0	13.6	10.4	31.0	0.0	19.4	32.9	0.0	25.4
LnGrp LOS	C	B	B	C	B	B	C		B	C		C
Approach Vol, veh/h		1086			1215			117			171	
Approach Delay, s/veh		13.4			14.2			26.0			26.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	27.3	7.7	11.9	7.4	26.6	6.0	13.6
Change Period (Y+Rc), s	4.5	6.2	4.5	4.5	4.5	6.2	4.5	4.5
Max Green Setting (Gmax), s	7.5	41.8	11.5	39.5	6.5	42.8	6.5	44.5
Max Q Clear Time (g_c+I1), s	3.2	10.0	4.0	6.7	2.9	11.8	2.7	3.4
Green Ext Time (p_c), s	0.0	6.8	0.1	1.0	0.0	8.7	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	15.2
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	775	34	71	871	203	91	28	100	494	29	144
Future Volume (veh/h)	143	775	34	71	871	203	91	28	100	494	29	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	791	35	72	889	207	93	29	102	504	30	147
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	1445	64	101	1389	431	121	44	155	672	68	335
Arrive On Green	0.07	0.29	0.29	0.06	0.27	0.27	0.07	0.12	0.12	0.19	0.25	0.25
Sat Flow, veh/h	3456	5013	221	1781	5106	1585	1781	363	1277	3456	276	1351
Grp Volume(v), veh/h	146	536	290	72	889	207	93	0	131	504	0	177
Grp Sat Flow(s),veh/h/ln	1728	1702	1831	1781	1702	1585	1781	0	1640	1728	0	1627
Q Serve(g_s), s	2.6	8.4	8.4	2.5	9.7	6.9	3.2	0.0	4.8	8.7	0.0	5.8
Cycle Q Clear(g_c), s	2.6	8.4	8.4	2.5	9.7	6.9	3.2	0.0	4.8	8.7	0.0	5.8
Prop In Lane	1.00		0.12	1.00		1.00	1.00		0.78	1.00		0.83
Lane Grp Cap(c), veh/h	253	981	528	101	1389	431	121	0	199	672	0	403
V/C Ratio(X)	0.58	0.55	0.55	0.71	0.64	0.48	0.77	0.00	0.66	0.75	0.00	0.44
Avail Cap(c_a), veh/h	482	1446	777	248	2168	673	364	0	1027	1287	0	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.3	19.0	19.0	29.3	20.2	19.2	28.9	0.0	26.5	24.0	0.0	20.0
Incr Delay (d2), s/veh	2.1	0.5	0.9	8.9	0.5	0.8	9.6	0.0	3.7	1.7	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.8	3.1	1.2	3.3	2.5	1.7	0.0	2.0	3.5	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.4	19.4	19.9	38.1	20.7	20.1	38.5	0.0	30.2	25.7	0.0	20.8
LnGrp LOS	C	B	B	D	C	C	D		C	C		C
Approach Vol, veh/h		972			1168			224			681	
Approach Delay, s/veh		21.2			21.7			33.6			24.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	24.4	8.8	20.1	10.8	23.4	16.8	12.2
Change Period (Y+Rc), s	6.2	6.2	4.5	4.5	6.2	6.2	4.5	4.5
Max Green Setting (Gmax), s	3.6	26.8	12.9	50.1	8.8	26.8	23.5	39.5
Max Q Clear Time (g_c+I1), s	4.5	10.4	5.2	7.8	4.6	11.7	10.7	6.8
Green Ext Time (p_c), s	0.0	4.3	0.1	1.3	0.1	5.5	1.6	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	666	407	358	63	395	584	432	1348	61	321	1188	496
Future Volume (veh/h)	666	407	358	63	395	584	432	1348	61	321	1188	496
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	694	424	373	66	411	0	450	1404	64	334	1238	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	635	1042	465	142	535		434	1620	74	367	1554	
Arrive On Green	0.18	0.29	0.29	0.04	0.15	0.00	0.13	0.32	0.32	0.11	0.30	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5005	228	3456	5106	1585
Grp Volume(v), veh/h	694	424	373	66	411	0	450	955	513	334	1238	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1829	1728	1702	1585
Q Serve(g_s), s	19.0	9.9	22.5	1.9	11.5	0.0	13.0	27.3	27.3	9.9	23.0	0.0
Cycle Q Clear(g_c), s	19.0	9.9	22.5	1.9	11.5	0.0	13.0	27.3	27.3	9.9	23.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	635	1042	465	142	535		434	1102	592	367	1554	
V/C Ratio(X)	1.09	0.41	0.80	0.46	0.77		1.04	0.87	0.87	0.91	0.80	
Avail Cap(c_a), veh/h	635	1505	671	167	1024		434	1178	633	367	1668	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.2	29.4	33.8	48.5	42.2	0.0	45.2	32.9	32.9	45.7	33.0	0.0
Incr Delay (d2), s/veh	63.9	0.3	4.6	2.4	2.4	0.0	52.9	6.7	11.6	25.7	2.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.3	4.0	8.7	0.8	5.0	0.0	8.4	11.3	12.9	5.3	9.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	106.1	29.6	38.4	50.8	44.6	0.0	98.1	39.6	44.5	71.5	35.7	0.0
LnGrp LOS	F	C	D	D	D		F	D	D	E	D	
Approach Vol, veh/h		1491			477			1918			1572	
Approach Delay, s/veh		67.4			45.4			54.6			43.3	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	39.7	10.2	36.5	19.0	37.7	25.0	21.8
Change Period (Y+Rc), s	6.0	6.2	6.0	6.2	6.0	6.2	6.0	6.2
Max Green Setting (Gmax), s	11.0	35.8	5.0	43.8	13.0	33.8	19.0	29.8
Max Q Clear Time (g_c+I1), s	11.5	29.3	3.9	24.5	15.0	25.0	21.0	13.5
Green Ext Time (p_c), s	0.0	4.2	0.0	3.6	0.0	4.7	0.0	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	54.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Appendix G –

Shared Parking Study

March 31, 2026

Ben Torres, Planning Manager
City of Rancho Mirage
69825 Highway 111
Rancho Mirage, CA 92270

Subject:
Riverside Sheriffs' Association Benefit's Trust– Shared Parking Assessment

Introduction

Michael Baker International has completed an assessment of the parking conditions associated with the Riverside Sheriffs' Association Benefit's Trust development project (Project). The primary purpose of this assessment is to compare the minimum parking requirements according to the City of Rancho Mirage's Municipal Code to the proposed parking supply, as well as outline the actual forecast peak shared parking demand based on actual uses on site. As shown in this assessment, the proposed parking supply is sufficient to meet the parking needs of the project. This Shared Parking Assessment focuses on the proposed on-site parking only and does not consider any on-street parking or adjacent parking facilities within the vicinity of the project. **Exhibit 1** shows the location of the RSA Benefit's Trust (RSABT) Project, located just south of Dinah Shore Drive and West of Key Largo Avenue in the City of Rancho Mirage.

Project Description

The Project will develop office facilities and commercial uses totaling approximately 67,592 square feet. The existing site consists of an undeveloped, empty lot. **Exhibit 2** shows the Project site plan. The Project includes the development of eight (8) buildings, surface parking, onsite circulation, two (2) water quality basins, and landscaping. The northern portion of the site would contain three (3) one-story commercial and fast casual restaurant buildings (Buildings 1 through 3) and associated parking.

The southern portion of the site would comprise the RSA campus and would include five (5) one-story buildings (Buildings 4 through 8) as shown on the site plan. For purposes of this analysis, approximately 450 RSA members including family members would have access to the Medical Office, Fraternal Order of Police Lodge, and Health and Fitness Center.

Prest Vuksic Greenwood (PVG) Architects prepared a dissertation of the project to provide a further breakdown of the uses of each building on-site. The dissertation, dated February 2026, also provides logistical details as well as the hours of operations for each use within the project and which uses have irregular operational hours or are reserved for special event purposes. This dissertation can be found in **Attachment A**. The following summarizes each of the buildings uses:

- **Buildings 1-3** will consist of a mix of commercial and restaurant space, with a total of 18,673 square feet (SF) of leasable space. As outlined in the PVG dissertation, the space is planned to accommodate up to 100% restaurant use for maximum tenant flexibility.

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- **Building 4** will consist of entirely office space, with a total of 9,874 square feet of leasable space. The space is also intended for the future expansion of the Riverside Sheriff's Association (RSA) office.
- **Building 5** will consist of a mix of interior office uses, with approximately 14,130 square feet.
- **Building 6** will consist of entirely medical office space, with approximately 11,357 square feet.
- **Building 7** will be a mixed-use facility for the Fraternal Order of Police (FOP), with approximately 5,891 square feet. The building breakdown is as follows:
    - Office Space – 3,568 SF
    - Lounge/Bar – 2,323 SF. The space will operate as a typical breakroom/lounge on weekdays for deputies to have lunch and/or write reports while being uninterrupted and in a safe and controlled environment. During special events, this space can be utilized as banquet space. It should be noted that the bar will only be open and operational during special event uses.
- **Building 8** will consist of a health and fitness center, approximately 7,667 square feet. The center will be for RSABT members and their eligible dependents, featuring free weights, cardio equipment, a multipurpose fitness studio, locker rooms, and saunas.

Table 1 provides a breakdown by intensity and land use for each building proposed in the RSABT Project.

TABLE 1 – DEVELOPMENT AREA SUMMARY

Building	Project Use	Intensity	Operational Details
1	Restaurant	6,582 SF	Typical commercial retail and restaurant, conservatively assumes 100% restaurant use.
2	Restaurant	5,510 SF	
3	Restaurant	6,582 SF	
4	Office	9,874 SF	Leasable office space. Intended for the future expansion of the RSA offices.
5	Office	10,619 SF	RSA offices.
	Retail	1,095 SF	Retail exclusive to deputies, includes uniforms and equipment.
	Meeting Hall	76 Seats	Special event venue for executive boardroom anticipated to be utilized 3 times per year from 1:00 PM-2:00 PM.
6	Medical Office	5,237 SF	Medical office space for RSABT medical service. Approximately 450 eligible members.
	Medical Office	6,120 SF	Leasable medical office space, or office space. Intended for the future expansion of RSABT medical services.
7	Office	3,568 SF	Provides additional office space for deputies.
	Bar/Lounge	2,323 SF	Typical use anticipated to support deputies on site as a breakroom. Special event venue is used for after-hours events and community outreach.
8	Health/Fitness Club	7,667 SF	Gym will be for RSABT members and their eligible dependents. Approximately 300-350 eligible members.

Code-Based Parking Requirements

The City of Rancho Mirage Municipal Code Section 17.26.040 specify a typical parking demand rate for various uses within the city which are used to calculate the minimum parking requirements for each individual use.

Table 2 summarizes the parking requirements for each individual use within the project area, including the restaurants, offices, retail, meeting hall, medical offices, lounge area, and gym. These base rates treat each land use as an individual "standalone" component, assuming that each use generates its own parking demand. And reflects the parking needs at maximum demand times. This includes parking requirements for the following uses:

- Restaurants, cafés, cafeterias, nightclubs, bars, taverns, lounges, or similar establishments for the consumption of food and beverages on the premises: one (1) space for each 80 square feet of gross floor area (equivalent to 12.5 per 1,000 square feet).
- Offices, administrative, corporate: one (1) space for each 250 square feet of gross floor area (4.0/KSF) for the first 5,000 square feet and one (1) space for each 400 square feet thereafter (2.5/KSF) .
- General merchandise (retail): one (1) space for each 250 square feet of gross floor area (4.0/KSF).
- Membership organization facilities, meeting halls, performance theaters, including auditoriums: one (1) space for each 3 seats.
- Clinics, medical/dental offices: one (1) space for each 200 square feet of gross floor area (5.0/KSF).
- Health/fitness clubs: one (1) space for each 200 square feet of gross floor area (5.0/KSF).

As shown in **Table 2**, the project would be required to provide a total of 475 parking spaces based on the parking rates outlined in the municipal code for each individual use. As shown in the project site plan, the project proposes to provide 319 regular spaces and 1 loading space for a total of 320 parking spaces

TABLE 2 – MUNICIPAL CODE PARKING REQUIREMENTS

Building	Land Use	Intensity	Code Parking Rate [1]	Code Parking Required	Parking Provided	Code Surplus (Shortfall)
1-3	Restaurants	18.674 KSF	12.5 / KSF	234	320	-155
4	Office (≤ 5.000 KSF)	5.000 KSF	4.0 / KSF	20		
	Office (> 5.000 KSF)	4.874 KSF	2.5 / KSF	13		
5	Office (≤ 5.000 KSF)	5.000 KSF	4.0 / KSF	20		
	Office (> 5.000 KSF)	5.619 KSF	2.5 / KSF	15		
	Retail	1.095 KSF	4.0 / KSF	5		
	Meeting Hall[2]	76 Seats	3 Seats	26		
6	Medical Office	5.237 KSF	5.0 / KSF	27		
	Medical Office	6.120 KSF	5.0 / KSF	31		
7	Office (≤ 5.000 KSF)	3.568 KSF	4.0 / KSF	15		
	Bar/Lounge	2.323 KSF	12.5 / KSF	30		
8	Health/Fitness Club	7.667 KSF	5.0 / KSF	39		
			Subtotal	475	320	-155

KSF = 1,000 Square Feet

[1] Source: City of Rancho Mirage Municipal Code Section 17.26.040 Table 3-6.

[2] Meeting Hall assumes 1 Parking Space required per 3 Seats.

Shared Parking Assessment

While the typical code based requirements generally reflect the peak parking demand of each individual land use, the City's Municipal Code Section 17.26.050 also recognizes the ability to share parking throughout the day and the interaction between land uses located in close proximity to each other.

Consideration of these factors for the mix of land uses within the RSABT Project results in a more accurate overall parking need assessment that is less than the sum of the individual parking requirements for each land use. Shared parking calculations recognize that different uses often experience individual peak parking demands at unique times of day, or days of week. The following section discussed the factors considered as part of this analysis.

Parking Demand Scenario Analyzed

The parking demand scenario analyzed in this study is considered a "worst case" scenario for a weekday since this assumes each the facilities on-site are fully occupied and operational. It should be noted that during special events at the RSABT office facilities, all other land uses would operate the same as during non-event days. There are two land uses that are considered as special event uses that do not generate their own parking demand and are typically only in use by those already on site, including the Meeting Hall and the Bar/Lounge area. These two uses are expected to be in use consecutively as opposed to concurrently due to their expected hours of operation. Based on information provided by the architect, the land uses are expected to operate as follows:

- Meeting Hall – Located in Building 5, the executive boardroom is expected to be utilized three times per year, with meetings occurring from 1:00PM-2:00PM.
- Bar/Lounge – Located in Building 7, the bar and lounge will serve as a space for events and community outreach such as ceremonies, fundraisers, memorial events, retirements, and community-focused programs.

Shared Parking Usage by Time-of-Day

Shared Parking analysis recognizes that different uses often experience individual peak parking demands at unique times of day, or days of week. Time-of-day parking demand distributions for various land uses within the RSABT Project were taken from the City of Rancho Mirage Municipal Code Section 17.26.050 and from the Urban Land Institute (ULI) "Shared Parking" Third Edition (2020). It should be noted that while the ULI demand distributions have a separate parking distribution pattern for visitors and employees for most land uses, this analysis assumes a "blend" of these visitor and employee demand rates. Certain uses such as the meeting hall and the health and fitness center have time of day distribution patterns that have been adjusted to more closely match the specific uses of these facilities and their hours of operation based on specific details provided by the architect (See **Attachment A**). Shared Parking usage by time-of-day rates from both the City of Rancho Mirage Municipal Code and the ULI Second Edition are provided in **Attachment B**.

Simultaneous Shared Parking Usage (captive ratio)

In order to account for the overlap of sheriff deputies that work in the RSABT office facilities that have already parked at one land use and will not generate the need for an additional parking space when they visit another nearby land use, a captive adjustment is applied to the parking demand. For the restaurant amenities in Buildings 1-3, the uniform and equipment store in Building 5, and the Health and Fitness

Center in Building 8, these uses would be frequented by sheriff deputies that work in the office facilities on site and are captured by the office parking requirements. The non-captive ratio factor applied in the shared parking analysis spreadsheet is the portion of the land use parking need that is not captured by the shared usage and needs to be satisfied. The following non-captive ratios were applied in the shared parking analysis:

- Restaurant – 85% non-sheriff deputies
- Retail – 50% sheriff deputies not working at the RSABT Office facilities on-site
- Health and Fitness Center – 75% sheriff deputies not working at the RSABT Office facilities on-site and RSABT members

Table 3 shows the shared parking demand for the RSABT Project on an average weekday with typical uses onsite, assuming no special events. As shown, the project is forecast to generate a peak parking demand of 289 spaces at 1:00. With the proposed supply of 320 spaces, this results in a surplus of 31 spaces on a typical weekday.

Table 4 shows the shared parking demand for the RSABT Project on a typical weekday with the occurrence of special events. As shown, the peak parking demand increases to 316 spaces at 1:00 on a day when the Meeting Hall is in use. With the proposed supply of 320 spaces, this results in a surplus of 4 spaces on a typical weekday. This reflects a "worst-case" condition assuming the meeting hall is occupied during the peak parking period and is only forecasted to occur 3 times per year based on specific details provided by the architect (See **Attachment A**).

TABLE 3 – RSABT PROJECT SHARED PARKING DEMAND – TYPICAL WEEKDAY

Land Use	Building 1-3	Building 4		Building 5			Building 6		Building 7	Building 8	RSABT Cumulative Parking Demand	RSABT Parking Provided & Surplus / Deficiency
	Restaurant	Office(≤ 5.000 KSF)	Office(> 5.000 KSF)	Office (≤ 5.000 KSF)	Office (> 5.000 KSF)	Retail	Medical Office	Medical Office	Office (≤ 5.000 KSF)	Health/Fitness Club		
Intensity	18.674 KSF	5.000 KSF	4.874 KSF	5.000 KSF	5.619 KSF	1.095 KSF	5.237 KSF	6.120 KSF	3.568 KSF	7.667 KSF		
Parking Rate [1]	12.5 / KSF	4 / KSF	2.5 / KSF	4 / KSF	2.5 / KSF	4 / KSF	5 / KSF	5 / KSF	4 / KSF	5 / KSF		
Maximum Parking Demand	234	20	13	20	15	5	27	31	15	39	419	320
Non-Captive Ratio	0.85	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00	0.75		
Adjusted Parking Demand	199	20	13	20	15	3	27	31	15	30	373	320

Time of Day	Restaurant	Office(≤ 5.000 KSF)	Office(> 5.000 KSF)	Office (≤ 5.000 KSF)	Office (> 5.000 KSF)	Retail	Medical Office	Medical Office	Office (≤ 5.000 KSF)	Health/Fitness Club	Weekday Shared Demand	Surplus / Deficiency
6:00 AM	0	1	1	1	1	0	0	0	1	23	28	292
7:00 AM	4	4	3	4	3	1	2	3	3	23	50	270
8:00 AM	10	13	9	13	10	1	26	29	10	15	136	184
9:00 AM	20	19	13	19	14	2	26	29	14	15	171	149
10:00 AM	40	20	13	20	15	3	27	31	15	15	199	121
11:00 AM	60	20	13	20	15	3	27	31	15	15	219	101
12:00 PM	100	18	12	18	14	3	15	17	14	15	226	94
1:00 PM	140	18	12	18	14	3	26	29	14	15	289	31
2:00 PM	120	20	13	20	15	3	27	31	15	15	279	41
3:00 PM	120	19	13	19	14	3	27	31	14	15	275	45
4:00 PM	100	16	11	16	12	3	26	29	12	23	248	72
5:00 PM	140	10	7	10	8	3	24	27	8	30	267	53
6:00 PM	180	5	3	5	4	3	19	21	4	30	274	46
7:00 PM	199	2	1	2	2	3	9	10	2	30	260	60
8:00 PM	199	2	1	2	2	3	5	5	2	30	251	69
9:00 PM	199	1	1	1	1	2	0	0	1	23	229	91
10:00 PM	180	1	1	1	1	1	0	0	1	23	209	111
11:00 PM	140	0	0	0	0	1	0	0	0	15	156	164
12:00 AM	100	0	0	0	0	0	0	0	0	15	115	205

KSF = 1,000 Square Feet

[1] Source: City of Rancho Mirage Municipal Code Section 17.26.040 Table 3-6.

TABLE 4 – RSABT PROJECT SHARED PARKING DEMAND – WEEKDAY WITH SPECIAL EVENTS

Land Use	Building 1-3	Building 4		Building 5				Building 6		Building 7		Building 8	RSABT Cumulative Parking Demand	RSABT Parking Provided & Surplus / Deficiency
	Restaurant	Office(≤ 5.000 KSF)	Office(> 5.000 KSF)	Office (≤ 5.000 KSF)	Office (> 5.000 KSF)	Retail	Meeting Hall [2]	Medical Office	Medical Office	Office (≤ 5.000 KSF)	Bar/Lounge [2]	Health/Fitness Club		
Intensity	18.674 KSF	5.000 KSF	4.874 KSF	5.000 KSF	5.619 KSF	1.095 KSF	76 Seats	5.237 KSF	6.120 KSF	3.568 KSF	2.323 KSF	7.667 KSF		
Parking Rate [1]	12.5 / KSF	4 / KSF	2.5 / KSF	4 / KSF	2.5 / KSF	4 / KSF	3 Seats	5 / KSF	5 / KSF	4 / KSF	12.5 / KSF	5 / KSF		
Maximum Parking Demand	234	20	13	20	15	5	26	27	31	15	30	39	475	320
Non-Captive Ratio	0.85	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00	1.00	1.00	0.75		
Adjusted Parking Demand	199	20	13	20	15	3	26	27	31	15	30	30	429	320

Time of Day	Restaurant	Office(≤ 5,000 SF)	Office(> 5,000 SF)	Office (≤ 5,000 SF)	Office (> 5,000 SF)	Retail	Meeting Hall	Medical Office	Medical Office	Office (≤ 5,000 SF)	Bar/Lounge	Health/Fitness Club	Weekday Shared Demand	Surplus / Deficiency
6:00 AM	0	1	1	1	1	0	0	0	0	1	0	23	28	292
7:00 AM	4	4	3	4	3	1	0	2	3	3	0	23	50	270
8:00 AM	10	13	9	13	10	1	0	26	29	10	0	15	136	184
9:00 AM	20	19	13	19	14	2	0	26	29	14	0	15	171	149
10:00 AM	40	20	13	20	15	3	0	27	31	15	0	15	199	121
11:00 AM	60	20	13	20	15	3	0	27	31	15	0	15	219	101
12:00 PM	100	18	12	18	14	3	20	15	17	14	0	15	246	74
1:00 PM	140	18	12	18	14	3	26	26	29	14	1	15	316	4
2:00 PM	120	20	13	20	15	3	26	27	31	15	1	15	306	14
3:00 PM	120	19	13	19	14	3	20	27	31	14	1	15	296	24
4:00 PM	100	16	11	16	12	3	0	26	29	12	1	23	249	71
5:00 PM	140	10	7	10	8	3	0	24	27	8	2	30	269	51
6:00 PM	180	5	3	5	4	3	0	19	21	4	9	30	283	37
7:00 PM	199	2	1	2	2	3	0	9	10	2	17	30	277	43
8:00 PM	199	2	1	2	2	3	0	5	5	2	24	30	275	45
9:00 PM	199	1	1	1	1	2	0	0	0	1	30	23	259	61
10:00 PM	180	1	1	1	1	1	0	0	0	1	30	23	239	81
11:00 PM	140	0	0	0	0	1	0	0	0	0	23	15	179	141
12:00 AM	100	0	0	0	0	0	0	0	0	0	16	15	131	189

KSF = 1,000 Square Feet

[1] Source: City of Rancho Mirage Municipal Code Section 17.26.040 Table 3-6.

[2] Special Event uses that will not have an impact on typical weekday operations.

Supplemental Assessment for Weekend Parking Conditions

When considering the forecast parking conditions for an average weekend, the demand and time-of-day characteristics can differ significantly based on the land use. For example, commercial offices are typically not occupied on most weekends, but the demand for restaurants is expected to be higher. The City of Rancho Mirage does not have weekend specific parking rates, therefore the weekday and weekend rates outlined in the ULI Shared Parking manual were used to determine a weekday-to-weekend parking ratio. This ratio was applied to the City municipal code parking rates to estimate an equivalent weekend parking demand rate. **Table 5** summarizes the rates used to develop the equivalent weekend City rate.

TABLE 5 – WEEKDAY AND WEEKEND PARKING RATES

Land Use	Weekday ULI Rate [1]	Weekday City Rate per Municipal Code [2]
Restaurants	14.40 / KSF	12.50 / KSF
Office (≤ 5.000 KSF)	3.80 / KSF	4.00 / KSF
Office (> 5.000 KSF)		2.50 / KSF
Retail	3.60 / KSF	4.00 / KSF
Medical Office	4.60 / KSF	5.00 / KSF
Bar/Lounge	16.50 / KSF	12.50 / KSF
Health/Fitness Club	7.00 / KSF	5.00 / KSF
Land Use	**Weekend ULI Rate [1]**	**Equivalent Weekend City Rate**
Restaurants	14.70 / KSF	12.76 / KSF
Office (≤ 5.000 KSF)	0.38 / KSF	0.40 / KSF
Office (> 5.000 KSF)		0.25 / KSF
Retail	4.00 / KSF	4.44 / KSF
Medical Office	0.00 / KSF	0.00 / KSF
Bar/Lounge	19.00 / KSF	14.39 / KSF
Health/Fitness Club	5.75 / KSF	4.11 / KSF

SF = 1,000 Square Feet

[1] Source: Urban Land Institute (ULI) Shared Parking 3rd Edition.

[2] Source: City of Rancho Mirage Municipal Code Section 17.26.040 Table 3-6.

As shown, the office space, medical office, and health/fitness club land uses experience a decrease in weekend parking demand when compared to weekday rates while the restaurant, retail, and bar/lounge uses are expected to experience a slight increase in required weekend parking. The meeting hall maintains the same parking rate in the weekend due to its proposed use having a very specific purpose that does not change dependent on the day of the week, as detailed in the dissertation by the architect (see **Attachment A**).

When applying these typical weekend parking demand rates to the proposed site land uses, a total of 346 parking spaces is estimated to be required on site before accounting for the peak time-of-day usage. **Table 6** details these calculations of required parking spaces.

TABLE 6 – WEEKEND PARKING REQUIREMENTS

Building	Land Use	Intensity	Weekend Parking Rate [1]	Weekend Parking Required	Parking Provided	Code Surplus (Shortfall)
1-3	Restaurants	18.674 KSF	12.76 / KSF	239	320	-26
4	Office (≤ 5.000 KSF)	5.000 KSF	0.40 / KSF	2		
	Office (> 5.000 KSF)	4.874 KSF	0.25 / KSF	2		
5	Office (≤ 5.000 KSF)	5.000 KSF	0.40 / KSF	2		
	Office (> 5.000 KSF)	5.619 KSF	0.25 / KSF	2		
	Retail	1.095 KSF	4.44 / KSF	5		
	Meeting Hall[2]	76 Seats	3 Seats	26		
6	Medical Office	5.237 KSF	0.00 / KSF	0		
	Medical Office	6.120 KSF	0.00 / KSF	0		
7	Office (≤ 5.000 KSF)	3.568 KSF	0.40 / KSF	2		
	Bar/Lounge	2.323 KSF	14.39 / KSF	34		
8	Health/Fitness Club	7.667 KSF	4.11 / KSF	32		
			Subtotal	346	320	-26

KSF = 1,000 Square Feet

[1] Source: Ratio of City of Rancho Mirage Municipal Code Section 17.26.040 Table 3-6 using ULI Rates.

[2] Meeting Hall assumes 1 Parking Space required per 3 Seats.

Similar to the Shared Parking Assessment of weekday parking, a Shared Parking Assessment was performed for the weekend period to account for the peak time-of-day usage for each individual use. The City does not have a shared parking hourly breakdown during the weekend so weekend hourly rates were used from the Urban Land Institute Shared Parking manual. This hourly breakdown is shown in **Table 7**.

Based on time-of-day parking demand distribution, as well as captive parking between the various uses, the peak weekend parking demand based on the mix of uses on-site is 291 spaces. Therefore the proposed parking supply of 320 spaces is shown to satisfy the forecast parking demand with an estimated surplus of 29 spaces during the peak weekend conditions. Similar to the weekday conditions, the weekend peak parking demand reflects the "worst-case" conditions, assuming the meeting hall is occupied during the peak parking period.

The results of the shared weekday and weekend parking assessment were used to develop a parking supply comparison as summarized in **Table 8**.

TABLE 7 – RSABT PROJECT SHARED PARKING DEMAND – WEEKEND WITH SPECIAL EVENTS

Land Use	Building 1-3	Building 4		Building 5				Building 6		Building 7		Building 8	RSABT Cumulative Parking Demand	RSABT Parking Provided & Surplus / Deficiency
	Restaurant	Office(≤ 5.000 KSF)	Office(> 5.000 KSF)	Office (≤ 5.000 KSF)	Office (> 5.000 KSF)	Retail	Meeting Hall [2]	Medical Office	Medical Office	Office (≤ 5.000 KSF)	Bar/Lounge [2]	Health/Fitness Club		
Intensity	18.674 KSF	5.000 KSF	4.874 KSF	5.000 KSF	5.619 KSF	1.095 KSF	76 Seats	5.237 KSF	6.120 KSF	3.568 KSF	2.323 KSF	7.667 KSF		
Parking Rate [1]	12.76 / KSF	0.40 / KSF	0.25 / KSF	0.40 / KSF	0.25 / KSF	4.44 / KSF	3 Seats	0.00 / KSF	0.00 / KSF	0.40 / KSF	14.39 / KSF	4.11 / KSF		
Maximum Parking Demand	239	2	2	2	2	5	26	0	0	2	34	32	346	320
Non-Captive Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adjusted Parking Demand	239	2	2	2	2	5	26	0	0	2	34	32	346	320

Time of Day	Restaurant	Office(≤ 5,000 SF)	Office(> 5,000 SF)	Office (≤ 5,000 SF)	Office (> 5,000 SF)	Retail	Meeting Hall	Medical Office	Medical Office	Office (≤ 5,000 SF)	Bar/Lounge	Health/Fitness Club	Weekday Shared Demand	Surplus / Deficiency
6:00 AM	16	0	0	0	0	1	0	0	0	0	0	26	43	277
7:00 AM	28	1	1	1	1	1	0	0	0	1	0	15	49	271
8:00 AM	52	2	2	2	2	2	0	0	0	2	0	12	76	244
9:00 AM	76	2	2	2	2	3	0	0	0	2	1	16	106	214
10:00 AM	139	2	2	2	2	4	0	0	0	2	1	12	166	154
11:00 AM	209	2	2	2	2	5	0	0	0	2	1	16	241	79
12:00 PM	239	2	2	2	2	5	20	0	0	2	1	16	291	29
1:00 PM	239	2	2	2	2	5	26	0	0	2	1	10	291	29
2:00 PM	217	2	2	2	2	5	26	0	0	2	1	9	268	52
3:00 PM	147	1	1	1	1	5	20	0	0	1	1	10	188	132
4:00 PM	134	1	1	1	1	5	0	0	0	1	1	18	163	157
5:00 PM	147	1	1	1	1	5	0	0	0	1	2	32	191	129
6:00 PM	205	1	1	1	1	4	0	0	0	1	10	31	255	65
7:00 PM	195	0	0	0	0	4	0	0	0	0	19	20	238	82
8:00 PM	123	0	0	0	0	4	0	0	0	0	27	10	164	156
9:00 PM	76	0	0	0	0	3	0	0	0	0	34	4	117	203
10:00 PM	52	0	0	0	0	2	0	0	0	0	34	1	89	231
11:00 PM	28	0	0	0	0	1	0	0	0	0	34	1	64	256
12:00 AM	17	0	0	0	0	0	0	0	0	0	34	0	51	269

KSF = 1,000 Square Feet

[1] Source: Ratio of City of Rancho Mirage Municipal Code Section 17.26.040 Table 3-6 using ULI Rates.

[2] Special Event uses that will not have an impact on typical weekend operations.

TABLE 8 – RSABT PROJECT PEAK SHARED PARKING DEMAND

Building	Land Use	Intensity		Code Parking Required	Parking Provided	Code Surplus (Shortfall)	Shared Parking Peak Weekday Demand	Weekday Surplus (Shortfall)	Shared Parking Peak Weekday Demand	Weekday Special Event Surplus (Shortfall)	Shared Parking Peak Weekend Demand	Weekend Special Event Surplus (Shortfall)
1-3	Restaurants	18.674	KSF	234	320	-155	140	+31	140	+4	239	+29
4	Office (≤ 5.000 KSF)	5.000	KSF	20			18		18		2	
	Office (> 5.000 KSF)	4.874	KSF	13			12		12		2	
5	Office (≤ 5.000 KSF)	5.000	KSF	20			18		18		2	
	Office (> 5.000 KSF)	5.619	KSF	15			14		14		2	
	Retail	1.095	KSF	5			3		3		5	
	Meeting Hall	76	Seats	26			N.A.		26		26	
6	Medical Office	5.237	KSF	27			26		26		0	
	Medical Office	6.120	KSF	31			29		29		0	
7	Office (≤ 5.000 KSF)	3.568	KSF	15			14		14		2	
	Bar/Lounge	2.323	KSF	30			N.A.		1		1	
8	Health/Fitness Club	7.667	KSF	39			15		15		10	
			Subtotal	475	320	-155	289	+31	316	+4	291	+29

KSF = 1,000 Square Feet

Conclusion

Due to the nature of the RSABT Project, having a mixture of offices and restaurants and RSABT facilities that will have direct correlation with the RSABT Office building, individual trips to the offices will likely also be attracted to the other land uses on-site. Because of this mix of land uses, the overall parking need would be less than the sum of the individual parking requirements for each land use since the peak parking demand times for unique land uses are different and some individuals to the uses can be considered "captive".

The RSABT Project would be required to provide a total of 475 parking spaces based on the parking rates outlined in the City of Rancho Mirage Municipal Code. The project proposes to provide a total of 320 parking spaces for the restaurant, office, retail, meeting hall, medical office, bar/lounge, and health/fitness center facilities. Therefore, there would be a deficiency of 155 spaces when applying the standards for individual permitted uses from Section 17.26 of the City of Rancho Mirage Municipal Code.

However, when shared parking demand patterns are taken into account and non-captive ratios are applied, the parking demand drops to 289 parking spaces on an average weekday (results in a surplus of 31 spaces), 316 parking spaces on a typical weekday with special events occurring (results in a surplus of 4 spaces), and 291 parking spaces on a typical weekend with special events (results in a surplus of 29 spaces).

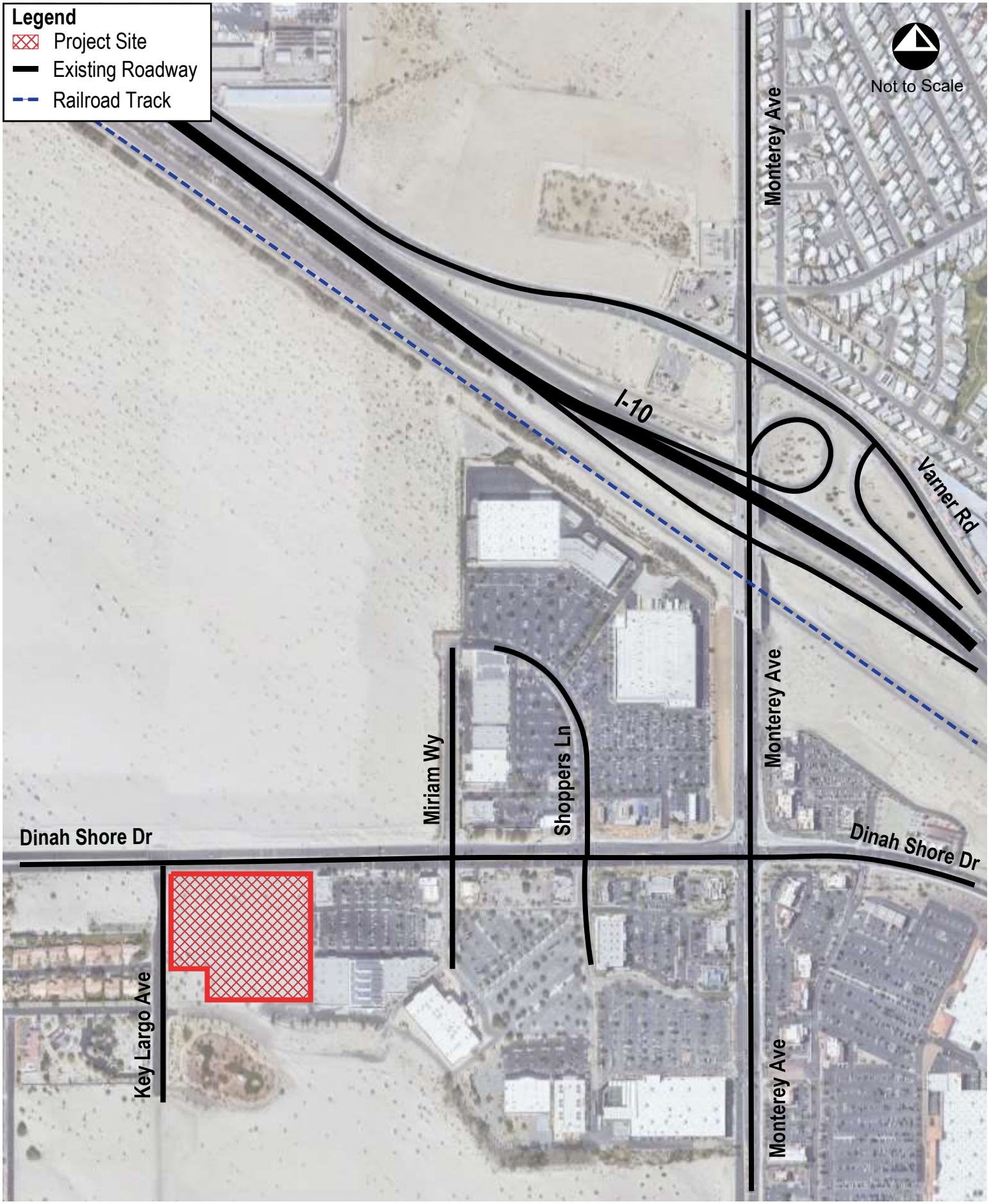
Therefore, the proposed parking facilities for the RSABT Project will satisfy the needs for the proposed mix of uses.

If you have any questions pertaining to the analysis results summarized in this memo, please call me at (760) 603-6244.

Sincerely,



Jordan Gray PE TE,
Technical Manager | Transportation Services

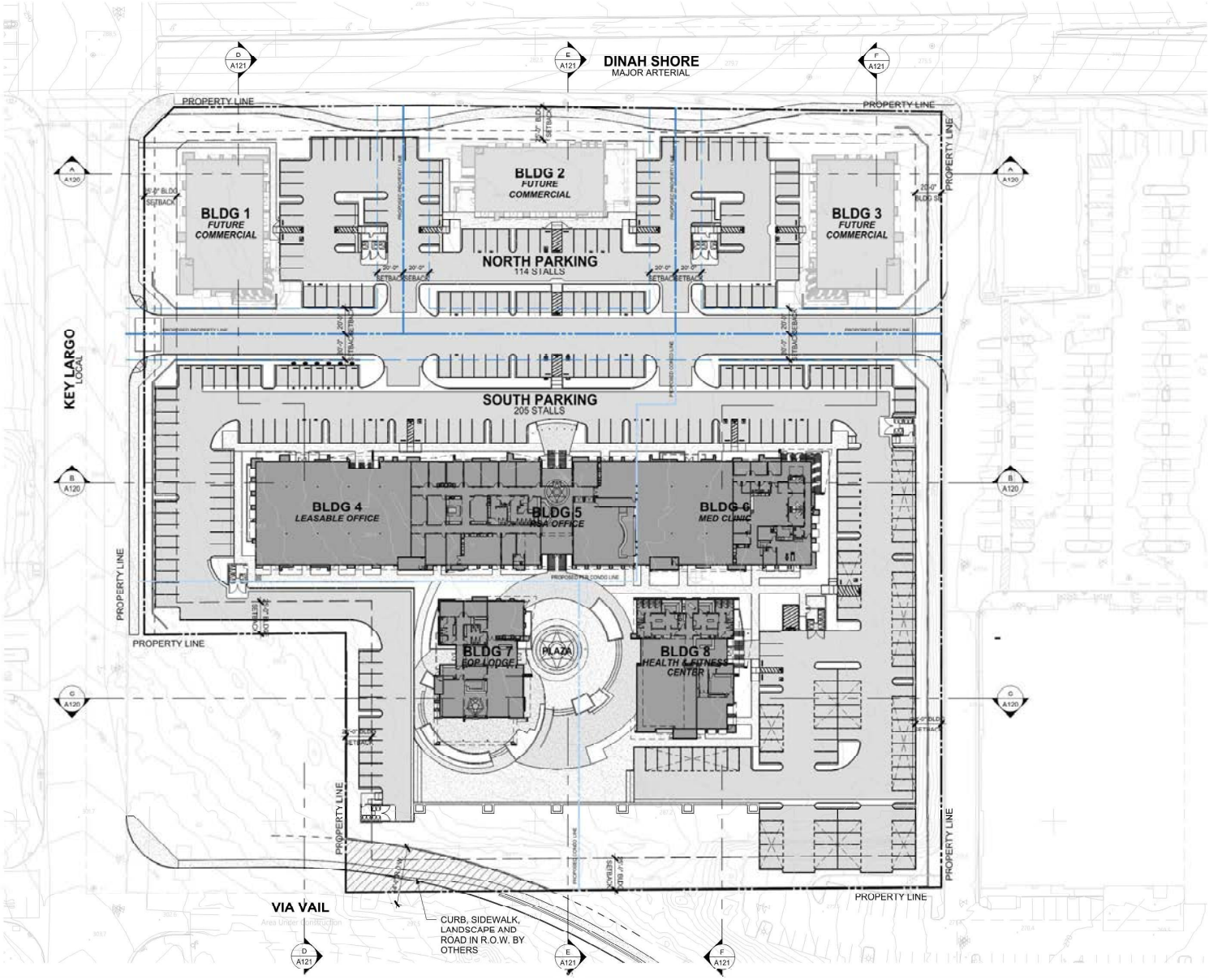


Michael Baker INTERNATIONAL

Project Location

Exhibit 1

Not to Scale



Source: Prest Vuksic Greenwood Architects

Not to Scale

Michael Baker INTERNATIONAL

Site Plan

Exhibit 2

Michael Baker
INTERNATIONAL

Attachment A
PVG Project Dissertation

PREST | VUKSIC | GREENWOOD
ARCHITECTS • INTERIORS

Riverside Sheriff's Association Benefit's Trust – Mixed Use Project
Project Dissertation
February 2026

Project Summary

The proposed project entails the development of a new mixed-use campus on the vacant approximately 7.92-acre parcel located at the southeast corner of Dinah Shore Drive and Key Largo Avenue. The project will serve the Riverside Sheriff's Association Benefits Trust (RSABT) and include a mix of commercial, office, medical, health and fitness uses as described below.

The site is divided by a shared access road that connects the existing mixed-use commercial center to the east with Key Largo Avenue to the west. The northern portion of the site will contain three one-story commercial buildings and associated parking. The southern portion will include five one-story buildings, a central multi-use plaza, a multi-purpose field, and shared parking areas. Parking will be provided through a shared parking agreement in accordance with the Monterey Specific Plan.

Phasing

The project will be constructed in multiple phases:

- Phase 1 will include all site infrastructure, parking, water retention areas, landscaping, the plaza, and Buildings 4 through 8 with their associated hardscape improvements.
- Future Phases will include Buildings 1 through 3, which will be developed on a land-lease basis as tenants are secured. Conceptual designs for these future buildings have been prepared to ensure architectural and material consistency throughout the project.

Building Uses and Descriptions

Buildings 1, 2 & 3 – Future Commercial

- **Size:** Approximately 5,510 to 6,582 SF each
- **Use:** Retail, restaurant, or office (planned to accommodate up to 100% restaurant use for maximum tenant flexibility)
- **Operations:** Typical retail and restaurant business hours

Building 4 – Office

- **Size:** Approximately 9,874 SF
- **Use:** Leasable office space. Space is also intended for the future expansion of the Riverside Sheriff's Association (RSA) offices
- **Operations:** Standard business hours

DRAFT

Building 5 – RSA Office

- **Size:** Approximately 14,130 SF
- **Use:** RSA office building, including 10,619 SF of office space, a 2,416 SF executive boardroom, and 1,095 SF of retail space. Retail items for sale would be uniforms and equipment for deputies at discounted rates. The store will be operated by RSA Staff under the Deputy Depot, DBA. Currently there is no uniform store for our deputies in the desert.
- **Operations:**
    - Office: Standard business hours (6:30AM-5:00PM)
    - Boardroom: Utilized three times per year from 1:00–2:00 PM
    - Retail: (6:30AM-5:00PM)

Building 6 – Medical Office

- **Size:** Approximately 11,357 SF
- **Use:** Medical office building, including 5,237 SF for RSABT medical services and 6,120 SF of leasable medical office or office space. Space is also intended for the future expansion of RSABT medical services.
- **Operations:** Standard business hours
- **Access:** Available to RSABT members and eligible dependents (approximately 450 eligible members)

Building 7 – FOP Lodge

- **Size:** Approximately 5,891 SF
- **Use:** Mixed-use facility for the Fraternal Order of Police, including 3,568 SF of office space and 2,323 SF of lounge/bar area
- **Operations:**
    - Office: Standard business hours (6:30AM-5:00PM)
        - Meetings & governance – executive board meetings, general membership meetings, elections, and committee work.
        - Member support – a place to handle benefits, legal plan questions, contract issues, and other member services.
        - Training & briefings – hosting classes, workshops, and informational sessions for officers.
    - Lounge/Bar: (6:30AM to 5:00PM for Typical uses, as needed for Special Uses)

      Typical Use:
        - Deputies will use the lounge to have their lunch or write reports while being uninterrupted and in a safe & controlled environment. The bar will not be available during this time.

      Special Uses:
        - Events & community outreach – ceremonies, fundraisers, memorial events, retirements, and community-focused programs.

Building 8 – Health & Fitness Center

- **Size:** Approximately 7,667 SF
- **Use:** Heath & Fitness center for will be for RSABT members and their eligible dependents, featuring free weights, cardio equipment, a multi-purpose fitness studio, locker rooms, and saunas
- **Operations:** Open during normal business hours, though most member use occurs before 5:00 AM and after 5:00 PM
- **Access:** Available to RSABT members and eligible dependents (approximately 300-350 eligible members) who are also participating in the program's medical benefits. This is an accessory use to the medical office component of the project as a health benefit to RSABT members.

Loading

- **Buildings 1–3:** Will be serviced as standard front-loaded retail buildings, with deliveries occurring during off-peak hours.
- **Buildings 4–8:** Will be serviced as front-loaded office buildings or via the designated loading area located south of Building 6.

Architectural Design

The architectural character will be contemporary, featuring clean lines, high-quality materials, and a cohesive design language across all buildings. The design will reflect elements that honor the professionalism, service, and community values of the Riverside Sheriff's Association.

If you have any questions, please feel free to reach out.

Best,



Nicole Williams, Architect

Michael Baker
INTERNATIONAL

Attachment B
Shared Parking Hourly Breakdown

TABLE 3-7
REPRESENTATIVE HOURLY ACCUMULATION BY PERCENTAGE OF PEAK HOUR

Hour of Day	Office	Retail	Restaurant	Cinema	HOTEL			
					Guest Room	Restaurant Lounge	Conference Area	Total
6:00 a.m.	3%	——	——	——	100%	20%	——	
7:00 a.m.	20%	8%	2%	——	85%	20%	——	
8:00 a.m.	63%	18%	5%	——	65%	20%	50%	
9:00 a.m.	93%	42%	10%	——	55%	20%	100%	
10:00 a.m.	100%	68%	20%	——	45%	20%	100%	
11:00 a.m.	100%	87%	30%	——	35%	30%	100%	
12:00 noon	90%	97%	50%	30%	30%	50%	100%	
1:00 p.m.	90%	100%	70%	70%	30%	70%	100%	
2:00 p.m.	97%	97%	60%	70%	35%	60%	100%	
3:00 p.m.	93%	95%	60%	70%	35%	55%	100%	
4:00 p.m.	77%	87%	50%	70%	45%	50%	100%	
5:00 p.m.	47%	79%	70%	70%	64%	70%	100%	
6:00 p.m.	23%	82%	90%	80%	70%	90%	100%	
7:00 p.m.	7%	89%	100%	90%	75%	100%	100%	
8:00 p.m.	7%	87%	100%	100%	90%	100%	100%	
9:00 p.m.	3%	61%	100%	100%	95%	100%	100%	
10:00 p.m.	3%	32%	90%	100%	100%	90%	50%	
11:00 p.m.	——	13%	70%	80%	100%	70%	——	
Midnight	——	——	50%	70%	100%	50%	——	

Source: City of Rancho Mirage Municipal Code - Chapter 17.26

	Retail (<400 ksf)			Fast Casual/Fast Food			Bar/Lounge			Health Club			Office <25 ksf			Medical/Dental Office		
	Visitor	Employee	Blend	Visitor	Employee	Blend	Visitor	Employee	Blend	Visitor	Employee	Blend	Visitor	Employee	Blend	Visitor	Employee	Blend
6:00 a.m.	1%	10%	2.8%	5%	20%	7.1%	0%	0%	0.0%	70%	75%	70.3%	0%	3%	2.8%	0%	0%	0.0%
7:00 a.m.	5%	15%	6.9%	10%	20%	11.4%	0%	0%	0.0%	40%	75%	42.0%	1%	15%	13.9%	0%	20%	7.0%
8:00 a.m.	15%	25%	16.9%	20%	30%	21.4%	0%	0%	0.0%	40%	75%	42.0%	20%	50%	47.6%	90%	100%	93.5%
9:00 a.m.	35%	45%	36.9%	30%	40%	31.4%	0%	5%	0.4%	70%	75%	70.3%	60%	90%	87.6%	90%	100%	93.5%
10:00 a.m.	60%	75%	62.9%	55%	75%	57.8%	0%	5%	0.4%	70%	75%	70.3%	100%	100%	100.0%	100%	100%	100.0%
11:00 a.m.	75%	95%	78.9%	85%	100%	87.1%	0%	5%	0.4%	80%	75%	79.7%	45%	100%	95.7%	100%	100%	100.0%
12:00 noon	100%	100%	100.0%	100%	100%	100.0%	0%	5%	0.4%	60%	75%	60.9%	15%	85%	79.5%	30%	100%	54.3%
1:00 p.m.	100%	100%	100.0%	100%	100%	100.0%	0%	10%	0.8%	70%	75%	70.3%	45%	85%	81.8%	90%	100%	93.5%
2:00 p.m.	95%	100%	96.0%	90%	95%	90.7%	0%	10%	0.8%	70%	75%	70.3%	95%	95%	95.0%	100%	100%	100.0%
3:00 p.m.	85%	100%	87.9%	60%	70%	61.4%	0%	10%	0.8%	70%	75%	70.3%	45%	95%	91.1%	100%	100%	100.0%
4:00 p.m.	85%	100%	87.9%	55%	60%	55.7%	0%	20%	1.5%	80%	75%	79.7%	15%	85%	79.5%	90%	100%	93.5%
5:00 p.m.	85%	100%	87.9%	60%	70%	61.4%	0%	45%	3.4%	90%	100%	90.6%	10%	60%	56.1%	80%	100%	87.0%
6:00 p.m.	90%	100%	91.9%	85%	90%	85.7%	25%	70%	28.4%	100%	100%	100.0%	5%	25%	23.4%	67%	67%	67.0%
7:00 p.m.	80%	100%	83.9%	80%	90%	81.4%	50%	100%	53.8%	90%	75%	89.1%	2%	15%	14.0%	30%	30%	30.0%
8:00 p.m.	65%	90%	69.9%	50%	60%	51.4%	75%	100%	76.9%	80%	50%	78.3%	1%	5%	4.7%	15%	15%	15.0%
9:00 p.m.	45%	60%	47.9%	30%	40%	31.4%	100%	100%	100.0%	70%	20%	67.1%	0%	3%	2.8%	0%	0%	0.0%
10:00 p.m.	15%	40%	19.9%	20%	30%	21.4%	100%	100%	100.0%	35%	20%	34.1%	0%	1%	0.9%	0%	0%	0.0%
11:00 p.m.	5%	20%	7.9%	10%	20%	11.4%	75%	90%	76.1%	10%	20%	10.6%	0%	0%	0.0%	0%	0%	0.0%
Midnight	0%	0%	0.0%	5%	20%	7.1%	50%	60%	50.8%	0%	0%	0.0%	0%	0%	0.0%	0%	0%	0.0%

Source: Urban Land Institute - Shared Parking (3rd Edition)

Appendix H –

AB 52 Consultation Materials

AGUA CALIENTE BAND OF CAHUILLA INDIANS
TRIBAL HISTORIC PRESERVATION

03-008-2026-001

April 02, 2026

[VIA EMAIL TO:bent@RanchoMirageCA.gov]
City of Rancho Mirage
Mr. Ben Torres
69-825 Highway 111
Rancho Mirage, California 92270

Re: Riverside Sheriff's Association

Dear Mr. Ben Torres,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Riverside Sheriff's Association project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the ACBCI THPO requests the following:

*Formal government to government consultation under California Assembly Bill No. 52 (AB-52).

*The presence of an approved Agua Caliente Native American Cultural Resource Monitor(s) during any ground disturbing activities (including archaeological testing and surveys). Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified Archaeologist (Secretary of the Interior's Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer and the Agua Caliente Tribal Historic Preservation Office.

*Please provide a copy of the Mitigated Negative Declaration report.

*The presence of an archaeologist that meets the Secretary of Interior's standards during any ground disturbing activities.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760) 883-1134. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Clarissa Durand

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
T 760/699/6800 F 760/699/6924 WWW.AGUACALIENTE-NSN.GOV

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION



Claritsa Duarte
Cultural Resources Analyst
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

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