WEST COVINA MEDICAL CENTER BEHAVIORIAL HEALTH BUILDING ADDITION

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

Prepared for

CITY OF WEST COVINA
Community Development Department
Planning Division
1444 West Garvey Avenue South
West Covina, CA 91790

Prepared by

TERRY A. HAYES ASSOCIATES INC.
3535 Hayden Avenue, Suite 350
Culver City, CA 90232

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1.0 INTRODUCTION

This section provides an overview of the environmental review process for the proposed West Covina Medical Center Behavioral Health Building Addition Project (proposed project) and identifies environmental compliance requirements and the discretionary actions and approvals needed to implement the proposed project.

1.1 PROJECT OVERVIEW

The proposed project would add a behavioral health transition facility to the eastern portion of the existing West Covina Medical Center at 725 South Orange Avenue in the City of West Covina (project site). The proposed building would be approximately 42,000 square feet in size and four stories high. It would adjoin and connect to an existing one-story medical hospital building on the project site.

1.2 ENVIRONMENTAL COMPLIANCE REQUIREMENTS

Section 15063(a) of the California Environmental Quality Act (CEQA) Guidelines requires the lead agency to prepare an Initial Study (IS) to determine if the proposed project may have a significant effect on the environment. The purpose of this document is to inform the City of West Covina, public agencies, and interested parties of the potential environmental effects resulting from the proposed project. For the proposed project to obtain an environmental clearance in the form of a Mitigated Negative Declaration (MND) in compliance with CEQA, any potential significant adverse effects must be mitigated to a less than significant level. This document alone does not determine whether the proposed project will be approved. Rather, it is a disclosure document aimed at equally informing all concerned parties and fostering informed discussion and decision-making regarding all aspects of the proposed project.

1.3 PROJECT INFORMATION

Project Title and Location:	West Covina Medical Center Behavioral Health Building Addition 725 South Orange Avenue West Covina, CA 91790
Lead Agency Name and Address:	City of West Covina Community Development Department Planning Division 1444 West Garvey Avenue South West Covina, CA 91790
Contact Person and Phone Number:	Jo-Anne Burns, Deputy Community Development Director (626) 939-8422
Project Sponsor's Name and Address:	Building Resources 2247 Lindsay Way Glendora, CA 91740

1.4 DISCRETIONARY ACTIONS AND APPROVALS

Discretionary actions include those local approvals or entitlements necessary to implement a project. The proposed project requires the following discretionary actions:

- Precise Plan – Approval of a Precise Plan is required for the architectural design and site layout of the proposed development.
- Conditional Use Permit – Approval of a Conditional Use Permit is required for hospitals in an Urban Center zoning district.
- Variance – Approval of a Variance is required because the site with the proposed construction does not comply with the required number of onsite parking spaces.
- Tree Removal Permit – Approval of a Tree Removal Permit is required to remove significant trees on the project site, as defined in Section 26-258 of the West Covina Municipal Code (WCMC).

1.5 ORGANIZATION OF THIS INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The content and format of this Initial Study/Mitigated Negative Declaration (IS/MND) is designed to meet the requirements of CEQA. This IS/MND is organized into the following four sections:

1.0 Introduction. This section provides an overview of the proposed project, describes the environmental compliance requirements, and identifies the discretionary actions and approvals needed for the proposed project.

2.0 Project Description. This section identifies the location of the project site; describes the project site, the surrounding area, and the proposed project; and provides an estimated timeline for the construction and implementation of the proposed project.

3.0 Initial Study Checklist and Evaluation. This section contains the CEQA Guidelines Appendix G: Initial Study Checklist and identifies the level of impact under each environmental impact category. This section also includes a discussion of the environmental impacts and any mitigation measures associated with each category.

4.0 List of Preparers and Sources Consulted. This section provides a list of the consultant team members who participated, and a list of sources and references used in the preparation of this IS/MND.

2.0 PROJECT DESCRIPTION

This section identifies the location of the project site, describes the project site and the surrounding area, provides a detailed description of the proposed project, and provides an estimated timeline for the construction and implementation of the proposed project.

2.1 PROJECT LOCATION AND EXISTING SETTING

PROJECT LOCATION

The 2.83-acre project site (Assessor's Identification Number [AIN] 8474-001-022) is located at 725 South Orange Avenue in the City of West Covina. The project site is located towards the western end of the City's Downtown district and is bounded by Interstate 10 (I-10) to the north with multi-family residential complexes north of the I-10 freeway; I-10 eastbound on- and off-ramps to the east; Orange Avenue to the southeast with an automotive service business, a specialty retail and its associated surface parking lot across the street; and Cameron Avenue to the west and southwest with offices (including medical offices) and the West Covina Medical Center surface parking lot across the street from the project site (northwest corner of the Orange Avenue/Cameron Avenue intersection). The West Covina Medical Center surface parking lot is currently used by patients, visitors, and staff of the medical center. The proposed project would be located at the eastern portion of the project site on approximately 36,400 square feet of the 2.83-acre project site. The project site and the surrounding uses are shown in **Figure 2-1**.

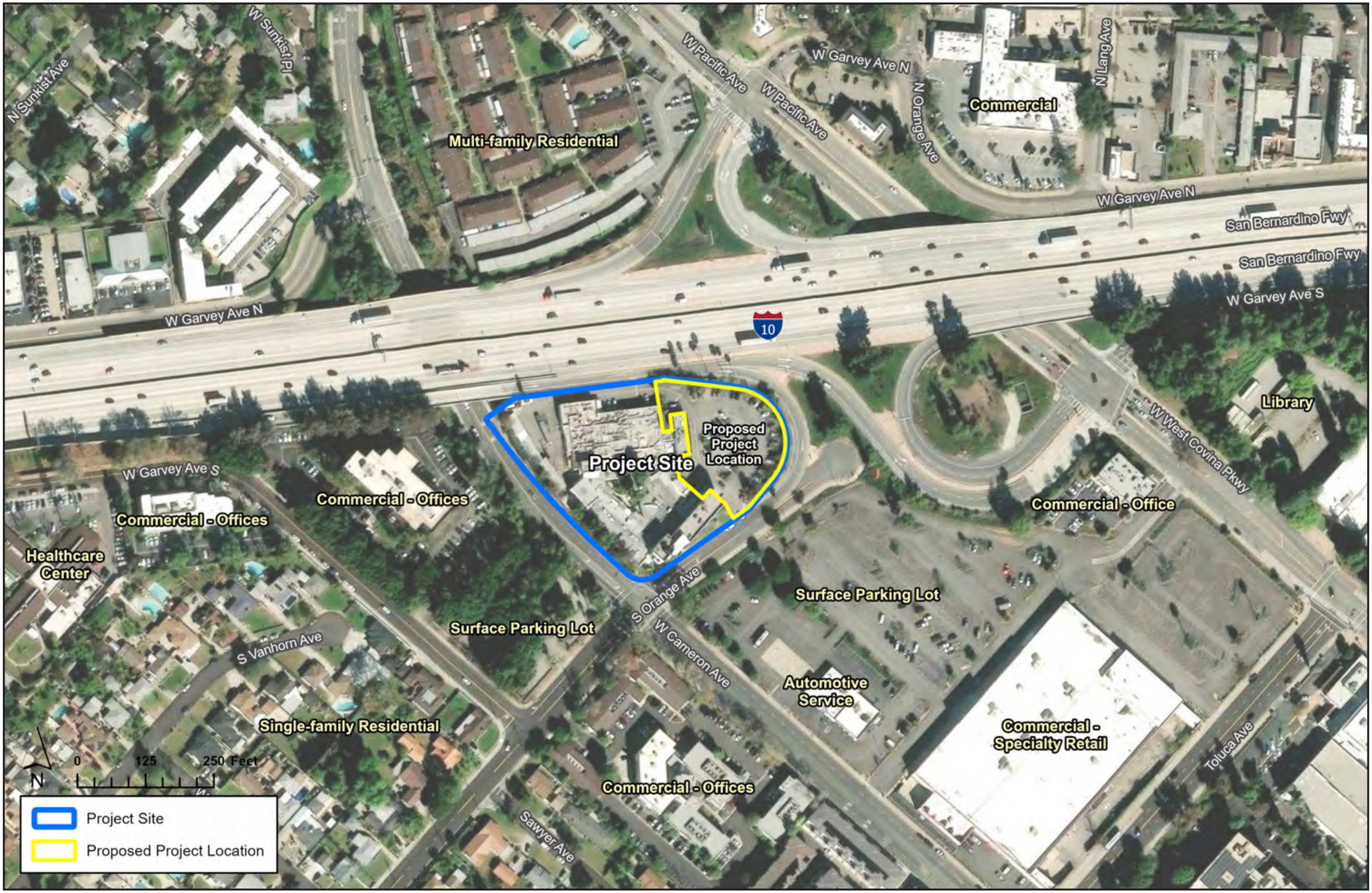
The project site is in the Urban Center (T-5) zoning district within the Downtown Plan Overlay Zone and has a General Plan land use designation of Commercial (C).

EXISTING SITE CONDITIONS

The project site is relatively flat and is currently occupied by the West Covina Medical Center, which consists of three adjoining low-rise structures and surface parking. The structure adjacent to Orange Avenue is a three-story 18,000-square-foot medical office building. The structure immediately northwest of this building is a 15,000-square-foot medical office building that is primarily one story. The northwestern corner of the 15,000-square-foot building is two stories. Adjoining the northern portion of this 15,000-square foot medical office building is a 28,000-square-foot medical hospital that is primarily one story. The southwestern corner of this 28,000-square-foot building is three stories.

Vegetation on the project site consists of grass, trees, and bushes. Landscaping is generally provided along the perimeter of the project site, along the sides of the existing buildings, in the courtyard between the medical hospital and the 15,000-square-foot medical office building, and in the surface parking lot at the eastern portion of the project site. The Arborist Report and Tree Protection Plan for the proposed project identified 87 trees on or adjacent to the project site, of which 57 trees are classified as significant per Section 26-258 of the WCMC.[1]

[1] Per WCMC Section 26-258, a significant tree is defined as a tree on private and/or public property that meets one or more of the following: a) located in the front yard of a lot or parcel and has a caliper of one foot or more; b) located in the street-side yard of a corner lot and has a caliper of one foot or more; and/or c) located anywhere on a lot, has a caliper of six inches or more, and is an oak tree native to California, California Sycamore, or American Sycamore. WCMC Section 26-258 defines caliper as the maximum diameter of the trunk of a tree measured at 4.5 feet above the natural grade. In the case of multi-trunked trees, caliper means the sum of the calipers of each individual trunk measured at 4.5 feet above grade.



Source: TAHA, 2024.

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FIGURE 2-1

PROJECT LOCATION AND SURROUNDING LAND USE

Trees on or adjacent to the project site include bird of paradise (*Strelitzia nicolai*), Brazilian pepper (*Schinus terebinthifolia*), brush cherry (*Syzygium paniculatum*), Buddhist pine (*Podocarpus macrophyllus*), Canary Island date palm (*Phoenix canariensis*), carrotwood (*Cupaniopsis anacardioides*), Chinese elm (*Ulmus parvifolia*), crepe myrtle (*Lagerstroemia indica*), Indian laurel (*Ficus microcarpa*), Mexican fan palm (*Washingtonia robusta*), pecan tree (*Carya illinoinensis*), Pygmy date palm (*Phoenix roebelenii*), Red frangipani (*Plumeria rubra*), and weeping fig (*Ficus benjamina*).

SURROUNDING AREA

The project site is generally surrounded by one- to three-story commercial buildings. Most of the commercial uses consist of offices, some of which are healthcare related. Specifically, a three-story office building and a surface parking lot that serves the West Covina Medical Center facility are located to the west across Cameron Avenue, with one- and two-story single-family residences, a two-story office building, and a one-story healthcare center located further west. The West Covina Medical Center surface parking lot on the west side of Cameron Avenue is currently used by patients, visitors, and staff of the medical center. An office park with one- and two-story buildings are located south of the Cameron Avenue/Orange Avenue intersection with single-family residences located further south and southwest. A one-story automobile service business, specialty retail business and its associated surface parking lot are located across Orange Avenue to the southeast with additional offices located further southeast. The I-10 eastbound on- and off-ramps are located to the east of the project site with a two-story healthcare-related office building and the City's Civic Center located further east. The civic and public institutional buildings in the Civic Center range from one to three stories tall. A mix of one- to three-story multi-family residential and one- to two-story commercial uses are situated north of I-10 freeway.

The commercial uses and surface parking lot to the west, southwest, and south of the project site (across from Cameron Avenue) are in the General Urban (T-4) zoning district and have a General Plan land use designation of Neighborhood – Medium Density Residential (NM). The commercial uses and surface parking lot to the southeast (across from Orange Avenue) are in the Urban Center (T-5) zoning district and have a General Plan land use designation of Commercial (C). The multi-family residential uses north of I-10 are zoned as either Residential 15 dwelling units per acre (MF-15), Residential 20 dwelling units per acre (MF-20), Residential 45 dwelling units per acre (MF-45), or Neighborhood Commercial (N-C). The R-A and MF-45 zoned residential uses have a General Plan land use designation of Neighborhood – High Density Residential (NH). The MF-20 and N-C zoned residential uses have a General Plan land use designation of NM. The commercial use to the north of I-10 is zoned N-C and has a General Plan land use designation of C.

Regional mass transit service is provided by Foothill Transit, with the closest bus stop located on Pacific Avenue, just north of Garvey Avenue North/I-10 on- and off-ramp, approximately 600 feet north of the project site across from the 1-10 freeway. Local transit service is provided by the City's Go West Shuttle Blue Line. The closest shuttle stop is located on Orange Avenue, just southwest of Cameron Avenue, approximately 150 feet south of the project site.

An aerial photograph depicting the project site and the surrounding land uses is presented in **Figure 2-1**.

2.2 PROJECT DESCRIPTION

The proposed project would generally be located on approximately 36,400 square feet of the 2.83-acre project site. The existing 55-space surface parking lot at the eastern portion of the project site would be replaced with a four-story 42,000-square foot behavioral health facility with a patient drop-off area, ambulance drop-off area, six parking spaces, and new landscaping. The proposed building would adjoin and connect to the existing one-story medical hospital. The proposed building would have a total of 71 licensed beds and would be up to 70 feet in height. The proposed patient drop-off area would be located to the southeast of the proposed building. All patients are expected to be transported to the proposed addition via ambulance or non-medical emergency transport van from another facility (such as a skilled nursing or residential care facilities) to the proposed facility for treatment. No sirens would be used.

The first floor of the proposed facility would consist of an ambulance drop-off area, a loading and receiving area, a kitchen services area, a lobby/reception area, staff areas, and utility rooms (e.g., electrical and information technology rooms). The kitchen services area would be developed to serve the existing 46 patient beds in the existing medical facility and the 71 patient beds for the proposed building. The patient drop-off area will be located to the southeast of the proposed building with the building entrance located at the southeastern end of the proposed addition. The ambulance drop-off area would be located on the north side of the proposed building, near the I-10 freeway.

The second through fourth floor would each have 12 patient rooms, exam/consultation rooms, nursing station and offices, a dining area, and utility rooms. Indoor activity space is proposed on the western end of the second and third floor, and outdoor activity space is proposed at the eastern end of the second floor and at the western end of the fourth floor. Mechanical services units for the proposed facility would be provided on the rooftop of the proposed building.

The parking lot at the eastern portion of the project site currently has 55 surface parking spaces. With implementation of the proposed project, this surface parking lot would have four parking spaces. The existing ten parking spaces located on the north side of the existing building would remain, while the carport and parking spaces located on the west of the existing building would be removed/demolished with only two parking spaces remaining. The existing 132 off-site surface parking spaces on the west side of Orange Avenue (across the street from the project site) would remain unchanged.

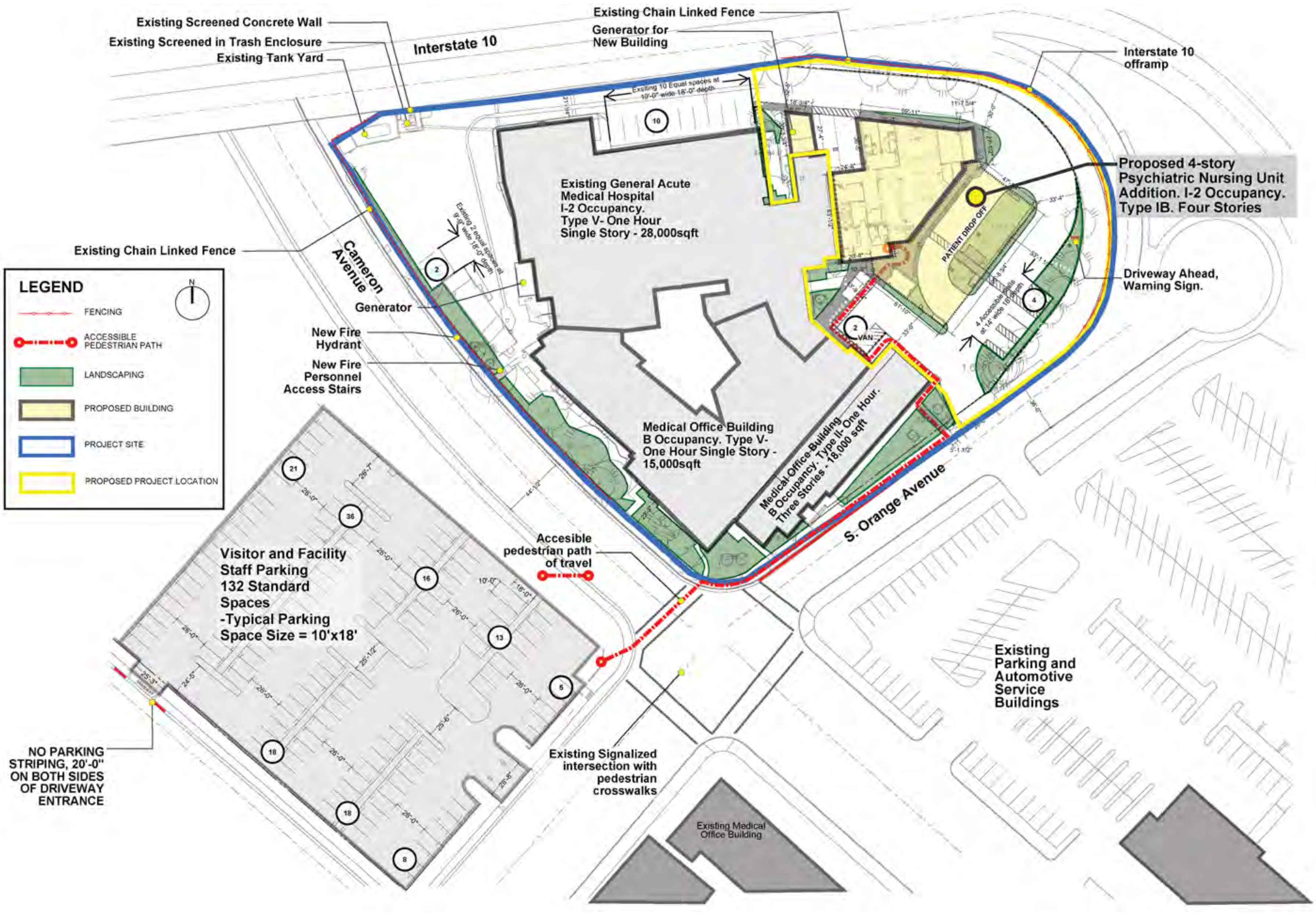
Existing vegetation on the eastern portion of the project site, including 38 existing trees, would be removed to accommodate the proposed project. Of the 38 existing trees that would be removed, 25 trees are classified as significant trees per Section 26-258 of the WCMC. Landscaping is proposed along the southeastern perimeter of the project site; on the southeast side of the patient drop-off area; and to the north, east, and south sides of the proposed building. The new landscaping would be drought tolerant.

Vehicular and pedestrian access to the project site would be located on Orange Avenue, with an existing driveway on the east side of the existing three-story medical office building. Sidewalks are located adjacent to the project site along Orange Avenue and Cameron Avenue.

Figure 2-2 shows the proposed site plan, and **Figures 2-3** through **2-5** illustrate the elevations for the proposed building.

2.3 CONSTRUCTION ACTIVITIES AND SCHEDULE

Construction of the proposed project is anticipated to begin in 2025 and would last for approximately 24 months. Approximately 36,400 square feet of the 2.83-acre project site would be disturbed. Construction activities include site clearing, grading, building construction, and paving. Site clearing and grading is estimated to last for approximately two months, paving would last for approximately two months, and building construction would last for approximately 20 months. Although construction would primarily occur at the eastern portion of the project site, the existing parking area and drive aisles to the north and west of the existing medical hospital would be repaved with the proposed project. Construction activity would occur Mondays through Fridays for eight hours per day, in accordance with the City's permitted hours of construction. Construction of the proposed project is expected to be completed in 2027.



Source: c|a ARCHITECTS, 2024.

FIGURE 2-2

SCHEMATIC SITE PLAN

Source: c|a ARCHITECTS, 2022

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FIGURE 2-3

SOUTHWEST AND SOUTHEAST ELEVATIONS

1 **North Elevation**
View from Interstate 10

2 **Northeast Elevation**

Source: c|a ARCHITECTS, 2022

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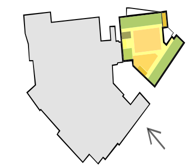
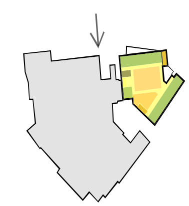
FIGURE 2-4
NORTH AND NORTHEAST ELEVATIONS



Site Section, looking North
As seen from Orange Avenue

Key Plan



Key Plan

Site Section, looking South
As seen from Interstate 10

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Source: c|a ARCHITECTS, 2022

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FIGURE 2-5
NORTH AND SOUTH ELEVATIONS

3.0 INITIAL STUDY CHECKLIST AND EVALUATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

☐ Aesthetics	☐ Agriculture/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

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" 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 ENVIRONMENTAL IMPACT REPORT 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.

Signature	Date
Jo-Anne Burns, Deputy Community Development Director	City of West Covina
Printed Name	For

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.1 AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) 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?	☐	☐	☑	☐

a) **No Impact**. A scenic vista is defined as a public viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Public views are those that are experienced from a publicly accessible vantage point, such as a roadway or public park. No scenic vistas are available on the project site or within the surrounding area. San Jose Hills is the nearest scenic vista to the project site. San Jose Hills is approximately 3.5 miles southeast of the project site and is not clearly visible from the project site and its surrounding area.[2] Views of San Jose Hills are primarily blocked by intervening structures and trees. Views of the San Gabriel Mountains to the north of the project site are blocked by the I-10 freeway. Clear unobstructed views of the San Gabriel Mountains and San Jose Hills are not available on the project site and its surrounding areas. Existing trees along the perimeter of the project site also block views of the San Gabriel Mountains and San Jose Hills from the project site. The proposed project would construct a four-story addition to the existing medical center on the project site with a height of up to 70 feet. Although the proposed building would be taller than the existing one- to three-story structures on the project site and in the surrounding area, the proposed project is not expected to obstruct any scenic vistas since none are available in the surrounding area. Intervening structures and trees would continue to block most views of the San Gabriel Mountains and San Jose Hills with implementation of the proposed project. Therefore, no impact would occur.

b) **No Impact**. A significant impact would occur if the proposed project would substantially damage scenic resources within a state scenic highway. The project site is not located on or in the vicinity of a scenic highway. The nearest state-designated scenic highway is Angeles Crest Highway (State Route 2), approximately 15 miles northwest of the project site.[3] The nearest state-eligible scenic highways are San Gabriel and Azusa Avenues north of Interstate 210, approximately four miles northeast of the project site. Due to intervening buildings, trees, and the I-10 freeway, the project site is not within the viewshed of these state-designated and state-eligible scenic highways. Therefore, no impact would occur.

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[2]City of West Covina, *West Covina General Plan*, adopted December 2016.

[3]California Department of Transportation, *California State Scenic Highway System Map*, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed March 2023.

c) **Less-Than-Significant Impact with Mitigation Incorporated**. The project site is in an urbanized area of the City and is in the Urban Center (T-5) zoning district within the Downtown Plan Overlay Zone. The project site has a General Plan land use designation of Commercial (C). The project site is developed with two buildings that are primarily one story in height, one three-story building, surface parking, and landscaping. Trees along the perimeter of the project site generally limit views of the western and eastern portions of the project site. The surrounding properties to the west, south, and east of the project site consists of primarily one- to three-story commercial uses. The proposed project would construct a four-story building that would be up to 70 feet high on the project site. The new building would adjoin the existing one-story medical hospital building on the project site. The proposed four-story building would have a modern architectural design with smooth white exterior walls and metal fascia between the first and second floor. The first floor of the southeast and southwest elevations would be painted yellow to identify the patient drop-off and the intake/lobby/waiting/reception areas. The design of the proposed building would be consistent with the visual character of the existing buildings on the project site and in the surrounding area. Additionally, the proposed structure would be set back approximately 130 feet from Orange Avenue and 210 feet from Cameron Avenue. The setback distances from the public rights-of-way would reduce the scale of the proposed building from the surrounding area. Along Orange Avenue, the trees along the perimeter of the project site would partially obstruct views of the proposed building, which would further reduce the scale of the proposed building. Along Cameron Avenue, the distance of the proposed building from the street, trees along the perimeter of the project site, and existing medical buildings on the project site would reduce the scale of the proposed building from the surrounding area.

The project site is in the Urban Center zoning district. Per the City's Downtown Plan & Code, new buildings in this zoning district are to be up to five stories and a maximum of 70 feet in height.[4] The proposed four-story, 70-foot-high building would comply with the building height requirement for the Urban Center Zone. The project site has 87 trees on or adjacent to the project site, of which 57 are classified as significant trees per Section 26-258 of the WCMC. The proposed project would remove 38 trees, of which 25 trees are classified as significant trees. The proposed project would be required to comply with Chapter 26, Article VI, Division 9 (Preservation, Protection and Removal of Trees) of the WCMC. Per Section 26-259of the WCMC, a tree removal permit would be required and would need to be obtained by the applicant prior to the removal of any significant trees on or adjacent to the project site. Per Section 26-262 of the WCMC, any significant trees that would be removed are required to be replaced with trees of comparable species, size, and condition as the existing trees. If it is not possible to relocate the existing trees or provide replacement trees on or off the project site, the applicant would be required to provide payment of the proper restitution value of the trees or donate boxed trees to the City to be used elsewhere in the City. The design of the proposed project limits the number of trees that could be planted on the project site. As it is not possible for the applicant to relocate or replace the existing 25 significant trees that would be removed by the proposed project, the applicant would be required to plant replacement trees off site, provide payment for the restitution value of the trees, or donate box trees to the City.

Construction activities, such as grading and other ground disturbance activities, equipment access and staging, right-of-way clearance, and tree removal have the potential to adversely affect protected trees. These activities could potentially damage roots and/or require excessive canopy removal, which could affect tree health and mortality. Generally, encroachments within the dripline and optimal tree protection zone, such as root severance and soil compaction, increase the likelihood that the tree would experience temporary or permanent negative health impacts, such as dieback, decline, decay, and death. Encroachments within the structural

[4]City of West Covina, *West Covina Downtown Plan & Code*, adopted December 2016.

rooting radius, particularly root severance of larger roots, increase the likelihood of tree destabilization. The Arborist Report and Tree Protection Plan for the proposed project determined that 15 trees, which would not be removed by the proposed project, would likely be affected by the proposed project. Of the 15 trees, construction of the proposed project would not compromise the health or structural integrity, would encroach approximately 30 percent or less of the dripline and/or the optimal tree protection zone, and/or would avoid the structural rooting radius of 11 trees. For the remaining four trees, the health or structural integrity may be compromised, construction activities would encroach greater than 30 percent or more of the dripline and/or optimal tree protection zone, and/or a portion of the structural rooting radius would be affected. After construction, these four trees may be at increased risk of failure during atypical weather events that produce high winds and oversaturated soil. The Arborist Report and Tree Protection Plan for the proposed project provide protective measures for the proposed project to implement. These measures include:

- Prohibiting grading, construction, or construction-related activities within the dripline of a significant tree or heritage tree;
- Providing construction barrier to shield significant trees and heritage trees from damage during construction;
- Requiring structures or impervious paving to be located outside of the dripline or a six-foot radius of the trunk perimeter, whichever is greater, of any significant tree or heritage tree;
- Pruning branches that could be injured by vehicles or that could interfere with the development activity;
- Not allowing compaction of soil within the dripline of any tree;
- Not permitting construction, including structures and walls, that disrupts the root system;
- Requiring the landscaping and irrigation plan to be tailored per the needs of the retained trees;
- Allowing the Planning Director to impose additional measures determined necessary to preserve and protect the health of trees to remain, relocated trees, and new trees planted to replace those removed;
- Requiring a certified arborist to oversee activities that would affect tree roots or canopy;
- Requiring temporary equipment staging and storage to be located in areas away from the canopies and dripline of trees;
- Requiring that any limbs and branches that are damaged be trimmed with clean and sharp pruners immediately in accordance with the American National Standards Institute standards, Section 8 Pruning Practices; and
- Limiting pruning and trimming of protected trees to only what is necessary for construction and to be conducted under the direct supervision of a certified arborist.[5]

The design of the proposed building would be consistent with the visual character of the existing buildings on the project site and the surrounding area and would comply with the City's zoning and other regulations that govern scenic quality. New landscaping would be installed and would comply with the City's landscape requirements. Additionally, the applicant would be required to comply with Chapter 26, Article VI, Division 10 (Preservation, Protection and Removal of Trees) of the WCMC with regards to the proposed tree removal. As development of the proposed project has the potential to affect 15 trees that would remain on the project site, implementation of Mitigation Measure **A-1** would be required. Mitigation Measure **A-1** would limit the effects that development of the proposed project would have on existing trees that would remain on the project site. Therefore, with implementation of Mitigation Measure **A-1**, a less-than-significant impact on visual character and quality would occur.

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[5]Rincon Consultants, Inc., *West Covina Medical Center at 725 and 741 Orange Ave: Arborist Report and Tree Protection Plan*, July 2023.

d) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would create a new source of substantial light or glare that adversely affects day or nighttime views in the surrounding area. The project site is located in an urbanized area with a moderate level of ambient lighting. Existing nighttime lighting sources on the project site and in the surrounding area include streetlights, vehicle headlights, lighting from surface parking lots, and interior and exterior building illumination from the project site and surrounding commercial uses. The proposed project would install exterior lighting at the proposed ambulance drop-off area, loading and receiving dock area, patient drop-off area, building entrance, and at the surface parking lot and driveway aisles. Exterior lighting levels associated with the proposed project would be consistent with the existing nighttime lighting levels of the project site and the surrounding area. No light sensitive land uses would be affected by the proposed project. Additionally, the proposed project would comply with the lighting standards in the WCMC, including Section 26-92 of the WCMC, which requires lights to be hooded and directed away from adjoining properties. Compliance with WCMC would prevent lighting on the project site from spilling over onto the surrounding area.

The proposed project does not include features that would introduce a major source of glare during the day and night. The proposed structures would be constructed with primarily non-reflective materials, such as stucco on the exterior facades. The use of metal would be limited to the fascia just above the first floor and at the roof cornice. The narrow strips of metal at the fascia above the first floor and at the roof cornice are not expected to generate a substantial amount of glare that would affect the surrounding area. Additionally, trees along the perimeter of the project site would further prevent glare from adversely affecting the surrounding area. Therefore, the proposed project would not create new sources of substantial light or glare, and a less-than-significant impact would occur.

MITGATION MEASURES

A-1 The applicant shall comply with all protective measures identified in the Arborist Report and Tree Protection Plan for the proposed project.

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

a-b) **No Impact**. Due to its urban setting, the project site and its surroundings are not included in the Farmland Mapping and Monitoring Program of the California Department of Conservation.[6] In addition, the project site is not located within a zone designated for agricultural use or an area that is designated as Williamson Act contract lands. The project site is in the City's Urban Center zoning district. No agricultural uses or related operations are present within the project site or in the surrounding area. Therefore, no impact on farmland would occur.

c-d) **No Impact**. The project site is located within an urban area that is not zoned as forest land. No forest land or forest resources are located on the project site or in the surrounding area. Therefore, no impact would occur.

e) **No Impact**. As discussed in Responses to Checklist Questions 3.2(a) through (d), no agricultural or forestry operations occur on the project site or its vicinity. The proposed project would not introduce any changes that would result in the conversion of farmland or forest land to non-agricultural or forest use, respectively. Therefore, no impact would occur.

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[6]California Department of Conservation, *California Important Farmland Finder*, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed March 2023.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.3 AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
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 nonattainment 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?	☐	☐	☑	☐

Air quality is typically characterized by ambient air concentrations of seven specific pollutants identified by the United States Environmental Protection Agency (USEPA) to be of concern with respect to health and welfare of the general public. Federal criteria air pollutants include ground-level ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), respirable particulate matter ten microns or less in diameter (PM_{10}), fine particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), and lead (Pb). These specific pollutants, known as criteria air pollutants, are pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. These pollutants are common byproducts of human activities and have been documented through scientific research to cause adverse health effects. The federal ambient concentration criteria are known as the National Ambient Air Quality Standards (NAAQS), and the California ambient concentration criteria are referred to as the California Ambient Air Quality Standards (CAAQS). In addition to the federal criteria pollutants, the state regulates visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Air quality in California is governed by the California Clean Air Act (CCAA). The CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts at the regional and local levels. The CCAA requires all areas of the state to achieve and maintain the CAAQS by the earliest feasible date. The proposed project is located in the South Coast Air Basin (SCAB). The Los Angeles County portion of SCAB does not meet the CAAQS for O_3, PM_{10}, and $PM_{2.5}$.

The air quality analysis for the proposed project is consistent with the methods described in the South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook (1993 edition), as well as the updates to the CEQA Air Quality Handbook.[7] SCAQMD methodologies recommend that air pollutant emissions be analyzed in both regional and local contexts. Regional emissions refer to all emissions that would be associated with construction and operation of a project, while localized emissions refer to only those emissions that would be produced by sources located on the project site. To assist in the assessment of air pollutant emissions, the SCAQMD established maximum daily threshold values for air pollutant emissions from CEQA projects within the SCAB. The mass daily thresholds were derived using regional emissions modeling techniques to prevent the occurrence of air quality violations that would

[7]SCAQMD, *Air Quality Analysis Guidance Handbook,* http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook, accessed January 2024.

obstruct implementation of the Air Quality Management Plan (AQMP) and hinder efforts to improve regional air quality.

Table 3-1 presents the SCAQMD mass daily air quality significance thresholds for regional and localized emissions of regulated pollutants resulting from construction activities, as well as regional mass daily thresholds for operational emissions.[8] The localized construction thresholds are specific to SCAQMD Source Receptor Area (SRA) 11 for a one-acre construction site with sensitive receptors within 100 meters and were obtained from the SCAQMD localized significance threshold (LST) guidance document.[9,10] The LST values were derived from regionally-specific modeling of pollutant emissions and designed to prevent localized pollutant concentrations from exceeding applicable ambient air quality standards near construction sites based on existing ambient air quality. The mass daily emissions thresholds were established as screening criteria for emissions from proposed CEQA projects. The SCAQMD generally advises that a project generating maximum daily emissions of the pollutants shown in **Table 3-1** of lesser magnitude than the corresponding threshold values would not cause a significant air quality impact at the regional or local level.

TABLE 3-1: SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS – MASS DAILY EMISSIONS

Pollutant	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
CONSTRUCTION						
Regional Threshold (lbs/day)	75	100	550	150	150	55
Localized Threshold (lbs/day)	--	96	1,113	--	29	9
OPERATIONS						
Regional Threshold (lbs/day)	55	55	550	150	150	55

Note: Construction LST values selected for a three-acre daily disturbance based on equipment inventory and 100-meter receptor distance in SRA 11.
SOURCE: SCAQMD, 2019; 2009.

The SCAQMD recognizes that air quality impacts for individual projects with emissions that remain below the thresholds shown in **Table 3-1** would be considered less than significant at the project level and would not be cumulatively considerable. If maximum daily emissions would exceed applicable threshold values during construction or operations, opportunities to mitigate and reduce those emissions are required to be explored and implemented as feasible.

In addition to the mass daily thresholds for criteria pollutants and O_3 precursors, SCAQMD has established CEQA significance thresholds related to toxic air contaminants (TACs) and odorous emissions. As a diverse class of pollutants, TACs include many different pollutants with varying degrees of toxicity and that affect human health in different ways. Within the field of health risk assessment, carcinogenic risk and non-carcinogenic hazards can be determined based on multipollutant exposures. According to SCAQMD methodology, health effects from carcinogenic air toxics are described in terms of excess incremental individual cancer risk. “Individual Cancer Risk” is the likelihood that a person continuously exposed to TAC concentrations over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. SCAQMD established a project-specific TAC carcinogenic exposure threshold of an incremental excess cancer risk of 10 cases per million. For non-carcinogenic TACs, the acute and chronic exposures should not exceed a combined calculated Hazard Index value of 1.0, based on pollutant-specific reference-exposure levels.

[8]SCAQMD, *SCAQMD Air Quality Significance Thresholds – Mass Daily Thresholds*, April 2019.
[9]SCAQMD, *Final Localized Significance Threshold Methodology Appendix C Mass Rate Lookup Tables*, October 21, 2009.
[10]SCAQMD, *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*, 2008.

Construction and operation of certain land use development projects may create public nuisances related to visible dust plumes and odors. The SCAQMD air quality significance thresholds address odorous emissions by invoking compliance with SCAQMD Rule 402. A project may have a significant air quality impact if construction or operation of that project creates a public nuisance condition in violation of SCAQMD Rule 402. Visible dust plumes are controlled through the enforcement of SCAQMD Rule 401 and SCAQMD Rule 403.

a) **Less-Than-Significant Impact**. The applicable air quality plan is the SCAQMD 2022 AQMP, which is based on regional growth projections assessed in the Southern California Association of Governments (SCAG) Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) related to population and employment. The 2022 AQMP provides policies and control measures that would reduce emissions to attain both state and federal ambient air quality standards by their applicable deadlines. Environmental review of individual projects within the SCAB must demonstrate that daily construction and operational emissions thresholds, as established by SCAQMD, would not be exceeded. The environmental review must also demonstrate that individual projects would not increase the number or severity of existing air quality violations.

The SCAQMD CEQA Air Quality Handbook identifies two key indicators of consistency with the AQMP:

1) Whether the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plan; and

2) Whether the project would exceed the forecasted growth incorporated into the AQMP via the RTP/SCS.

Consistency Criterion 1: Air Quality Violations

Construction Emissions. Air quality violations are determined by an SCAQMD Air Quality Inspector when a business is out of compliance with applicable SCAQMD rule requirements, permit conditions or legal requirements, or with applicable state or federal air pollution regulations. Air quality violations typically involve large industrial facilities that emit vast quantities of highly regulated pollutants and are not common among typical land use development projects. Construction of the proposed project would be conducted in accordance with the best management practices (BMPs) provided in SCAQMD Regulation IV, Rule 401 (Visible Emissions) and Rule 403 (Fugitive Dust). These BMPs include the application of water as a dust suppressant to material stockpiles and disturbed ground areas. The application of these BMPs would reduce fugitive dust emissions during construction activities by approximately 61 percent. All construction equipment and vehicles would be maintained and operated within manufacturer specifications to limit unnecessary emissions during use, and any vehicles traveling on unpaved surfaces would be required to limit their speed to 15 miles per hour or less. Construction of the proposed project would not have the potential to obstruct or conflict with implementation of the AQMP in the context of SCAQMD rule requirements.

Estimates of maximum daily air pollutant emissions that would be generated by construction activities can be used to demonstrate that the proposed project would not conflict with or obstruct implementation of the AQMP with regards to increasing the frequency or severity of existing air quality violations. SCAQMD devised its mass daily thresholds of significance as a screening tool for determining the potential significance of air pollutant emissions from CEQA projects. Emissions of air pollutants that would be generated by construction activities were calculated using the California Emissions Estimator Model (CalEEMod, Version 2022.1.1.21). CalEEMod is the preferred regulatory tool for estimating air pollutant emissions associated with land use developments in California. Sources of air pollutant emissions associated with proposed project construction include heavy-duty diesel equipment exhaust, fugitive dust generation from material movement, off-gassing of volatile compounds from architectural finishing, haul truck trips, vendor material delivery trips, and construction worker trips.

Table 3-2 presents the maximum daily regional emissions that would be generated by each construction activity for the proposed project. Maximum daily emissions during construction are compared to the applicable SCAQMD mass daily thresholds of significance. Construction of the proposed project would not generate daily emissions of criteria pollutants or O_3 precursors in excess of any SCAQMD regional threshold. Thus, construction of the proposed project would not result in an increase in the frequency or severity of existing air quality violations, would not cause or contribute to new violations, and would not obstruct timely implementation of the AQMP.

TABLE 3-2: ESTIMATED REGIONAL CONSTRUCTION EMISSIONS

	Maximum Daily Emissions (Pounds Per Day)					
Construction Activity	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Site Preparation	0.2	2.7	3.5	<0.1	1.3	0.2
Grading	0.9	8.7	8.8	<0.1	2.9	1.4
Building Construction	1.5	6.1	23.3	<0.1	3.4	0.9
Paving + Architectural Coating	26.8	2.9	4.4	<0.1	0.8	0.2
Maximum Daily Emissions	**26.8**	**8.7**	**23.3**	**<0.1**	**3.4**	**1.4**
Regional Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Emissions modeling files can be found in **Appendix A**.
SOURCE: TAHA, 2024.

Operational Emissions. CalEEMod was also used to produce estimates of daily air pollutant emissions during future operation. CalEEMod generates default estimates of population growth and daily vehicle trips associated with land uses in lieu of project-specific information. Direct sources of operational emissions would include mobile source vehicle trips and area source emissions such as consumer product use (i.e., household cleaners) and landscaping activities. Indirect source emissions during operations would include energy consumption such as natural gas use associated with space heating, water heating, and stoves, as well as electricity for lighting and appliances. The primary source of operational emissions would be on-road vehicle travel. The Transportation Impact Study (TIS) for the proposed project, which is included in Appendix C, determined that operations would generate 452 daily vehicle trips.[11] The CalEEMod program generates estimates of emissions from energy use (i.e., natural gas consumption) based on the land use type and size of the project and average building energy demand factors. **Table 3-3** presents the estimated operation emissions of the proposed project. As shown, future operation of the

[11]Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Health Addition Project*, September 17, 2024.

proposed project would not result in daily emissions that exceed any of the applicable SCAQMD regional thresholds.

TABLE 3-3: ESTIMATED DAILY OPERATIONAL EMISSIONS

Operational Activity	Maximum Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	1.5	<0.1	2.8	<0.1	<0.1	<0.1
Energy Sources	<0.1	0.3	0.2	<0.1	<0.1	<0.1
Mobile Sources	1.5	1.3	13.9	<0.1	3.3	0.9
Daily Operational Emissions	**3.0**	**1.6**	**16.9**	**<0.1**	**3.3**	**0.9**
Regional Threshold	55	55	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Emissions modeling files can be found in **Appendix A**.
SOURCE: TAHA, 2024.

Consistency Criterion 2: AQMP Growth Forecast

The second AQMP consistency criterion requires that the proposed project does not exceed the growth assumptions in the AQMP. The population and employment assumptions used to estimate regional emissions in the AQMP are obtained from SCAG projections for cities and unincorporated areas within the SCAQMD jurisdiction. Projects that are consistent with regional growth projections are generally consistent with the AQMP. The proposed project is an addition to an existing medical center and would not construct any housing units. The proposed project is an addition to an existing medical center and would not construct any housing units. The proposed project would provide a net increase of approximately 50 jobs in the City that can be filled by the local labor force. There is no potential for this relatively small number of jobs to interfere with long-term growth forecasts. Thus, the proposed project would, therefore, have no potential to interfere with population, housing, or employment growth forecasts. Therefore, the proposed project would not result in growth that would exceed the projections incorporated into the AQMP.

Summary

The proposed project would not result in daily regional emissions that exceed the applicable SCAQMD thresholds, which were established to ensure that individual projects would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (Consistency Criterion 1). Additionally, the proposed project would not have the potential to result in population and employment growth that would exceed the growth projections incorporated into the AQMP (Consistency Criterion 2). Therefore, the proposed project would be consistent with the AQMP, and a less-than-significant impact would occur.

b) **Less-Than-Significant Impact**. The Los Angeles County portion of SCAB has ongoing cumulative regional emissions for O_3, PM_{10}, and $PM_{2.5}$ since the region is designated as non-attainment of the NAAQS and CAAQS for these air pollutants. Considering existing environmental conditions, SCAQMD propagated guidance that an individual project can emit allowable quantities of these pollutants on a regional scale without significantly contributing to cumulative emissions of criteria pollutants for which the region is non-attainment (**Table 3-1**). As such, individual projects that do not generate emissions greater than the SCAQMD regional significance thresholds are not expected to result in cumulatively considerable net increase of any criteria pollutant for which SCAB is non-attainment. As discussed in Response to Checklist Question 3.3a, daily regional and localized emissions associated with construction and operation of the proposed project would be below all applicable regional SCAQMD thresholds. Therefore, the proposed project would not result in a cumulatively considerable net increase of non-attainment pollutants, and a less-than-significant impact would occur.

c) **Less-Than-Significant Impact**. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to SCAQMD, air quality sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

SCAQMD has established 1,640 feet (500 meters) as the distance for assessing localized air quality impacts. Air quality sensitive land uses within 1,640 feet of the project site include:

- Mauna Loa Garden Apartments located approximately 365 feet (112 meters) to the north;
- Assisted Home Health and Hospice located approximately 415 (125 meters) feet to the west;
- Residences located approximately 570 feet (174 meters) to the southwest;
- Four Palms Apartments located approximately 715 feet (218 meters) to northwest;
- Residences located approximately 800 feet (230 meters) to the north;
- Residences located approximately 915 feet (280 meters) to the northwest; and
- Residences located approximately 1030 feet (315 meters) to the northeast.

Construction

Sensitive receptors near the project site may be exposed to pollutant concentrations emanating from emissions sources involved in construction activities. SCAQMD established an LST methodology to determine the likelihood of substantial criteria pollutant concentrations reaching sensitive receptor locations. The LST methodology involves screening values for daily NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions that are generated exclusively by sources located on the project site. Mobile source emissions on the roadway network are spread across long distances and do not directly affect sensitive receptors in close proximity to the project site. LST values were determined using emissions modeling based on ambient air quality measured throughout SCAB. If maximum daily emissions remain below the LST values during construction activities, it is highly unlikely that air pollutant concentrations in the ambient air would reach substantial levels sufficient to create public health concerns for sensitive receptors. As shown in **Table 3-4** maximum daily emissions of criteria pollutants and ozone precursors would not exceed any applicable LST values. Therefore, construction of the proposed project would not result in exposure of sensitive receptors to substantial concentrations of criteria pollutants.

TABLE 3-4: ESTIMATED LOCALIZED CONSTRUCTION EMISSIONS

	Maximum Daily On-Site Emissions (Pounds Per Day)			
Construction Activity	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Site Preparation	2.0	2.9	1.0	0.2
Grading	8.6	8.3	2.9	1.4
Building Construction	4.6	6.4	0.2	0.2
Paving + Architectural Coating	2.8	3.8	0.6	0.1
Maximum Daily Localized Emissions	**8.6**	**8.3**	**2.9**	**1.4**
Localized Significance Threshold /a/	96	1,113	29	9
Exceed Threshold?	**No**	**No**	**No**	**No**

/a/ LST values correspond to a one-acre disturbance area in SRA 11 within 25 meters of the nearest sensitive receptor.
Note: Emissions modeling files can be found in **Appendix A**.
SOURCE: TAHA, 2024.

With regards to TAC emissions, carcinogenic risks, and non-carcinogenic hazards, the use of heavy-duty construction equipment and haul trucks during construction activities would release diesel PM to the atmosphere through exhaust emissions. Diesel PM is a known carcinogen, and extended exposure to elevated concentrations of diesel PM can increase excess cancer risks in individuals. However, carcinogenic risks are typically assessed over timescales of several years to decades, as the carcinogenic dose response is cumulative in nature. Short-term exposures to diesel PM would have to involve extremely high concentrations in order to exceed the SCAQMD air quality significance threshold of 10 excess cancers per million.

Construction of the proposed project is forecasted to last for approximately 24 months, and over the course of construction, average diesel PM emissions from on-site equipment would be approximately 0.13 pounds per day. This magnitude of diesel PM emissions is a conservative estimate based on the assumed near-continuous operation of equipment during the workday, when in reality there may be considerable downtime throughout days of active construction. Emissions would be distributed across the construction site where equipment is active and would be dispersed quickly due to the elevated atmospheric mixing height and higher wind speeds during the daytime. It is unlikely that diesel PM concentrations would reach levels of any public health concern at sensitive receptor locations in the project vicinity during the construction period, and diesel PM emissions would cease upon completion of construction activities. Therefore, the proposed project would result in a less-than-significant impact related to construction TAC emissions, concentrations, and exposures.

Operation

The proposed project does not include an industrial component that would constitute a new substantial stationary source of operational air pollutant emissions and does not include a land use that would generate a substantial number of heavy-duty truck trips within the region. The proposed project would not generate air toxic emissions that would expose sensitive receptors to substantial pollutant concentrations. Therefore, the proposed project would result in a less-than-significant impact related to substantial pollutant concentrations during operational activities.

d) **Less-Than-Significant Impact.** Odors are the only potential construction and operational emissions that have the potential to adversely affect a substantial number of people other than the emissions addressed in Response to Checklist Questions 3.3a through 3.3c.

During construction, potential sources that may produce objectionable odors include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site, would be temporary in nature, and would not persist beyond the termination of construction activities. The proposed project would utilize typical construction techniques, and odors would be typical of most construction sites. Odors from construction activities would decrease, dissipate away from the construction area, and quickly diluted. Therefore, the proposed project would result in a less-than-significant impact related to construction odors.

Land uses and industrial operations that are associated with odor complaints generally include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding.[12] During operational activities, the proposed kitchen services within the medical facility addition would produce some odors and smells associated with the preparation of food in the kitchen service area, which would be typical of the types of odors that currently exist in the commercial area. Operations of the kitchen facility would comply with SCAQMD Rule 402, which would prohibit any air quality discharge that would be a nuisance or pose any harm to individuals of the public. Therefore, the proposed project would result in a less-than-significant impact related to operational odors.

[12]SCAQMD, *CEQA Air Quality Handbook*, 1993.

3.4 BIOLOGICAL RESOURCES. Would the project:	**Potentially Significant Impact**	**Less-Than-Significant Impact with Mitigation Incorporated**	**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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
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 tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?	☐	☑	☐	☐
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?	☐	☐	☐	☑

a) **No Impact**. A significant biological impact would occur if the proposed project would cause the loss or destruction of individuals of a candidate, sensitive, or special status species or the degradation of sensitive habitat for these species. The project site is located in an urban area surrounded by commercial and residential uses. Plant life on the project site is limited to non-native and ornamental species used for landscaping. Animal life is comprised of common bird, insect, reptile, and small mammal species. The California Natural Diversity Database (CNDDB), a computerized database that identifies past occurrences of species of special concern (e.g., plants, animals, and communities that are rare, threatened, or endangered), does not identify any candidate, sensitive, or special status species on the project site or within 1.3 miles of the project site.[13] The entire project site has been previously disturbed and developed with urban uses (i.e., structures, ornamental landscaping, and paved areas). Suitable habitat for special-status wildlife species does not occur within the project site. Since no special-status species were identified or have high likelihood of occurring on the project site, it is unlikely that the proposed project would result in the loss or destruction of individual candidate, sensitive, or special status species or the degradation of sensitive habitat. Therefore, the proposed project would not have an 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

[13] California Department of Fish and Wildlife, *California Natural Diversity Database*, https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018408-cnddb-in-bios, accessed April 2023.

Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS), and no impact would occur.

b) **No Impact**. As discussed in Response to Checklist Question 3.4a, the project site is located within an urbanized area surrounded by commercial and residential uses. The project site is bordered by the I-10 freeway to the north, Cameron Avenue to the west and southwest, and Orange Avenue to the southeast. The project site and the adjacent surrounding areas do not contain any riparian habitat or features necessary to support riparian habitat. Additionally, CNDDB has not listed any riparian habitat or other sensitive natural communities on or in the vicinity of the project site.[14] Therefore, the proposed project would not have any effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS, and no impact would occur.

c) **No Impact**. A significant impact would occur if federally protected wetlands were modified or removed as a result of the proposed project. The project site does not contain any state or federally protected wetlands. The project site is located in an urbanized area and is designated for commercial uses. There are no federally protected wetlands adjacent to or in proximity to the project site. The nearest water body is Walnut Creek Wash, a concrete-lined channel approximately 1,350 feet south of the project site. CNDDB has not listed any riparian habitat or other sensitive natural communities on or in the vicinity of the project site.[15] The proposed project would not have any 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. Therefore, no impact would occur.

d) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project would interfere with, or remove access to, a migratory wildlife corridor or impede use of native wildlife nursery sites. The project site and the surrounding area are highly developed with urban uses, and no wildlife corridors are on or in proximity to the project site. The project site does not contain any state or federally protected wetlands that would contain migratory fish or other wildlife species. If migratory birds were to traverse the project site, the birds would likely utilize mature vegetation on the project site, some of which may potentially provide nesting sites for migratory birds. The Arborist Report and Tree Protection Plan for the proposed project identified 87 trees on or adjacent to the project site, of which 38 trees would be removed and 15 trees would likely be affected by construction of the proposed project. Construction activities would likely encroach into the dripline, optimal tree protection zone, and/or a portion of the structural rooting radius of the 15 trees. The tree survey that was conducted as part of the Arborist Report and Tree Protection Plan identified a nesting pair of common ravens (*Corvus corax*) in a Mexican fan palm at the West Covina Medical Center parking lot at the west side of Cameron Avenue, across the street from the project site. Due to the proximity of nesting birds to the project site, the removal of trees on and adjacent to the project site, and that construction of the proposed project could potentially affect existing trees, it is possible that project-related construction activities could potentially affect migratory birds; however, the proposed project is required to comply with the Migratory Bird Treaty Act (MBTA)[16] and the California Fish and Game Code (CFGC).[17]

[14]California Department of Fish and Wildlife, *California Natural Diversity Database*, https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018408-cnddb-in-bios, accessed April 2023.
[15]*Ibid*.
[16]Migratory Bird Treaty Act, 16 United States Code Chapter 7, Subchapter II, Section 703.
[17]California Department of Fish and Game Code Section 3513.

Under MBTA and CFGC, it is unlawful to take or possess any migratory nongame bird.[18] To ensure that the proposed project complies with MBTA and CFGC, implementation of Mitigation Measure **BR-1** would be required. Mitigation Measure **BR-1** would require a nesting survey be conducted if tree removal or trimming activities occur during the nesting season (generally from February 1 to August 31). The nesting survey would be conducted prior to tree removal or trimming activities to ensure that no active nests are present. By avoiding clearing and tree trimming during the bird-breeding season or performing nest surveys to ensure no active nests are present prior to clearing and tree trimming activities, the proposed project would be in compliance with the MBTA and pertinent sections of the CFGC. With implementation of Mitigation Measure **BR-1**, the proposed project is not expected to interfere with wildlife movement or impede the use of native wildlife nursery sites. Therefore, a less-than-significant impact would occur with implementation of Mitigation Measure **BR-1**.

e) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project were inconsistent with local regulations pertaining to biological resources. As discussed in Response to Checklist Question 3.1c, the proposed project would remove 38 trees, of which 25 trees are classified as significant trees based on the definition of significant trees in Section 26-258 of the WCMC. The proposed project would be required to comply with Chapter 26, Article VI, Division 9 (Preservation, Protection and Removal of Trees) of the WCMC. Per Section 26-262 of the WCMC, a tree removal permit would be required and would need to be obtained by the applicant to remove any of the significant trees on or adjacent to the project site. Per Section 26-263 of the WCMC, any significant trees that would be removed are required to be replaced with trees of comparable species, size, and condition as the existing trees. If it is not possible to relocate the existing trees or provide replacement trees on or off the project site, the applicant would be required to provide payment of the proper restitution value of the trees or donate boxed trees to the City to be used elsewhere in the City. The replacement or relocation of all 25 significant trees on the project site may not be possible due to the size, design, and orientation of the proposed project. To comply with the City's Preservation, Protection and Removal of Trees Ordinance, the applicant would be required to plant replacement trees off site or provide payment for the restitution value of the trees or donate box trees to the City.

The Arborist Report and Tree Protection Plan for the proposed project determined that 15 trees that would remain on the project site would likely be affected by the proposed project. Of the 15 trees, construction the proposed project would not compromise the health or structural integrity, would not encroach more than 30 percent of the dripline and/or the optimal tree protection zone, and/or would avoid the structural rooting radius of 11 trees. For the remaining four trees, the health or structural integrity may be compromised, construction activities would encroach more than 30 percent of the dripline and/or optimal tree protection zone, and/or a portion of the structural rooting radius would be affected. After construction, these four trees may be at increased risk of failure during atypical weather events that produce high winds and oversaturated soil. The Arborist Report and Tree Protection Plan provides protective measures to limit the potential adverse effects that the proposed project may have on existing trees that would remain on the project site.[19]

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[18]"Take" is defined by the USFWS (Federal Endangered Species Act Section 3(19)) as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Take" is defined by the California Fish and Game Code Section 86 as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

[19]Rincon Consultants, Inc., *West Covina Medical Center at 725 and 741 Orange Ave: Arborist Report and Tree Protection Plan*, July 2023.

With regards to the trees that are proposed to be removed as part of the proposed project, the proposed project would comply with the City's Preservation, Protection and Removal of Trees Ordinance since the applicant would be required to plant replacement trees off site or provide payment for the restitution value of the trees or donate box trees to the City. However, since the proposed project has the potential to affect the health and integrity, dripline, optimal tree protection zone, and/or structural rooting radius of trees during construction, Mitigation Measure **A-1** would be required to reduce impacts on trees that would remain on the project site. Therefore, with implementation of Mitigation Measure **A-1**, a less-than-significant impact with regards to tree preservation would occur.

f) **No Impact**. The project site is located in an urbanized area and surrounded primarily by commercial and residential uses. The project site is not located within or adjacent to the boundaries of any adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

MITGATION MEASURES

See Mitigation Measure **A-1**.

BR-1 All tree removal and tree trimming activities shall be performed prior to or after the bird-breeding season of February 1st through August 31st (i.e., only between September 1 and January 31). If clearing/vegetation removal or tree trimming is planned to occur during the breeding season, a nest survey shall be conducted by a qualified biologist no more than one week prior to any clearing or tree trimming activities. Work may proceed only if no active bird nests are detected. The biologist conducting the nest survey shall document a negative survey with a report indicating that no impacts to active avian nests shall occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.5 CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☑	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☑	☐

a) **No Impact**. CEQA Guidelines Section 15064.5 generally defines a historical resource as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. The project site is developed with a medical center and is not listed in the National Register of Historic Places (National Register) or the California Register of Historic Resources (California Register). The project site was evaluated as a potential historical resource in the City's 2019 Historic Resource Inventory Update.[20] The project site was evaluated according to the established designation criteria for listing in the National Register, California Register, and as a City of West Covina landmark or historic district.

A property is eligible for listing in the National Register if it is at least 50 years of age, possess significance in American history and culture, architecture, or archaeology, and meets one or more of the following four established criteria:

A. Associated with events that have made a significant contribution to the broad patterns of our history;

B. Associated with the lives of persons significant in our past;

C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Yield, or may be likely to yield, information important in prehistory or history.

The criteria for eligibility of listing in the California Register are based upon National Register criteria but are identified as 1 through 4 instead of A through D. A property is eligible for listing in the California Register if it is at least 50 years of age and possess significance at the local, state, or national level, under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

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[20] City of West Covina, *Historic Context Statement, 1945-1978 & Historic Resource Inventory Update*, December 2019, https://www.westcovina.org/departments/community-development/planning-division/historic-preservation, accessed March 2023.

2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

The City's Historic Resource Preservation Ordinance (WCMC Chapter 17, Article III) identifies the criteria under which a property may be designated in the City. A property may be designated a landmark if it is at least 50 years old and meets one or more of the following five criteria:

A. It exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, or architectural history;

B. It is identified with persons or events significant in local, regional, state or national history;

C. It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;

D. It is representative of the notable work of a builder, designer, or architect; or

E. It has a unique location or physical characteristic(s) or represents an established and familiar visual feature or landmark of a neighborhood, community, or the City.

According to the City's 2019 Historic Resource Inventory Update, the West Covina Medical Center was one of the first medical facilities in the City and was constructed to meet the needs of the rapidly growing community. The medical center was constructed in several phases. It was originally constructed in 1949 and was founded by doctors and brothers-in-law Bernard Finch and Franklin Gordon. The medical center was constructed as a one-story masonry building with a flat, mansard metal roof; was planned to have between 40 and 50 rooms; and would provide complete medical services. The medical center was expanded in 1958 and became the West Covina Hospital. Additions were also added in 1971 and 1980. The property is currently known by its original name, West Covina Medical Center.

The City's 2019 Historic Resource Inventory Update identified the West Covina Medical Center property as one of the 90 properties that warranted further evaluation as a potential historical resource. A full evaluation of the project site was documented on the California Department of Parks and Recreation (DPR) 523 form and is summarized below.[21]

The DPR 523 form indicates that the West Covina Medical Center appears eligible for listing in the National Register and California Register as an individual property through survey evaluation and appears to be individually eligible for local listing or designation through survey evaluation. The project site appears to be significant under the National Register Criterion A, California Register Criterion 1, and West Covina Landmark Criterion A for its association with postwar institutional development. The project site is associated with private institutional development in the immediate postwar period and represents the beginning of this trend during the period. However, the project site does not retain sufficient

[21]City of West Covina, *Historic Context Statement, 1945-1978 & Historic Resource Inventory Update*, Attachment 4, December 2019, https://www.westcovina.org/departments/community-development/planning-division/historic-preservation, accessed March 2023.

physical integrity to convey that association and is, therefore, not eligible for listing under these criteria.

With regards to National Register Criterion B, California Register Criterion 2, and West Covina Landmark Criterion B, Finch lived in Covina, while Gordon lived in West Covina. Both had medical practices in Covina before opening their West Covina medical office. Though they appear to have been active in their communities, no evidence is available to suggest that they could be significant to the history of medicine or some other aspect of history in West Covina. Therefore, the project site does not appear to be eligible under National Register Criterion B, California Register Criterion 2, or West Covina Landmark Criterion B.

With regards to National Register Criterion C, California Register Criterion 3, and West Covina Landmark Criteria C and D, the buildings on the project site are not representative of a particular style of architecture. It does not appear to be an important example of construction practices from the period and does not possess high artistic value. Initially constructed as a one-story L-shaped building accessed from Garvey Avenue, the medical center was substantially altered in 1958 when the hospital was constructed. What was once the primary elevation of the medical center appears to be located within the courtyard between the hospital and medical center. Further additions were made between 1968 and 1976. These alterations occurred during the property's period of significance. However, they create an appearance of a building from the 1960s and 1970s rather than from the 1940s. The hospital portion of the building was designed by architect Mansell Lee Dexter. Dexter (1910-1992) received his education at San Jose State College; University of California, Los Angeles; and Art Center College of Design in Pasadena. After working as a draftsman for the firm of Maurice Fleishman from 1952 to 1955, Dexter formed his own practice. Other examples of his work include Auburn Faith Hospital (1966), Sonora Community Hospital Long Term Care Unit (1967), Los Banos Community Hospital (1967), Delta Memorial Hospital in Antioch (1967), and Feather River Hospital in Paradise (1968). There is no evidence that Dexter could be considered a master architect, and the building does not appear to be eligible under the National Register Criterion C, California Register Criterion 3, or West Covina Landmark Criterion D as representative of the notable work of a builder, designer or architect. The project site is not a component of a significant and distinguishable entity (a historic district) because it is not united historically or aesthetically with the surrounding properties by a plan or physical development. Thus, the project site does not appear to be eligible under National Register Criterion C, California Register Criterion 3, or West Covina Landmark Criterion C.

National Register Criterion D and California Register Criterion 4 generally apply to archaeological resources but may apply to a built resource in instances where a property may contain important information about such topics as construction techniques or human activity. In any case, the property must be the principal source of information. It is unlikely for the property of a private medical institution to contain important information about archaeological resources. Therefore, the project site does not appear to be eligible under National Register Criterion D or California Register Criterion 4.

The West Covina Medical Center does not appear to meet West Covina Landmark Criterion E. It does not appear to have a unique location or physical characteristic(s) or represent an established and familiar visual feature or landmark of a neighborhood, community, or the City. For properties to be considered under West Covina Landmark Criterion E, integrity of feeling and association are essential. This project site lacks integrity of feeling and association due to alterations that were made after the period of significance, and the project site no longer conveys its historic significance.

As the project site does not appear to be eligible for listing under any of the National Register, California Register, or West Covina Landmark criteria, the proposed project is not expected to cause an adverse change in the significance of a historical resource, and no impact would occur.

b) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if a known or unknown archaeological resource were removed, altered, or destroyed as a result of the proposed project. CEQA Guidelines Section 15064.5 defines significant archaeological resources as resources which meet the criteria for historical resources, as discussed above in Response to Checklist Question 3.5a, or resources that constitute unique archaeological resources associated with a scientifically recognized important prehistoric or historic event or person.

The project site is located in an urbanized area that has been subject to previous grading and development. Any surficial archaeological resources that may have existed on the project site are likely to have been previously disturbed or removed. Although no archaeological resources are known to exist on the project site, encountering unanticipated archaeological resources during ground disturbance is a possibility, and implementation of Mitigation Measure **CR-1** would be required to reduce the potential for the destruction of any significant archaeological resource. Mitigation Measure **CR-1** consists of procedural steps to take in the event of an unanticipated discovery during construction. Therefore, with implementation of Mitigation Measure **CR-1**, impacts related to archaeological resources would be less than significant.

c) **Less-Than-Significant Impact**. The project site is not part of a formal cemetery and is not known to have been used for disposal of historic or prehistoric human remains. There are no known human remains on the project site, and human remains are not expected to be encountered during construction of the proposed project. While no formal cemeteries, other places of human interment, or burial grounds or sites are known to exist within the project site, there is always a possibility that human remains may be unexpectedly encountered during construction. In the unlikely event that human remains are encountered, the proposed project would be required to comply with Section 7050.5 of the California Health and Safety Code. If human remains of Native American origin are discovered during construction, the proposed project would also be required to comply with applicable regulations related to the handling of Native American human remains, including Public Resources Code (PRC) Section 5097. With compliance of the State Health and Safety Code Section 7050.5 and applicable regulations related to the handling of human remains of Native American origin, no impact would occur.

MITIGATION MEASURES

CR-1 If archaeological resources are encountered during ground-disturbing activities, the City of West Covina Community Development Department shall be immediately informed of the discovery. All work shall cease in the area of the find or diverted away from the discovery to a distance of 50 feet until a qualified archaeologist has evaluated the find in accordance with federal, state, and local guidelines, including those set forth in PRC Section 21083.2. Personnel of the project shall not collect or move any archaeological materials or associated materials. Construction activity may continue unimpeded on other portions of the project site. Construction shall not resume in the locality of the discovery until the identified resources are properly assessed and consultation between the qualified archaeologist, the City of West Covina Community Development Department, the applicant’s representative, and all other concerned parties takes place and reaches a conclusion approved by the City of West Covina Community Development Department.

The qualified archaeologist shall be retained by the project applicant to determine if the find is classified as a significant cultural resource pursuant to the CEQA definition of historical resources (CEQA Guidelines Section 15064.5[a]) and/or unique archaeological resources (PRC Section 21083.2[g]). If the resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource," the qualified archaeologist shall make recommendations on the treatment and disposition of the find. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Section 21083.2(b) for unique archaeological resources. The treatment plan shall be reviewed by the City of West Covina Community Development Department prior to implementation. Upon approval by the City of West Covina Community Development Department, the treatment plan shall be implemented, and the City shall be provided with a final report on the treatment and disposition of the find prior to issuance of a Certificate of Occupancy.

Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. See Mitigation Measure **TR-2** for archaeological material that are Native American in origin.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.6 ENERGY. Would the project:				
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?	☐	☐	☑	☐

a-b) Less-Than-Significant Impact. The main forms of available energy supply are electricity, natural gas, and oil. During construction of the proposed project, energy would be primarily consumed in the form of electricity associated with the conveyance of water used for dust control, powering lights, electronic equipment, or other construction activities that require electrical power. Construction activities typically do not involve the consumption of natural gas. Additional sources of construction-related energy consumption would be in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment, round-trip construction worker travel to the project site, and delivery and haul truck trips. Construction activities would comply with CARB's "In-Use Off-Road Diesel Fueled Fleets Regulation", which limits engine idling times to reduce harmful emissions and reduce wasteful consumption of petroleum-based fuel. Additionally, the proposed project would comply with the California Renewable Portfolio Standard, the Clean Energy and Pollution Reduction Act of 2015 (Senate Bill [SB] 350). Compliance with local, state, and federal regulations would reduce short-term energy demand during proposed project construction to the extent feasible, and the proposed project construction would not result in a wasteful or inefficient use of energy.

During operations of the proposed project, Southern California Edison would provide electricity and Southern California Gas Company would provide natural gas to the project site. Energy use associated with operation of the proposed project would be typical of a medical facility, requiring electricity and natural gas for interior and exterior building lighting; heating, ventilation, and air conditioning systems (HVAC); electronic equipment; machinery; refrigeration; appliances; security systems; and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. High efficiency lighting fixtures would be used. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by staff and visitors. However, the proposed project would not involve any characteristics or processes that would require the use of equipment that would be more energy intensive than is used for comparable activities or involve the use of equipment that would not conform to current emissions standards and related fuel efficiencies.

In September 2011, the City adopted an Energy Action Plan to guide the City toward attainable conservation goals that may also significantly reduce the impact of greenhouse gas (GHG) emissions within the community. The Energy Action Plan proposes several policies related to energy-efficiency and conservation, including energy and water conservation design features in new development projects. The proposed project would be subject to the California Building Code (Title 24), including the California Green Building Standards Code, which requires new buildings to reduce water consumption, employ building commissioning to increase building system efficiencies for large buildings, divert construction waste from landfills, and install low pollutant-emitting finish materials. The proposed project would be consistent with the Energy Action Plan by complying with the

California Green Building Standards Code. The California Green Building Standard Code, referred to as CalGreen, is the first statewide Green Building Code. CalGreen lays out minimum requirements for newly constructed buildings in California, which reduces GHG emissions through improved efficiency and process improvements. It requires builders to install plumbing that cuts indoor water use by as much as 20 percent, to divert 50 percent of construction waste from landfills to recycling, and to use low-pollutant paints, carpets, and floors. The proposed project does not include any feature (i.e., substantially alter energy demands) that would interfere with the implementation of these state and City codes and plans. Therefore, a less-than-significant impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.7 GEOLOGY AND SOILS. Would the project:				
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 potential 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 direct or indirect risks to life or property?	☐	☐	☑	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or unique geologic feature?	☐	☑	☐	☐

a.i) **No Impact**. A significant impact would occur if the proposed project would exacerbate existing environmental conditions in a manner that would increase the potential to expose people or structures to substantial adverse effects associated with the rupture of a known earthquake fault. The Alquist-Priolo Earthquake Fault Zoning Act regulates development near active faults to mitigate the hazard of surface fault rupture. It prohibits the location of most structures for human occupancy across the trace of active faults. The Act also establishes Earthquake Fault Zones and requires geologic/seismic studies of all proposed developments within 1,000 feet of the zone. The Earthquake Fault Zones are delineated and defined by the State Geologist and identify areas where potential surface rupture along a fault could occur. According to the California Department of Conservation Earthquake Zones of Required Investigation, the project site is not located within the Alquist-Priolo Special Studies Zone, and no trace of any known active or potentially active fault passes through the project site.[22] The proposed project is a behavioral health transition facility and does not involve any activities that would potentially exacerbate existing environmental conditions so as to increase the potential to expose people or structures to the rupture of a known earthquake fault. The type of development proposed

[22]California Department of Conservation, *Earthquake Zone of Required Investigation*, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed March 2023.

would not involve deep excavation into the Earth or boring of large areas creating unstable seismic conditions or stresses in the Earth's crust that would result in the rupture of a fault. Therefore, no impact would occur.

a.ii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would exacerbate existing environmental conditions in a manner that would increase the potential to expose people or structures to substantial adverse effects related to strong ground shaking from severe earthquakes. As with all properties in the seismically active Southern California region, the project site is susceptible to moderate and occasionally high levels of ground motion during a seismic event. The ground motion characteristics of any future earthquakes in the region would depend on the characteristics of the generating fault, the distance to the epicenter, the magnitude of the earthquake, and the site-specific geologic conditions. The proposed project does not involve activities that would increase the potential to expose people or structures to the adverse effects associated with strong seismic ground shaking. Additionally, the design and construction of the proposed building addition is required to conform to the California Building Code seismic standards, California Department of Health Care Access and Information (HCAI) seismic safety requirements, as well as all other applicable codes and standards that address issues related to strong seismic ground shaking. Therefore, a less-than-significant impact would occur.

a.iii) **No Impact**. A significant impact would occur if the proposed project would exacerbate existing environmental conditions in a manner that would increase the potential to expose people or structures to substantial adverse effects related to seismic-related ground failure, including liquefaction. Liquefaction typically occurs when a saturated or partially saturated soil becomes malleable and loses strength and stiffness in response to an applied stress caused by earthquake shaking or other sudden change in stress conditions. Soil liquefaction occurs when loose, saturated, granular soils lose their inherent shear strength due to excess water pressure that builds up during repeated movement from seismic activity. Liquefaction usually results in horizontal and vertical movements from the lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials. According to the California Department of Conservation's Earthquake Zones of Required Investigation, the project site is not located within a liquefaction hazard zone.[23] Historical high groundwater on the project site is mapped deeper than 50 feet below the ground surface. The geotechnical investigation conducted for the project site concluded that the potential for liquefaction to occur beneath the project site is very low.[24] The proposed project would be constructed in accordance with the California Building Code, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Therefore, no impact would occur.

a.iv) **No Impact**. A significant impact would occur if the proposed project would exacerbate existing environmental conditions in a manner that would increase the potential to expose people or structures to substantial adverse effects related to landslides. The project site and its surrounding area are relatively flat. According to the California Department of Conservation's Earthquake Zones of Required Investigation, the project site is not located within an earthquake-induced landslide area.[25] Therefore, no impact would occur.

b) **Less-Than-Significant Impact**. A significant impact would occur if construction activities or future uses associated with the proposed project would result in substantial soil erosion or

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[23]California Department of Conservation, *Earthquake Zone of Required Investigation*, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed March 2023.

[24]Albus & Associates, Inc., *Geotechnical Investigation, Proposed Behavioral health Building Addition, West Covina Medical Center, 725 South Orange Avenue, West Covina, Los Angeles County, California*, April 6, 2023.

[25]California Department of Conservation, *Earthquake Zone of Required Investigation*, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed March 2023.

loss of topsoil. During ground disturbing activities, such as grading, the project site could potentially be subject to soil erosion or loss of topsoil. However, the proposed project would be required to comply with local, state, and federal regulations and standards related to minimizing potential erosion impacts, including the latest requirements of the City-enforced National Pollution Discharge Elimination System (NPDES) Construction General Permit, best management practices (BMPs), and applicable pollution control and erosion protection measures pursuant to the City's Drainage and Grading Ordinance (WCMC Chapter 9, Article 1). The NPDES Construction General Permit regulates stormwater discharges from construction sites. As part of the NPDES permit and City's standard urban stormwater mitigation plan (SUSMP), the City requires the project applicant and construction contractors to implement BMPs to control sediment and erosion. See Response to Checklist Question 3.10a for further information regarding NPDES, SUSMP, and BMPs. Chapter 9 of the WCMC requires that the project applicant prepare an erosion control plan and requires the construction contractor to implement erosion control measures during ground disturbing activities. With compliance with the NPDES Construction General Permit, BMPs, and applicable City's regulations in WCMC Chapter 9, impacts related to soil erosion and loss of topsoil would be less than significant.

c) **No Impact**. A significant impact would occur if the proposed project would cause geologic unit or soil on the project site to become unstable or, if the project site is on unstable geologic unit or soil, the proposed project would exacerbate existing conditions so as to increase the potential for landslides, lateral spreading, subsidence, liquefaction, or collapse. As discussed under Response to Checklist Questions 3.7a.iii and 3.7a.iv, the project site is not located within a liquefaction hazard zone or an earthquake-induced landslide area, respectively.[26] The proposed project would not create liquefaction or landslide hazards because the proposed project does not involve activities that would affect seismic conditions or alter underlying soil or groundwater characteristics that govern liquefaction potential. Additionally, the project site and the surrounding area are relatively flat and, thus, are not susceptible to landslides and the likelihood of lateral spreading is low. According to the geotechnical investigation for the project site, the potential of lateral spreading is not likely to occur within the project site due to a lack of liquefiable soils in the upper 50 feet.[27]

Subsidence and ground collapse generally occur in areas with active groundwater withdrawal or petroleum production. The extraction of groundwater or petroleum from sedimentary source rocks can cause the permanent collapse of the pore space previously occupied by the removed fluid. The compaction of subsurface sediments by fluid withdrawal will cause subsidence or ground collapse overlying a pumped reservoir. The project site and its vicinity do not contain any subsurface oil extraction facilities or groundwater withdrawal activities.[28] The project site is located in an area with commercial, residential, and health care-related uses. The proposed project would develop a four-story structure that would adjoin the existing medical hospital on the project site. Construction and operation of the proposed project would not involve activities known to cause or trigger subsidence and is not anticipated to adversely affect soil stability or increase the potential for local or regional landslides, lateral spreading, subsidence, liquefaction, or collapse. The proposed project would be constructed in accordance with the California Building Code, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Thus, the proposed project would not cause or exacerbate existing conditions

[26] California Department of Conservation, *Earthquake Zone of Required Investigation*, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed March 2023.

[27] Albus & Associates, Inc., *Geotechnical Investigation, Proposed Behavioral health Building Addition, West Covina Medical Center, 725 South Orange Avenue, West Covina, Los Angeles County, California*, April 6, 2023.

[28] California Department of Conservation, *Well Finder,* https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-117.93414/34.05815/13, accessed March 2023.

associated with landslides, lateral spreading, subsidence, liquefaction, or collapse. No impact would occur.

d) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project were built on expansive soils without proper site preparation or adequate foundations for proposed buildings, thus posing a hazard to life and property. Expansive soils have relatively high clay mineral content and are usually found in areas where underlying formations contain an abundance of clay minerals. Due to its high clay content, expansive soils expand with the addition of water and shrink when dried, which can cause damage to overlying structures. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors.

Soil materials encountered on the project site during the geotechnical investigation consist of primarily artificial fills and Quaternary alluvial fan deposits. Artificial fill materials were encountered in the upper two to four feet across the project site. Deeper localized fills may be encountered within the project site particularly due to underground utility improvements. The fill materials consist of silty sands, which were brown and generally very loose to loose and damp to moist. The alluvial materials were typically comprised of sands and gravels, which tend to grade coarser materials with depth. The materials encountered consisted of silty sands, sands, sands with gravels, and gravelly sands. The materials are typically light brown, damp and medium dense to very dense. The geotechnical investigation concluded that the near-surface soils on the project site are generally anticipated to possess a very low expansion potential.[29] Additionally, the proposed project would be required to comply with all applicable building codes and standards, including the California Building Code, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Therefore, a less-than-significant impact would occur.

e) **No Impact**. A significant impact would occur if adequate wastewater disposal were not available to the project site. The project site is fully developed and located in an urbanized area of the City, where wastewater infrastructure is currently in place. The proposed project would connect to the existing sanitary sewer system and would not include septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

f) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project would directly or indirectly destroy a unique paleontological resource or unique geologic feature. Paleontological resources are fossils (e.g., preserved bones, shells, exoskeletons, and other remains) and other traces of former living things. Paleontological resources may be present in fossil-bearing soils and rock formations below the ground surface. Ground-disturbing activities in fossil-bearing soils and rock formations have the potential to damage or destroy paleontological resources that may be present below the ground surface.

The project site is located in an urbanized area that has been subject to previous grading and development. No unique geologic features exist on or adjacent to the project site. The proposed project does not involve deep levels of excavation. Ground-disturbing activities would generally take place in previously disturbed soils and are not expected to disturb native soil. However, it is possible that unanticipated paleontological resources may be encountered during ground disturbance, and implementation of Mitigation Measure **GS-1** would be required to reduce the potential for the destruction of a unique paleontological resource. Mitigation Measure **GS-1** consists of procedural steps to take in the event of an

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[29]Albus & Associates, Inc., *Geotechnical Investigation, Proposed Behavioral health Building Addition, West Covina Medical Center, 725 South Orange Avenue, West Covina, Los Angeles County, California*, April 6, 2023.

unanticipated paleontological resource discovery during construction. Therefore, less-than-significant impacts would occur with implementation of Mitigation Measure **GS-1**.

MITIGATION MEASURES

GS-1 In the event paleontological resources are encountered during construction, the City of West Covina Community Development Department shall be immediately informed of the discovery. All work shall cease in the area of the find and a qualified paleontologist shall be contacted to evaluate the find before restarting work in the area. The City shall require that all paleontological resources identified on the project site be assessed and treated in a manner determined by the qualified paleontologist. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case, the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. Any significant paleontological resources found during construction monitoring shall be prepared, identified, analyzed, and permanently curated in an approved regional museum repository under the oversight of the qualified paleontologist. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the project paleontologist. Work in the area of the discovery shall resume once the find is properly documented and the qualified paleontologist authorizes resumption of construction work.

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

a) **Less-Than-Significant Impact**. GHG emissions refer to a group of emissions that are generally understood to play a critical role in controlling atmospheric temperature near the Earth's surface by allowing high frequency shortwave solar radiation to enter the planet's atmosphere and then subsequently trapping low frequency infrared radiative energy that would otherwise emanate back out into space. The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes; the glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. The levels of GHGs in the atmosphere affect how much heat energy can be absorbed.

Radiative forcing is an expression of the net difference in energy entering Earth's atmosphere versus leaving it. Each GHG possesses its own degree of climate forcing ability to absorb low frequency infrared energy, meaning that some GHGs are more effective in trapping heat in the atmosphere than others. Water vapor is the most environmentally prevalent GHG, however, definitive methods are not established to regulate emissions and concentrations of water vapor in the atmosphere. After water vapor, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) are the most ubiquitous GHGs, and CO_2 is commonly used as the standard reference for characterizing the relative global warming potential (GWP) of other GHGs. The GWP value describes the relative magnitude of climate forcing effects of GHGs and is used to convert emissions into CO_2-equivalents (CO_2e). **Table 3-5** presents the GWP value and atmospheric lifetime of CO_2, CH_4, and N_2O, as well as other regulated GHGs emitted by human activities. GHG emissions that would be generated by the proposed project are assessed in units of metric tons of CO_2e ($MTCO_2e$).

Section 15064.4 of the CEQA Guidelines states that a lead agency should make a good-faith effort to describe, calculate, or estimate the amount of GHG emissions resulting from a project, and that the lead agency should consider the following factors when assessing the significance of impacts from GHG emissions on the environment:

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

TABLE 3-5: GLOBAL WARMING POTENTIAL FOR VARIOUS GREENHOUSE GASES			
Pollutant	**Lifetime (Years) /a/**	**Global Warming Potential (20-Year)**	**Global Warming Potential (100-Year) /b/**
Carbon Dioxide (CO_2)	--	1	1
Methane (CH_4)	12	21	25
Nitrous Oxide (N_2O)	114	310	298
Nitrogen Trifluoride	740	Unknown	17,200
Sulfur Hexafluoride (SF_6)	3,200	23,900	22,800
Perfluorocarbons (PFCs)	2,600-50,000	6,500-9,200	7,390-12,200
Hydrofluorocarbons (HFCs)	1-270	140-11,700	124-14,800

/a/ Lifetime refers to the approximate amount of time it would take for the anthropogenic increment to an atmospheric pollutant concentration to return to its natural level as a result of either being converted to another chemical compound or being taken out of the atmosphere via a sink.

/b/ The United States primarily uses the 100-year GWP as a measure of the relative impact of different GHGs. However, the scientific community has developed a number of other metrics that could be used for comparing one GHG to another. These metrics may differ based on timeframe, the climate endpoint measured, or the method of calculation. For example, the 20-year GWP is sometimes used as an alternative to the 100-year GWP. Just like the 100-year GWP is based on the energy absorbed by a gas over 100 years, the 20-year GWP is based on the energy absorbed over 20 years. This 20-year GWP prioritizes gases with shorter lifetimes, because it does not consider impacts that happen more than 20 years after the emissions occur. Because all GWPs are calculated relative to CO_2, GWPs based on a shorter timeframe will be larger for gases with lifetimes shorter than that of CO_2, and smaller for gases with lifetimes longer than CO_2.

SOURCE: CARB, *Global Warming Potentials,* https://www.arb.ca.gov/cc/inventory/background/gwp.htm, accessed October 16, 2023.

CEQA Guidelines direct lead agencies to adopt thresholds of significance for GHG emissions. However, the CEQA Guidelines allow some flexibility in selecting the most appropriate thresholds of significance. When adopting these thresholds, the CEQA Guidelines allow lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence, and/or to develop their own significance threshold.

Neither the City nor SCAQMD has officially adopted a quantitative threshold value for determining the significance of GHG emissions that would be generated by projects under CEQA. SCAQMD established a GHG Significance Threshold Stakeholder Working Group to establish an interim GHG significance threshold until the state establishes a GHG significance threshold or provides recommended guidance on establishing a GHG significance threshold. The Working Group proposed a tiered screening methodology for assessing the potential significance of GHG emissions generated by CEQA projects.[30] The tiered screening methodology was outlined in the minutes of the final Working Group meeting on September 28, 2010.[31] The Working Group proposed a 3,000 $MTCO_2e$ annual threshold for commercial projects, which was derived using a 90 percent capture rate for proposed CEQA projects within the SCAQMD jurisdiction. Projects with annual GHG emissions below 3,000 $MTCO_2e$ are assumed to result in less than significant impacts.

GHG emissions that would be generated by the proposed project were estimated using CalEEMod, as recommended by the SCAQMD. CalEEMod quantifies GHG emissions from construction and future operation of projects. Sources of GHG emissions during project construction would include heavy-duty off-road diesel equipment and vehicular travel to and

[30]SCAQMD, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.

[31]SCAQMD, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15*, September 28, 2010, www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf, accessed October 2023.

from the project site. In accordance with SCAQMD methodology, the total amount of GHG emissions that would be generated by construction of the proposed project was amortized over a 30-year operational period to represent long-term impacts. Sources of GHG emissions during future project operation would include employee and delivery vehicular travel, energy consumption, water use, and solid waste disposal at off-site facilities. Additionally, the 38 trees that would be removed during construction would result in minor indirect increases in GHG emissions through reduction of carbon sequestration on the project site.

Table 3-6 presents estimated GHG emissions that would be released to the atmosphere on an annual basis by the proposed project. Construction of the proposed project would produce 966.3 $MTCO_2e$ emissions, or 32.2 $MTCO_2e$ annually over a 30-year amortization period. The total annual operating emissions would be approximately 946.7 $MTCO_2e$ per year after accounting for amortized construction emissions. This mass rate is substantially below the most applicable SCAQMD quantitative draft interim threshold of 3,000 $MTCO_2e$ per year. Therefore, impacts related to GHG would be less than significant.

TABLE 3-6: ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS

Scenario and Emission Source	Carbon Dioxide Equivalent (Metric Tons per Year)
Construction Emissions Amortized (Direct) /a/	32.2
Area Source Emissions (Direct)	1.3
Energy Source Emissions (Indirect)	174.9
Mobile Source Emissions (Direct)	580.8
Waste Disposal Emissions (Indirect)	141.6
Water Distribution Emissions (Indirect)	12.9
Vegetation Change (Indirect)	2.9
Refrigerants (Direct)	0.2
TOTAL	**946.7**
SCAQMD Draft Interim Significance Threshold	3,000
Threshold Exceeded?	**No**

/a/ Based on SCAQMD guidance, the emissions summary also includes construction emissions amortized over a 30-year span.
SOURCE: TAHA, 2024

b) **Less-Than-Significant Impact**. Assembly Bill (AB) 32 requires CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions and directs CARB to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill sets a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. On December 11, 2008, CARB adopted the Scoping Plan, which sets forth the framework for facilitating the state's goal of reducing GHG emissions to 1990 levels by 2020. The First Update of the Scoping Plan was adopted on May 22, 2014. CARB adopted the 2017 Scoping Plan in November 2017, which details strategies to cut back 40 percent of GHGs by 2030. AB 32, the updated first Scoping Plan, and the 2017 Scoping Plan do not have regulations implementing, for specific projects, the legislature's statewide goals for reducing GHGs.[32]

The Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions, including expanding energy efficiency programs,

[32] *Center for Biological Diversity v. California Department of Fish and Wildlife*, 62 Cal..4th 204, November 30, 2015.

increasing electricity production from renewable resources (at least 33 percent of the statewide electricity mix), increasing automobile efficiency, implementing the Low-Carbon Fuel Standard, and developing a cap-and-trade program. These measures are designed to be implemented by state agencies. The proposed project would not interfere with implementation of AB 32 and measures contained within the Scoping Plan to reduce GHG emissions.

The California legislature enacted SB 375 in 2008 to set regional targets for the reduction of GHG emissions and to require the preparation of Sustainable Communities Strategies (SCS) by metropolitan planning organizations to achieve GHG reduction targets set by the CARB. The SCAG SCS presents strategies and tools that incorporate best practices for achieving the state-mandated reductions in GHG emissions at the regional level through reduced per-capita vehicle miles traveled (VMT). SB 743 was enacted in 2013 to evolve the assessment of transportation impacts under CEQA, and SB 743 was incorporated into the CEQA Guidelines in 2018 by promulgating the use of VMT and VMT reductions as a significance threshold metric because it meets the statutory criteria of promoting the reduction of GHG emissions. As discussed in Response to Checklist Question 3.17a, below, and in the Transportation Impact Study for the proposed project, which is included in Appendix C, the proposed project would be located in a low VMT area and would be screened out of a VMT analysis.[33] Thus, the proposed project would not conflict with the SCAG SCS and would not have the potential to conflict with regional GHG emissions targets and VMT reduction efforts of SB 375 and SB 743, respectively.

The proposed project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in Executive Order (E.O.) S-03-05 and SB 32, or the carbon neutrality goal for 2045 identified in E.O. B-55-18. E.O. S-03-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. SB 32 establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40 percent below 1990 levels by December 31, 2030. E.O. B-55-18 establishes an additional statewide policy goal to achieve carbon neutrality as soon as possible and no later than 2045 and to achieve and maintain net negative emissions thereafter.

With regards to local climate planning initiatives, the City adopted an Energy Action Plan in 2011 to guide the City toward attainable conservation goals that may also significantly reduce the impact of GHG emissions within the community. The proposed project would be consistent with the Energy Action Plan by complying with the California Building Code (Title 24), including the California Green Building Standards Code. The California Green Building Standard Code, referred to as CalGreen, is the first statewide Green Building Code. CalGreen lays out minimum requirements for newly constructed buildings in California, which reduces GHG emissions through improved efficiency and process improvements. It requires builders to install plumbing that cuts indoor water use by as much as 20 percent, to divert 50 percent of construction waste from landfills to recycling, and to use low-pollutant paints, carpets, and floors.

The City's General Plan includes a series of policies for implementing a well-planned community. Applicable policies aimed at reducing GHG emissions include the following:

[33]Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Health Addition* Project, September 17, 2024.

- Policy P1.3: Minimize the adverse impacts of growth and development on air quality and climate.
- Policy P3.6: Reduce West Covina's production of greenhouse gas emissions and contribution to climate change and adapt to the effects of climate change.[34]

The proposed project would be consistent with Policies P1.3 and P3.6 of the City's General Plan since the proposed project would comply with all applicable regulations associated with reducing GHG emissions, such as CalGreen.

Overall, the proposed project would not conflict with applicable plans, policies, and regulations associated with reducing GHG emissions. Therefore, less-than-significant impacts are expected.

[34]City of West Covina, *West Covina General Plan*, adopted December 2016.

3.9 HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☑	☐
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 or excessive noise 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, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☑

a-b) Less-Than-Significant Impact. A significant impact would occur if the proposed project would create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials, or if it would create a significant hazard through the accidental release of hazardous materials into the environment. Construction of the proposed project would involve the temporary use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. Operations of the proposed project would involve the use and storage of hazardous substances, such as chemicals used in patient treatment, infection prevention and infection control; pharmaceuticals; sterilants and disinfectants; custodial products (e.g., cleaning supplies, solvents, paints); and landscaping supplies (e.g., pesticides). The use would be similar to those that are currently used at the existing on-site medical facilities. The use, transport, and disposal of hazardous substances during construction and operations of the proposed project would comply with all applicable standards and regulations, including the Medical Waste Management Act (California Health and Safety Code Sections 117600-118360). The proposed project does not involve any uses or activities that would result in the use or discharge of unregulated hazardous materials and/or substances, or create a public hazard through the transport, use, or disposal of hazardous materials. All hazardous materials during construction and operational activities would be handled in compliance with applicable standards and regulations. As the proposed project would comply with all applicable standards and regulations related to hazardous materials during construction and operational activities, the proposed would not create a significant hazard to the public or the environment through the transport, use, disposal, and accidental release of hazardous materials. Therefore, impacts related to the creation of hazards to the public or the environment would be less than significant.

c) **Less-Than-Significant Impact**. No schools are located within one-quarter mile of the project site. As discussed in Response to Checklist Questions 3.9a-b, construction of the proposed project would involve the temporary use of potentially hazardous materials (including vehicle fuels, oils, and transmission fluids), and operations of the proposed project would involve the use of hazardous materials (such as chemicals used in patient treatment, infection prevention and infection control; pharmaceuticals; sterilants and disinfectants; custodial products; and landscaping supplies). The proposed project would comply with all applicable standards and regulations related to the transport, use, and disposal of hazardous materials during construction and operational activities. Therefore, the proposed project would not emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of a school. A less-than-significant impact would occur.

d) **Less-Than-Significant Impact**. The California Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) each maintain a database (EnviroStor and GeoTracker, respectively) that provides access to detailed information on hazardous waste sites and their cleanup statuses. EnviroStor focuses on hazardous waste facilities and sites with known contamination or sites with possible reasons for further investigation. GeoTracker focuses on sites that impact or have the potential to impact water quality in California, with an emphasis on groundwater. The project site is not on the EnviroStor database.[35] The project site is listed on the Geotracker database as a leaking underground storage tank cleanup site. However, the cleanup status of the project site is listed as completed and closed as of December 13, 2007.[36] Therefore, a less-than-significant impact would occur.

e) **No Impact**. The project site is not located in an airport land use plan area, or within two miles of any public or public use airports, or private air strips. The closest airport to the project site is San Gabriel Valley Airport, which is approximately 4.9 miles west of the project site. Therefore, the proposed project would not result in an airport- or airstrip-related safety hazard for people residing or working in the area, and no impact would occur.

f) **Less-Than-Significant Impact**. The Natural Hazard Mitigation Plan (NHMP) is the City's adopted emergency response plan. It addresses the City's planned response to extraordinary emergency situations associated with man-made and natural disasters and provides a list of activities that may assist the City in reducing risk and preventing loss from natural hazard events. The NHMP addresses multi-hazard issues, as well as activities from earthquakes, earth movements, flooding, wildfires, and windstorms. The NHMP identifies the West Covina Medical Center as a critical facility.[37] The proposed project would not involve any uses that would interfere with the NHMP.

The project site is located adjacent to I-10, which is identified as a freeway disaster route by the County of Los Angeles Department of Public Works.[38] Although construction of the

[35]Department of Toxic Substances Control, *EnviroStor*, https://www.envirostor.dtsc.ca.gov/public/, accessed May 2023.

[36]Department of Toxic Substances Control, *GeoTracker*, https://geotracker.waterboards.ca.gov/profile_report?global_id=T0603726822&mytab=esidata&subcmd=edfsummarytable#esidata, accessed May 2023.

[37]City of West Covina, *Natural Hazard Mitigation Plan*, Section 3: Risk Assessment, Map 2 Critical Facilities, https://www.westcovina.org/departments/fire-/disaster-preparedness/natural-hazaard-mitigation-plan/section-3-risk-assessment/#Map%20#3, accessed May 2023.

[38]County of Los Angeles Department of Public Works, *Disaster Routes*, http://dpw.lacounty.gov/dsg/disasterroutes/map/West%20Covina.pdf, accessed May 2023.

proposed project may involve temporary lane closures on Orange Avenue, this roadway would remain accessible to vehicular traffic and emergency vehicles would still be able to travel along this roadway. Access to all surrounding properties would be maintained. Any construction activities occurring with the public right-of-way, such as construction of sidewalks and driveway approach, and construction activities that would obstruct portions of the streets are required to obtain an engineering permit from the City. As part of the engineering permit, the City requires the preparation and implementation of a construction staging and traffic management plan. The City also requires light barricades, delineators, and traffic control personnel be provided if construction activities occur within the public right-of-way. Construction and operational activities would not require temporary or permanent closure of any streets, including designated disaster routes near the project site. Additionally, the proposed project would be reviewed by the City's Fire Department to ensure that the proposed project would not interfere with the City's NHMP or evacuation routes.

The proposed project would be designed to accommodate emergency vehicles to the project site. The proposed project would be designed to accommodate emergency vehicles and would allow adequate emergency access to the project site in accordance with the City's driveway standards and the West Covina Fire Department (WCFD) requirements. The proposed driveway aisles would be designed to meet the minimum width and turning dimension requirements of WCFD. The turnaround area in front of the proposed building would be designed to accommodate fire trucks. Vehicles, including emergency response vehicles, would be able to access the project site via Orange Avenue. No roads would be closed by construction or operation of the proposed project. Emergency vehicles would be able to travel along roadways, and access to all surrounding properties would be maintained. Therefore, the proposed project would not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and a less-than-significant impact would occur.

g) **No Impact.** The project site is located in an urbanized area and is surrounded primarily by commercial and residential uses. The project site is not located within or adjacent to a wildland area. No large, undeveloped areas and/or steep slopes that may pose wildfire hazards are located on or near the project site. Additionally, the project site is not located in a fire hazard severity zone, as identified by the California Department of Forestry and Fire Protection (CalFire). The nearest fire hazard zone is located approximately 2.6 miles southeast of the project site.[39] The proposed project would not involve activities that would expose people or structures to the risk of loss, injury, or death involving wildland fires. Therefore, no impact would occur.

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[39]California Department of Forestry and Fire Protection, *California Fire Hazard Severity Zone Viewer*, https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414, accessed May 2023.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.10 HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☑	☐
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; or	☐	☐	☑	☐
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?	☐	☐	☐	☑

a) **Less-Than-Significant Impact**. Construction of the proposed project would require site clearing, grading, and building construction activities. During construction, surface water quality could potentially be affected by loose soils, debris, construction wastes, and fuels that could be carried off-site by surface runoff in into local storm drains, which drain into water resources. However, the proposed project would be required to comply with all federal, state, and local regulations related to water quality standards and wastewater discharge.

The project applicant and construction contractors would be required to comply with the NPDES permit program, which was created by the Clean Water Act to address water pollution from point sources (e.g., pipes, channels, and tunnels) that discharge pollutants to the waters of the United States. The NPDES Construction General Permit is issued by the State Water Resource Control Board and enforced by the City. Construction activities subject to this permit include clearing, grading, excavation, stockpiling, and other ground disturbances. During the plan review process, the City's Engineering Division would review the development plans for the proposed project to make sure that the proposed project complies with the City's stormwater requirements. The project applicant and construction contractors would also be required to implement BMPs that are required by the City's Engineering Division as part of the NPDES permit, including sediment and erosion control.

The project applicant and construction contractors would be required to comply with applicable regulations in Chapter 9 of the WCMC, including Article I (Drainage and Grading) and Article II (Stormwater and Urban Run-Off Pollution Control). WCMC Chapter 9, Article I, Section 9-36 requires development projects to comply with the City's SUSMP conditions, which includes low impact development structural and non-structural BMPs, source control BMPs, and structural and non-structural BMPs. LID is a stormwater management strategy that emphasizes conservation and the use of existing natural site features integrated with stormwater controls to most closely mimic natural hydrologic patterns in residential, commercial, and industrial settings. LID controls effectively reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff. Source control BMPs would prevent runoff contact with pollutant materials that would otherwise be discharged into the municipal storm drains. Compliance with the NPDES Construction General Permit and applicable regulations in the WCMC would reduce the risk of water degradation from soil erosion and other pollutants related to construction activities. The proposed project would not violate any water quality standards or waste discharge requirements during construction.

As the project applicant would be required to comply with all applicable water quality standards and waste discharge requirements during construction and operations of the proposed project, impacts would be less than significant.

b) **Less-Than-Significant Impact**. The project site is not currently used for groundwater recharge activities. Furthermore, the proposed project would not install any groundwater wells and would not otherwise directly or indirectly withdraw any groundwater during construction or operations of the proposed project. The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge. As discussed in Response to Checklist Question 3.19a, domestic water service to the project site is provided by Suburban Water Systems, which would be able to provide reliable water supplies for an average year, single dry year, and multiple dry years for the project site through 2045. The proposed project would be served by available water supply and would not significantly deplete groundwater supplies or interfere with groundwater recharge. Therefore, a less-than-significant impact would occur.

c.i) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would substantially alter the existing drainage pattern of the project site, including through the alteration of the course of an existing stream or river or through the addition of impervious surfaces, in a manner that would result in a substantial erosion or siltation on or off-site. The project site is located in an urbanized area of the City. Existing surface water drainage from the project site generally flows south and southwest towards Orange Avenue. Surface runoff from the project site is currently collected by an existing catch basin located in the driveway on the project site (near the driveway entrance) and off-site on Orange Avenue, west of Cameron Avenue. A catch basin is also located on Cameron Avenue adjacent to the project site. The proposed project would increase the amount of impervious surfaces on the project site compared to existing conditions. The existing catch basin on the project site would be replaced with a new catch basin at a similar location. Another catch basin would be installed at the northeastern portion of the project site. The proposed project would also install a new stormwater infiltration tank to capture stormwater on the project site. New storm drain lines would be installed to connect the new on-site catch basins to the stormwater infiltration tank. With the installation of the on-site stormwater infiltration tank, runoff leaving the project site would not substantially increase compared to existing conditions.

During construction, on-site soils would be temporarily exposed to surface water runoff; however, the proposed project would be required to comply with local, state, and federal regulations and standards related to minimizing potential erosion, including WCMC Chapter 9 regarding drainage and grading. The City requires that the project applicant prepare an erosion control plan and that the construction contractor implement erosion control measures during ground disturbing activities. Therefore, the proposed project would not substantially alter the existing drainage pattern of the project site in a manner that would result in substantial erosion or siltation, and less-than-significant impact would occur.

c.ii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would substantially alter the existing drainage pattern of the project site, including through the alteration of the course of an existing stream or river or through the addition of impervious surfaces, in a manner that would substantially increase the rate or amount of surface runoff and would result in flooding on- or off-site. The project site is located within an urbanized area of the City with existing stormwater infrastructure in place. Runoff from the project site is currently collected by an existing catch basin located in the driveway of the project site and off-site on Orange Avenue, west of Cameron Avenue.

As discussed in Response to Checklist Question 3.10c.i, the proposed project would increase the amount of impervious surfaces on the project site compared to existing conditions. The existing catch basin on the project site would be replaced with a new catch basin at a similar location. Another catch basin would be installed at the northeastern portion of the project site. The proposed project would also install a stormwater infiltration tank on the project site. New storm drain lines would be installed to connect the new on-site catch basins to the stormwater infiltration tank to capture stormwater on-site. With the installation of the on-site catch basins and stormwater infiltration tank, runoff leaving the project site would not substantially increase compared to existing conditions and stormwater runoff would not increase in a manner that would result in flooding on- or off-site. Therefore, a less-than-significant impact would occur.

c.iii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. As discussed in Response to Checklist Question 3.10a, the proposed project would be required to comply with all federal, state, and local regulations related to water quality standards and wastewater discharge, including Chapter 9 of the WCMC regarding drainage and grading. Construction contractors are required to comply with NPDES requirements prior to the issuance of a demolition, grading, and building permit, which include sediment and erosion control. The proposed project would include BMPs to limit the amount of polluted runoff that enters the stormwater drainage system. BMPs are required under NPDES and by the City's Engineering Division as part of the NPDES permit. Compliance with applicable regulations and City requirements would ensure that during construction, impacts related to creating or contributing to runoff that would exceed the capacity of the City's existing storm drain system or provide additional sources of polluted runoff would be less than significant.

Operation of the proposed project would not increase stormwater runoff in a manner that would exceed the capacity of the existing stormwater drainage system within the public rights-of-way or provide substantial additional sources of polluted runoff. As discussed in Response to Checklist Questions 3.10c.i and 3.10c.ii, the proposed project would replace the existing catch basin with a new catch basin at a similar location and another catch basin would be installed at the northeastern portion of the project site. The proposed project would also install a stormwater infiltration tank on the project site. New storm drain lines would be installed to connect the new on-site catch basins to the stormwater infiltration tank. On-site stormwater runoff would be conveyed towards the infiltration tank and would allow stormwater to percolate into the subsurface soils. Any stormwater that is not captured by the stormwater infiltration tank would be conveyed to the existing catch basin on Orange Avenue. The proposed stormwater infiltration tank would limit the amount of stormwater runoff that leaves the project site. Therefore, a less-than-significant impact would occur.

c.iv) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would substantially alter the drainage pattern in a manner that would impede or redirect flood flows. The project site is designated as Zone X (shaded) by the Federal Emergency Management Agency (FEMA), which is an area subject to flooding from the 500-year flood (0.2 percent annual chance of flooding).[40] As discussed in Response to Checklist Questions 3.10c.i and 3.10c.ii, stormwater runoff on the project site would be conveyed towards an on-site stormwater infiltration tank that would allow stormwater to percolate into the subsurface soils. Any stormwater that is not captured by the underground infiltration system would be conveyed to the existing catch basin on Orange Avenue. With installation and operation of the on-site stormwater infiltration tank, stormwater runoff would not increase in a manner that would exceed the capacity of the existing stormwater drainage system within the public rights-of-way. Therefore, the proposed project would not alter the project site's drainage patterns in a manner that would impede or redirect flood flows, and a less-than-significant impact would occur.

d) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project is in a flood hazard, tsunami, or seiche zone and would risk the release of pollutants due to project inundation. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, or lake. A tsunami is a sea wave produced by a significant undersea disturbance. Mudflows result from the down-slope movement of soil and/or rock under the influence of gravity. The project site is not located near a body of water that is large enough to create a seiche during a seismic event. The project site is located approximately 29 miles east of the Pacific Ocean and is not within a coastal zone or tsunami inundation area. As discussed in Response to Checklist Question 3.10c.iv, the project site is subject to flooding from the 500-year flood (0.2 percent annual chance of flooding). According to the City's Natural Hazard Mitigation Plan and the California Department of Water Resources, Division of Safety of Dams, the project site is subject to potential inundation in the event of dam failure at the Puddingstone Dam.[41,42] However, it is unlikely for inundation to occur due to dam failure and, in accordance with California Water Code Section 6160, each dam is required to have an Emergency Action Plan in place to guide emergency response in case of dam failure. While there is little that can be done if the project site is flooded, the risk of releasing pollutants during flooding would be consistent with the existing risks for the project site and its surrounding area. The proposed project does not involve uses or activities that would exacerbate this risk. Therefore, less-than-significant impact would occur.

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[40]Federal Emergency Management Agency, *FEMA Flood Map Service Center*, https://msc.fema.gov/portal/search?AddressQuery=725%20s%20orange%20ave%2C%20west%20covina#searchresultsanchor, accessed May 2023.

[41]City of West Covina, *Natural Hazard Mitigation Plan, Section 8: Flood*, https://www.westcovina.org/departments/fire/disaster-preparedness/natural-hazard-mitigation-plan/section-8-flood, accessed May 2023.

[42]California Department of Water Resources, Division of Safety of Dams, *California Dam Breach Inundation Maps*, https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2, accessed May 2023.

e) **No Impact**. A significant impact would occur if the proposed project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The project site is located in the San Gabriel River watershed, which is regulated by the Los Angeles Regional Water Quality Control Board (LARWQCB). Water quality standards for the Los Angeles region, including the San Gabriel River watershed, are set forth in the LARWQCB *Water Quality Control Plan: Los Angeles Region Basin Plan* (Basin Plan), which was last updated in 2014. The Basin Plan establishes water quality objectives to protect the valuable uses of surface waters and groundwater within the Los Angeles region. Under Section 303(d) of the Clean Water Act, the Basin Plan is intended to protect surface waters and groundwater from both point and nonpoint sources of pollution within the project area and identifies water quality standards and objectives that protect the beneficial uses of various waters. In order to meet the water quality objectives established in the Basin Plan, LARWQCB established total maximum daily loads, which are implemented through stormwater permits. As discussed in Response to Checklist Question 3.10a, the proposed project would be required to comply with applicable regulations associated with water quality. Compliance with these regulations would ensure that the proposed project would be consistent with the Basin Plan.

The City is underlain by the San Gabriel Valley Groundwater Basin and approximately 80 percent of the City's potable water is from the local groundwater basin. The Sustainable Groundwater Management Act requires local public agencies and groundwater sustainability agencies in high- and medium-priority basins to develop and implement groundwater sustainability plans (GSPs) or alternatives to GSPs. GSPs are detailed road maps for how groundwater basins would reach long term sustainability. The project site is located in a very low-priority basin and, to date, no sustainable groundwater management plan has been developed for this groundwater basin.[43]

The proposed project would not conflict with or obstruct implementation of the Basin Plan. Therefore, no impact would occur related to water quality control plans or sustainable groundwater management plans.

[43] California Department of Water Resources, *SGMA Basin Prioritization Dashboard*, https://gis.water.ca.gov/app/bp-dashboard/final/, accessed May 2023.

3.11 LAND USE AND PLANNING. Would the project:	**Potentially Significant Impact**	**Less-Than-Significant Impact with Mitigation Incorporated**	**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?	☐	☐	☑	☐

a) **No Impact**. The project site is located within an urbanized area surrounded by primarily health care-related and commercial uses. The project site and its surrounding uses are served by existing roadways. No street closures would result with implementation of the proposed project. Orange Avenue and Cameron Avenue would continue to provide vehicular access to the project site and the surrounding area. Pedestrian access would be maintained on the sidewalks along public roads surrounding the project site. Access to all uses would not be disrupted. The proposed project does not include any elements that would physically divide or block access to or through the community, and no separation of uses or disruption of access between land use types would occur as a result of the proposed project. Therefore, no impact would occur.

b) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project conflicts with applicable land use plans, policies, or regulations in a manner that would result in a significant environmental impact. The project site is in the Urban Center Zone and has an existing General Plan land use designation of Commercial (C). The proposed project would construct a four-story behavioral health facility adjacent to the existing medical center buildings on the project site. The proposed building would be up to 70 feet high. Hospital-related uses are permitted on the project site with approval of a conditional use permit (CUP). Approval of a Precise Plan for the site plan and architecture of the proposed project is also required. The height of the proposed structure is permitted in the Urban Center Zone, which has a maximum height limit of five stories and 70 feet. The proposed project would comply with all applicable Zoning regulations associated with the Urban Center Zone. the requirements of the Urban Center Zone of the City's Downtown Plan and Code, and other City zoning regulations. The proposed project does not involve any General Plan amendments or changes that would conflict with the City's General Plan, Downtown Plan and Code, and applicable regulations in the WCMC. As the proposed project would require a CUP and a Precise Plan, the proposed project would be reviewed by the City's Planning Commission as part of the discretionary review process for a CUP and Precise Plan. The regulatory procedures provide the City with further assurances for review and opportunities to incorporate additional conditions to ensure that the proposed project would improve the character and condition of the project site. Therefore, the proposed project would not conflict with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect, and the proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation. Therefore, a less-than-significant impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.12 MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☑

a-b) **No Impact**. The project site is developed with a surface parking lot and a medical facility. The surrounding area consists of commercial and health care-related uses. The project site is not located within an area that contains known mineral resources appropriate for mineral extraction that would be of value to the region and the residents of the state. Furthermore, the project site is not located near any oil fields, and no oil extraction and/or quarry activities have historically occurred on or are presently conducted at the project site. Therefore, the proposed project would not result in the loss of availability of any known regionally valuable or locally important mineral resource, and no impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.13 NOISE. Would the project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☑	☐	☐
b) Generation of excessive ground-borne vibration or ground-borne 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, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

a) **Less-Than-Significant Impact with Mitigation Incorporated**. Sound is technically described in terms of the loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The A-weighted scale, abbreviated dBA, reflects the normal hearing sensitivity range of the human ear.

Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment ranges from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source.

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and may evoke a community reaction. A 10-dBA increase is subjectively heard as a doubling in loudness and would likely cause a negative community reaction. Noise levels decrease as the distance from the noise source to the receiver increases. Noise levels generated by a stationary noise source, or “point source,” will decrease by approximately 6 dBA over hard surfaces (e.g., pavement) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet over hard surface from the noise source, 77 dBA at a distance of 200 feet, and so on. Noise levels generated by a mobile source will decrease by approximately 3 dBA over hard surfaces for each doubling of the distance.

This noise analysis discusses sound levels in terms of Community Noise Equivalent Level (CNEL) and Equivalent Noise Level (L_{eq}). CNEL is an average sound level during a 24-hour period. CNEL is a noise measurement scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. Human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if the sound were actually 5 dBA higher than if it occurred from 7:00 a.m. to 7:00 p.m. From 10:00 p.m. to 7:00 a.m., humans perceive sound as if it were 10 dBA higher due to the lower background level. Hence, the CNEL is obtained by adding an additional 5 dBA to sound levels in the evening from 7:00

p.m. to 10:00 p.m. and 10 dBA to sound levels in the night from 10:00 p.m. to 7:00 a.m. Because CNEL accounts for human sensitivity to sound, the CNEL is always a higher number than the actual 24-hour average. L_{eq} is the average noise level on an energy basis for any specific time period. The L_{eq} for one hour is the average energy noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

Summary of Applicable Noise Regulations/Standards

The City has established noise standards to control unnecessary, excessive and annoying noise. The standards are codified in WCMC Article IV (Noise Regulations). Noise created by radios, television sets, and similar devices is regulated by WCMC Section 15-94 (Radios, television sets, and similar devices). The WCMC states that between the hours of 10:00 p.m. on one day and 7:00 a.m. of the following day, it is unlawful to use or operate any radio receiving set, musical instrument, phonograph, television set, or other machine or device for the producing or reproducing of sound or any device by which voice, music, or any other sound is amplified, in such a manner as to create any noise which causes the noise level at the property line of any property (or if a condominium or apartment house, within any adjoining unit or apartment), building, structure or vehicle to be plainly audible at a distance of 50 feet.

Construction noise is governed by WCMC Section 15-95 (Construction and Building Projects), which prohibits the use of construction tools, equipment, or the performance of any outside construction on buildings, structures, or projects within 500 feet of a residential zone which would cause the ambient noise level to be exceeded by 5 dB as measured at property lines, except for the hours of 7:00 a.m. to 8:00 p.m. Unloading and loading activity is prohibited within 500 feet of a residential zone, except for the hours of 6:00 a.m. to 8:00 p.m.

The City's General Plan Noise Element provides guidance on improving the safety and health of the community and abatement of excessive noise. The General Plan outlines land use compatibility standards as a guideline for locating new land uses, which have been adopted from the California Office of Noise Control. Policy 6.24 of the General Plan requires potential noise impacts on nearby noise sensitive receptors be analyzed for new development and, as feasible, require noise mitigation to address any identified significant impacts.

Existing Noise Levels

Noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise-sensitive and may warrant unique measures for protection from intruding noise. A distance of 500 feet is generally used as the screening distance for noise in an existing urban environment. Noise sensitive receptors within 500 feet of the project site include the following:

- Existing West Covina Medical Center facilities on the project site;
- Mauna Loa Garden Apartments, approximately 365 feet to the north; and
- Assisted Home Health and Hospice, approximately 415 feet to the west.

To characterize the existing noise environment around the project site, short-term noise measurements were taken using a SoundPro DL Sound Level Meter on Thursday, March 16, 2023 between 10:30 a.m. and 12:30 p.m. Hourly noise levels within the project area ranged from 55.2 to 70.2 dBA L_{eq}. Roadway noise was the most significant source of noise in the area. Monitoring locations and existing noise levels are shown in **Table 3-7**.

TABLE 3-7: EXISTING AMBIENT NOISE LEVELS

Noise Monitoring Location	Sound Level (dBA, L_{eq})
Cameron Ave. and Garvey Ave.	68.4
Pacific Ave. and Garvey Ave.	69.9
Orange Ave. and Cameron Ave.	70.2
Residence (830 Van Horn Ave.)	55.2
SOURCE: TAHA, 2024.	

Construction Noise

Construction activity would result in temporary increases in ambient noise levels in the area surrounding the project site on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Typical noise levels from various types of equipment that may be used during each construction phase are listed in **Table 3-8**.

TABLE 3-8: CONSTRUCTION EQUIPMENT NOISE LEVEL RANGES

Construction Equipment	Noise Level at 50 feet (dBA, L_{eq})
SITE PREPARATION	
Backhoe	73.6
Excavator	76.7
GRADING PHASE	
Backhoe	73.6
Dozer	77.7
Excavator	76.7
BUILDING CONSTRUCTION PHASE	
Backhoe	73.6
Crane	72.6
Forklift	79.4
Gradall	79.4
PAVING PHASE	
Concrete Mixer Truck	74.8
Backhoe	73.6
ARCHITECTURAL COATING PHASE	
Air Compressor	73.7
Aerial Lift	67.7
SOURCE: FHWA, *Roadway Construction Noise Model, Version 1.1*, 2008.	

Construction activities typically require the use of numerous pieces of noise-generating equipment. In addition, truck trips would be required to remove excavated materials and import fill material. The noise levels shown in **Table 3-9** take into account the likelihood that multiple pieces of construction equipment would be operating simultaneously and the typical overall noise levels that would be expected for each phase of construction. When considered as an entire process with multiple pieces of equipment, building construction would generate the loudest noise level of approximately 82.4 dBA L_{eq} at 50 feet.

TABLE 3-9: CONSTRUCTION PHASE NOISE LEVELS	
Construction Phase	**Noise Level at 50 Feet (dBA)**
Site Preparation	78.4
Grading	80.2
Building Construction	82.4
Paving	77.3
Architectural Coating	74.7
SOURCE: FHWA, *Roadway Construction Noise Model, Version 1.1,* 2008.	

Table 3-10 presents the estimated noise levels at off-site sensitive receptors nearest to the project site for informational purposes. The most noise-intensive construction activities would occur during the early phases of construction (e.g., site preparation, grading and structural framing). The majority of the latter phases of construction would occur within the newly constructed building and would result in lower noise levels than exterior construction. The analysis demonstrates that construction noise is expected to be less than existing noise levels at off-site sensitive receptors. The proposed project would be constructed in a manner typical of urban infill projects and would not require unusually noisy activities such as pile driving. In addition, the proposed project would not require nighttime construction activities. Construction would comply with the allowable construction hours of 7:00 a.m. to 8:00 p.m. as defined in the WCMC, which is designed to control noise exposure. Therefore, construction noise would result in a less-than-significant impact to off-site sensitive land uses.

TABLE 3-10: UNMITIGATED CONSTRUCTION NOISE LEVELS AT OFF-SITE SENSITIVE RECEPTORS			
Sensitive Receptors	**Distance to Construction (Feet)**	**Existing Ambient Noise Level (dBA, L_{eq})**	**Typical Construction Noise Level at Sensitive Receptor (dBA, L_{eq})**
Mauna Loa Garden Apartments	365	69.2	65.1
Assisted Home Health & Hospice	415	68.4	64.0
SOURCE: TAHA, 2024.			

The proposed project would be located on the same property as the existing West Covina Medical Center, which includes medical facilities that are sensitive to increased noise levels. These facilities, which are owned and operated by the applicant, may experience short-term disruptive noise events during construction. To reduce construction noise levels at noise sensitive uses, the proposed project would be required to implement Mitigation Measure **N-1**. This mitigation measure requires the preparation of a Noise Control Plan to minimize exposure to these existing medical facilities. With implementation of Mitigation Measure **N-1**, on-site construction noise impacts would be reduced to less than significant levels.

Operational Noise

Stationary Noise Sources. The proposed project would include several stationary sources of noise, including heating, ventilation, and air conditioning (HVAC) systems; parking lot activities; activities at the patient drop-off area; and activities at the ambulance drop-off area. HVAC equipment typically generates noise levels of approximately 60 dBA at 50 feet.[44] Neither the WCMC nor the City's General Plan Noise Element have established quantitative noise thresholds regarding HVAC equipment. Per WCMC Section 26-53, mechanical equipment, including HVAC systems, are required to be placed behind a parapet wall when located on a rooftop and fully enclosed when located at ground level. The parapet wall and enclosures would further reduce HVAC noise levels by 10 dBA or more, resulting in a noise level of approximately 50 dBA at 50 feet. HVAC equipment would be fully screened and would be approximately 500 feet away from the Assisted Home Health and Hospice and residences along Van Horn Avenue. The existing noise level along Cameron Avenue is approximately 68.4 dBA L_{eq}. HVAC noise levels would not be 5 dBA above the existing noise level and, thus, operations of HVAC equipment would not result in a noticeable change in noise levels that may evoke a community reaction. Therefore, the proposed project would result in a less-than-significant impact related to HVAC equipment.

The proposed project would reduce on-site parking on the east side of the project site from 55 to 4 parking spaces. A patient drop-off from passenger vehicles would be located at the eastern portion of the project site. Sources of noise would include engines accelerating, doors slamming, car alarms, and people talking. Passenger vehicles traveling at 10 miles per hour would generate a noise level of approximately 50 dBA at 50 feet.[45] Activities occurring from the six parking spaces and patient drop-off area are not expected to incrementally increase existing noise level since fewer parking spaces would be provided compared to existing conditions. Therefore, the proposed project would result in a less-than-significant impact related to parking and patient drop-off from passenger vehicles.

The proposed ambulance drop-off area would be located at the rear of the proposed building at the northern portion of the project site. All patients admitted to the proposed facility would arrive via ambulance or non-medical emergency transport van. No sirens would be used. The surrounding land uses, including sensitive receptors, would not have direct line-of-sight to the proposed ambulance drop-off area. Noise from the ambulance drop-off area to land uses to the north would be shielded by freeway infrastructure, including a soundwall on the north side of the I-10 freeway. The existing landscaping and transportation infrastructure would obstruct views of the ambulance drop-off area to the east of the project site. Given the location of the proposed ambulance drop-off area at the rear of the proposed building and that no sirens would be used for ambulances or non-medical emergency transport vans transporting patients to the proposed facility, the proposed project would result in a less-than-significant impact related to the ambulance drop-off.

[44]Cowan, James P., *Handbook of Environmental Acoustics*, 1994.

[45]California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, *Figure 4-1 A-Weighted Baseline FHWA (Federal Highway Administration) TNM (Traffic Noise Model) REMEL (Reference Energy Mean Emission Level) Curves*, September 2013.

Mobile Sources. The proposed project would generate approximately 452 daily trips, 34 AM peak hour trips, and 36 PM peak hour trips. **Table 3-11** shows roadway noise levels for Existing and Year 2026 conditions. As shown in **Table 3-12**, the roadway noise increase attributed to the proposed project would be less than 1 dBA on the local roadway network and is not anticipated to result in a perceptible change in sound level for a person with normal hearing sensitivity or result in a 5 dBA CNEL or more increase. Therefore, the proposed project would result in a less-than-significant impact related to mobile noise levels.

TABLE 3-11: MOBILE SOURCE NOISE LEVELS

Roadway Segment	Estimated dBA, L_{eq} at 50 Feet		
	Existing (2023)	Year 2026 No Project	Year 2026 with Project
Cameron Ave. between Pacific Ave. and Orange Ave.	66.9	67.2	67.3
Cameron Ave. between Orange Ave. and Toluca Ave.	61.6	61.7	61.9
Orange Ave. between Garvey Ave. and Cameron Ave.	67.0	67.4	67.5
Toluca Ave. between Pacific Ave. and Cameron Ave.	59.2	59.5	59.5
SOURCE: TAHA, 2024.			

TABLE 3-12: CHANGE IN MOBILE SOURCE NOISE LEVELS

Roadway Segment	Estimated dBA, L_{eq} at 50 Feet	
	Year 2026 with Project vs. Year 2026 without Project (2023)	Existing (2023) vs. Year 2026 with Project
Cameron Ave. between Pacific Ave. and Orange Ave.	0.3	0.4
Cameron Ave. between Orange Ave. and Toluca Ave.	0.1	0.3
Orange Ave. between Garvey Ave. and Cameron Ave.	0.4	0.5
Toluca Ave. between Pacific Ave. and Cameron Ave.	0.3	0.3
SOURCE: TAHA, 2024.		

Summary

Overall, construction noise is expected to be less than existing noise levels at off-site sensitive receptors. The existing West Covina Medical Center facilities may experience short-term disruptive noise events during proposed project construction. Mitigation Measure **N-1** would be required to reduce on-site construction noise impacts to less than significant levels. Therefore, construction noise would result in a less-than-significant impact with mitigation incorporated.

Operational noise, such as noise from HVAC equipment, parking lot, patient drop-off area, and activities and ambulance drop-off area, are not expected to cause ambient noise levels at noise sensitive receptor to noticeably increase. A less-than-significant impact would occur during operations of the proposed project.

b) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would generate excessive groundborne vibration or groundborne noise levels. Operations of the proposed project would not include significant sources of vibration. Vehicle trips associated with the proposed project would not generate perceptible levels of groundborne vibration or groundborne noise as rubber-tired vehicles rarely create ground-borne vibration problems unless there is a discontinuity or bump in the road that causes the vibration.[46]

Construction activity can generate varying degrees of vibration, depending on the construction procedure and the construction 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 a 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, and to damage at the highest levels.

Because construction activity is short-term and equipment moves around a project site, the primary concern regarding construction vibration relates to building damage. Activities that can result in damage include demolition and site preparation in close proximity to sensitive structures. Typical vibration levels associated with relevant construction equipment are provided in **Table 3-13**. Importantly, construction would not require pile driving, which generates elevated vibration levels above what typical construction equipment does.

TABLE 3-13: VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT

Equipment	Peak Particle Velocity at 25 feet (Inches/Second)
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

SOURCE: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018.

The City has not established vibration standards for construction activities. The Federal Transit Administration has published guidance stating that non-engineered timber and masonry buildings (e.g., typical single-family residential buildings) can withstand peak particle velocity (PPV) vibration of levels of at least 0.2 inches per second without experiencing damage. Reinforced concrete and masonry buildings (e.g. medical centers, commercial buildings) can withstand vibration levels of 0.5 inches per second.

The nearest off-site structure is a commercial building located approximately 300 feet to the southwest of the project site. Vibration levels at this distance would be less than 0.002 inches per second and would not exceed the 0.5 inches per second vibration damage threshold. Similarly, other structures located further away would not experience vibration levels that would exceed the vibration damage threshold. The existing West Covina Medical Center facilities would be located approximately 10 feet from where heavy equipment may be operating. Vibration levels generated by a large bulldozer at 10 feet would be approximately 0.352 inches per second and would be less than the 0.5 inches per second vibration damage threshold.

The City regulates construction disturbances through limiting the allowable hours of activities to between 7:00 a.m. to 8:00 p.m. Commercial construction is typically over by

[46]Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018.

4:00 p.m. even though later construction is allowed. Complying with the City standards is considered sufficient for limiting exposure to vibration levels.

As the proposed project would not generate perceptible vibration levels during operations and construction activities would not result in vibration levels that would generate elevated vibration levels that would damage existing buildings. Therefore, the proposed project would result in a less-than-significant impact related to vibration.

c) **No Impact**. The proposed project is not located within an airport land use plan and is not within two miles of a private airstrip or public airport. The nearest airport is San Gabriel Valley Airport, approximately 4.9 miles to the west. There is no potential to expose people working or residing in the area to excessive aircraft noise. Therefore, no impact related to excessive airport noise would occur.

MITGATION MEASURES

N-1 The construction contractor shall develop and implement a Noise Control Plan to minimize excessive noise levels at the existing West Covina Medical Center during construction. At a minimum, the Noise Control Plan shall require the following:

- Prior to initiating construction activity, the construction contractor shall coordinate with the West Covina Medical Center administration to discuss construction activities that would generate high noise levels. Coordination between the administration and the construction contractor shall continue on an as-needed basis throughout the construction phase of the proposed project to minimize potential disruption to medical facilities.
- Power construction equipment (including combustion engines), fixed or mobile, shall be equipped with muffling devices consistent with manufacturers' standards. All equipment shall be properly maintained to assure that no additional noise would be generated due to worn or improperly maintained parts.
- The construction contractor shall use "quiet" gasoline-powered compressors or electrically powered compressors as well as electric rather than gasoline- or diesel-powered forklifts for small lifting, where feasible.
- The construction contractor shall locate construction equipment as far as feasible from adjacent or nearby noise-sensitive receptors.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.14 POPULATION AND HOUSING. Would the project:				
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?	☐	☐	☐	☑

a) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would induce substantial population growth that would not have otherwise occurred as rapidly or in as great a magnitude. The proposed project would add a behavioral health building to the eastern portion of the project site. The new building would adjoin and connect to the existing medical hospital building on the project site. Medical offices are also located on the project site. No residential uses are currently located on the project site and no residential uses are being proposed. The proposed building addition would serve to meet the behavioral health needs of the existing population in the surrounding communities. No additional homes would be built as a result of the proposed project. The proposed project would provide a net increase of approximately 50 jobs in the City that can be filled by the local labor force. While the proposed project would increase the number of employees on the project site, it is expected that workers from nearby communities would be available to serve the needs of the proposed project. Employees are not expected to relocate to the surrounding area and, thus, would not result in a substantial permanent increase in population. Additionally, the proposed project is located in a developed portion of the City and is served by existing roads and utility infrastructure. The proposed project does not propose extension of roads or other infrastructure that would encourage development beyond what is already planned in the City and the surrounding communities. Therefore, the proposed project would not directly or indirectly induce substantial unplanned population growth, and impacts would be less-than-significant.

b) **No Impact**. A significant impact would occur if the proposed project would displace substantial numbers of existing people or housing. Medical offices and a medical hospital are currently located on the project site, and the proposed project would add a behavioral health facility to the project site. No residential uses are located on the project site, and no housing would be displaced as a result of the proposed project. The proposed project would not require the construction of replacement housing elsewhere. Therefore, no impact would occur.

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

a.i) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would result in the provision of or need for new or physically altered fire protection services, the construction and/or operation of which would cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives. The WCFD provides fire protection and paramedic services to residents and businesses within the City. The City is divided into five fire districts, and each fire district is served by a fire station. The project site is within the fire district of Fire Station No. 1, located at 819 South Sunset Avenue.[47] The project site is approximately 0.3 "road mile" south of this fire station, which would ensure a maximum response time of five minutes or less.

Construction of the proposed project may generate traffic associated with the movement of construction equipment, removal of materials from site clearing, and construction worker trips. Construction activities associated with the proposed project are not expected to directly block emergency routes since construction would not involve any street closures. Although slow-moving construction-related vehicles may be present along streets, emergency access would remain available along all surrounding streets. Emergency vehicles would be able to circumvent slow-moving construction-related vehicles using sirens during emergencies.

The proposed building addition would incrementally increase demand for fire protection services. However, the proposed project would be constructed to comply with the requirements of the City's Fire Code (Article II of the WCMC), which requires adequate fire flow for the project site, fire prevention and suppression measures, fire access, and a sufficient number of hydrants. The proposed project would be designed to accommodate emergency access to and within the project site. The proposed drive aisles would be designed to meet the minimum width and turning dimensions as required by WCFD. Additionally, the proposed building addition would be constructed to meet the current building code requirements for fire safety. The applicant would be required to submit project plans to WCFD and incorporate WCFD fire protection and suppression features that are appropriate for the proposed project. Compliance with the City's Fire Code and the inclusion of the WCFD fire suppression and suppression

[47] City of West Covina, *Fire Department*, https://www.westcovina.org/departments/fire, accessed August 2023.

measures would ensure that operation of the proposed project would not cause WCFD to expand the existing Fire Station 1, or any other fire stations within the City.

Per Chapter 17, Article IV of the WCMC, new structures constructed as a result of the proposed project would be subject to the payment of development impact fees, which would be used to pay for the construction of any additional fire facilities, fire facility improvements, equipment, and vehicles required as a result of the proposed project.

As the proposed project would be required to comply with the City's Fire Code, WCFD requirements, and pay development impact fees, the proposed project would not increase demand on fire protection services in a manner that would adversely affect WCFD service ratios, response times, or other performance objectives. Therefore, impacts related to fire protection services would be less than significant.

a.ii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would result in the provision of or need for new or physically altered police protection services, the construction and/or operation of which would cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives. The West Covina Police Department (WCPD) provides police protection services to residents and businesses within the City of West Covina. WCPD headquarters is located at 1444 West Garvey Avenue approximately 0.6 "road mile" southeast from the project site.

Project construction may generate traffic associated with the movement of construction equipment, removal of materials from site clearing, and construction worker trips. However, construction activities are temporary and would not involve the closure of an entire street. Emergency access would remain available along all surrounding streets and would not directly block emergency routes. Although slow-moving construction-related vehicles may be present along streets, emergency access would remain available along all surrounding streets. Emergency vehicles would be able to circumvent slow-moving construction-related vehicles using sirens during emergencies.

Project plans would be submitted to the WCPD Crime Prevention unit for review and appropriate on-site security features would be required by WCPD. Furthermore, as discussed in Response to Checklist Question 3.15a.i, the proposed project would be required to pay development impact fees, which would be used to pay for any additional law enforcement facilities, police facility improvements, vehicles, equipment, and services required as a result of the proposed project. Therefore, a less-than-significant impact related to police protection services would occur.

a.iii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would induce substantial employment or population growth, which could increase demand for school facilities that would exceed the capacity of the schools, necessitating a new school or physical alteration of an existing school, the construction of which would cause a significant environmental impact. The project site is located within the West Covina Unified School District (WCUSD). Monte Vista Elementary School, Walnut Grove Intermediate School, and Edgewood High School are the closest schools that serve the project site. In the 2021-2022 school year, Monte Vista Elementary School, which serves grades TK through 6, had a total enrollment of 454 students.[48] Walnut Grove Intermediate School, which serves grades 7 and

[48]Monte Vista Elementary School, *Monte Vista Elementary School: 2021-2022 School Accountability Report Card (Published During the 2022-2023 School Year)*, https://drive.google.com/file/d/1OzIpS_shfj3hmvWHTudF2kZNJY-XTj-m/view, accessed August 2023.

8, had a total enrollment of 319 students during the 2021-2022 school year.[49] Edgewood High School, which serves grades 9 through 12, had a total enrollment of 855 students during the same school year.[50]

The need for new school facilities is typically associated with a population increase that generates an increase in enrollment large enough to cause new schools to be constructed. No residential units would be constructed as part of the proposed project. Although the proposed project would increase the number of employees on the project site, the proposed project is not expected to result in a permanent increase in population since workers from nearby communities are expected to serve the needs of the proposed project. Nevertheless, it is possible that employees from the project site may decide to have their children attend schools that serves the project site (rather than from the employees' school of residence), which could potentially increase student population of the schools that serve the project site. In accordance with California Education Code Section 17620, the applicant of the proposed project would be required to pay school district fees to the West Covina Unified School District to fund the construction or reconstruction of school facilities. Pursuant to California Government Code Section 65995(3)(h), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization…on the provision of adequate school facilities." Therefore, impacts related to school facilities would be less than significant.

a.iv) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would induce substantial population growth resulting in the need for and/or the provision of new or physically altered parks, the construction of which would cause significant environmental impacts. The City's Public Services Department is responsible for the provision, maintenance, and operation of public recreational and park facilities and services within the City. As discussed in Response to Checklist Question 3.14a, the proposed project is not expected to result in a permanent increase in population since no residential uses are proposed and employees from the project site would come from nearby communities. Although it is possible that employees from the project site may use nearby parks and recreational facilities, the additional demand on nearby parks and recreational facilities are not expected to increase in a manner that would require the need for or the provision of new or physically altered parks and recreational facilities. Additionally, the proposed project would be required to pay development impact fees, which would contribute funding for parks and recreational facilities. Any additional park services required as a result of the proposed project would be mitigated by the applicant paying the development impact fee. Therefore, impacts would be less than significant.

a.v) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would result in substantial employment or population growth that could generate a demand for other public facilities, including roads, transit, utilities, and libraries, that would exceed the capacity available to serve the project site, necessitating new or physically altered public facilities, the construction of which would cause significant environmental impacts. Potential impacts to roads and transit are discussed in Section 3.17, Transportation, and potential impacts to utilities are discussed in Section 3.19, Utilities and Service Systems. With regards

[49] Walnut Grove Intermediate School, *Walnut Grove Intermediate School: 2021-2022 School Accountability Report Card (Published During the 2022-2023 School Year)*, https://drive.google.com/file/d/1BKS0LVdz4yivta56JITKJ0zkHsBTPLLg/view, accessed August 2023.

[50] Edgewood High School, *Edgewood High School: 2021-2022 School Accountability Report Card (Published During the 2022-2023 School Year)*, https://drive.google.com/file/d/1Eh6FyjFcBsbAWih4ohZ6_2SGKaGMfQzZ/view, accessed August 2023.

to libraries, the City is served by the West Covina Library located at 1601 West Covina Parkway approximately 0.2 miles east of the project site.

The proposed project would increase employment on the project site, which could potentially incrementally increase the demand on library facilities. The West Covina Library is part of the County of Los Angeles Public Library system, which is financed by property taxes from the service area, general county funds, parcel tax, grants, feeds, and funds raised by the Library Foundation. As a result, the proposed project would contribute to the financing of library services through property taxes, which would mitigate the need for new or physically altered government facilities that support library use. Therefore, less-than-significant impacts related to library facilities would occur.

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

a) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would result in an increased use of existing parkland and recreational facilities in a manner that would accelerate or induce their physical deterioration. As discussed in Response to Checklist Question 3.15a.iv, although the proposed project would not result in a permanent increase in population, employees from the project site may use nearby parks and recreational facilities, which would create additional demand on these parks and recreational facilities. However, the potential increase in the use of existing public park and recreational facilities by the proposed project would not be at a level that would result in physical deterioration of existing parks and other recreational facilities and would not require or need new or physically altered facilities. The proposed project would be required to pay development impact fees, which would contribute funding for parks and recreational facilities. Any additional park services required as a result of the proposed project would be mitigated by the applicant paying the development impact fee. Thus, the proposed project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities that would cause or accelerate adverse deterioration of existing parks and recreational facilities. Therefore, a less-than-significant impact is anticipated.

b) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would include or require the construction or expansion of recreational facilities, the construction and operation of which would have an adverse physical effect on the environment. The proposed project does not include any parks and recreational facilities. As discussed in Response to Checklist Question 3.15a.iv, the proposed project would be required to pay development impact fees, which would contribute funding for public parks and recreational facilities. Any additional park services required as a result of the proposed project would be mitigated by the applicant paying the development impact fees. Therefore, a less-than-significant impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.17 TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☑	☐	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 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?	☐	☐	☐	☑

a) Less-Than-Significant Impact with Mitigation Incorporated. A significant impact would occur if the proposed project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Alternative Transportation Modes

The proposed project would not conflict with alternative transportation modes that serve the area surrounding the project site. The project site and its surrounding area is served by Foothill Transit Line 178 and the City's Go West Shuttle Blue Line. The nearest bus stop for the City's Go West Shuttle Blue Line is on Orange Avenue, approximately 150 feet south of the project site. The nearest bus stop for Foothill Transit Line 178 is on Pacific Ave, north of the I-10 freeway, approximately 600 feet north of the project site. The bus stop for these two transit lines is also located at the West Covina Parkway/Toluca Avenue intersection, south of the I-10 freeway, approximately 950 feet from the project site. Foothill Transit Lines 178, 185, 272, and 281 have a bus stop at the Sunset Avenue/West Covina Parkway intersection, approximately 0.4 mile southeast of the project site. The proposed project does not include components that would disrupt services to Foothill Transit and the City's Go West Shuttle. The bus and shuttle lines would continue to serve the project site and the surrounding area.

According to the City's General Plan, Cameron Avenue (adjacent to the project site) and Orange Avenue (southwest of Cameron Avenue) are designated as Class III bike routes. The proposed project does not involve any components that would affect these or other bikeways in the surrounding area. Additionally, the existing sidewalks along Cameron Avenue and Orange Avenue would remain with implementation of the proposed project and would continue to be used by pedestrians to access the project site and the surrounding uses.

Circulation-related Plans and Policies

The City's General Plan Circulation Element (Our Accessible Community Chapter of the General Plan) sets forth actions and policies pertaining to accident and traffic safety, transit and public transportation, and bicycle routes and pedestrian facilities, among other things. Relevant adopted policies include the following:

- Policy 4.2: Accommodate multimodal mobility, accessibility and safety needs when planning, designing, and implementing transportation improvements, improving access and circulation for all users of City streets.

- Policy 4.3: Establish protection of human life and health as the highest transportation system priorities and seek to improve safety through the design and maintenance of streets, sidewalks, intersections and crosswalks.
- Policy 4.4: Allocate street space equitably among all modes.
- Policy 4.5: Work to eliminate barriers to pedestrian and bicycle travel.
- Policy 4.6: Work with transit providers to develop high-quality facilities for transit users, including access facilities.
- Policy 4.13: Synchronize traffic signals and develop operational enhancements at the I-10 freeway interchanges to reduce traffic congestion.

The City's Active Transportation Plan also sets forth a number of objectives and goals to promote a balanced multi-modal transportation network that serves pedestrians, bicyclists, transit riders and motorists of all ages and abilities. The Active Transportation Plan includes objectives pertaining to programs that support bicycling, including programs that introduce and promote education, encouragement, and outreach, facilitate non-motorized travel to transit stations and stops, and encourage non-motorized travel to shops and restaurants. The Plan also provides specific recommendations for promoting walking and bicycling activities within the City, such as improving street crossings and lightings for pedestrians, implementing pedestrian safety measures in neighborhood streets, closing gaps to enhance crosstown connections for the bicycle network, enhancing bicycle facilities, and linking to other regional routes in adjacent cities.

The proposed project would not conflict with the applicable goals, objectives, and policies of the City's General Plan and the City's Active Transportation Plan. As discussed in Response to Checklist Question 3.17c, Mitigation Measure **T-1** would be implemented to provide greater visibility and safety to pedestrians and motorists at the existing crosswalk at the Orange Avenue/Cameron Avenue intersection. Mitigation Measure **T-2** would be implemented to improve the line of sight at the on-site and off-site parking lots. Implementation of these mitigation measures would improve safety along Orange Avenue and at the Orange Avenue/Cameron Avenue intersection and would support Policies 4.2, 4.3, 4.5 of the City's General Plan Circulation Element.

The proposed project would be accessible by vehicles, pedestrians, bicyclists, and transit users. Sidewalks are located adjacent to the project site along Orange Avenue and Cameron Avenue, and a designated Class III bike route is located on Cameron Avenue adjacent to the project site. The bike routes would not be altered by the proposed project. Walkways would be provided on the project site to connect the proposed project to the public sidewalks and bike routes. The walkways would minimize the extent of pedestrian and bicycle interaction with vehicles at the project site and would provide a comfortable, convenient, and safe environment, which in turn can encourage use of active transportation modes.

The project site is within walking distance (i.e., less than 0.5 mile) of Foothill Transit Line 178 and the City's Go West Shuttle Blue Line. The proposed project is not expected to affect access or safety at the existing bus stops and is not expected to hinder public transit service in the surrounding area. The proposed project is not expected to preclude the City from constructing bicycle facilities or pursuing bicycle network improvements along local roadways within the surrounding area. Development of the proposed project would not prevent the City from completing any proposed transit, bicycle, or pedestrian facilities.

Vehicular circulation on the project site would be designed to comply with the City's Municipal Code and the requirements of the City's Fire Department. As detailed below under "I-10 Off-Ramp Vehicle Queuing," the proposed project would not cause or contribute towards vehicle queuing that would extend back into the I-10 freeway mainline travel lanes.

Level of Service

While delay-based metric (including level of service [LOS]) is no longer used in the determination of significance of transportation impacts, it is used in project planning. The City of West Covina's Transportation Study Guidelines note that the City has established vehicle LOS standards which local infrastructure will strive to maintain. The LOS standards apply to discretionary approvals of new land use projects.[51]

Volume-to-capacity (v/c) ratio is a ratio that compares the number of vehicles using an intersection during peak hour to the capacity of the intersection. The v/c ratio measures whether an intersection has sufficient capacity for the movement of vehicles. A small v/c value indicates excess capacity, while a large v/c value indicates severe congestion. The overall intersection v/c ratio is subsequently assigned an LOS value to describe intersection operations. LOS is typically used to describe the operating conditions of a roadway based on factors such as speed, travel time, and delay.[52]

For signalized intersections, the City may require improvements or other strategies to reduce the v/c ratio to acceptable levels if the proposed project meet the following condition:

- The addition of project traffic results in the increase in v/c ratio equal to or greater than 0.020 at an intersection that degrades from acceptable operations (LOS E or better) to unacceptable operations (LOS F).

For unsignalized intersections, the City may require improvements or other strategies to reduce the LOS to acceptable levels if both of the following conditions are met:

- The addition of project traffic to an intersection results in the degradation of overall intersection operations from acceptable operations (LOS E or better) to unacceptable operations (LOS F), and
- Project-related increase in traffic contributes 10 percent or more to the total peak hour volume at an intersection that is already operating at LOS F.

Operations. According to the Transportation Impact Study for the proposed project, which is included in Appendix C, the proposed project would generate an additional 452 daily vehicle trips, of which 34 trips would be during the AM peak hour and 36 trips would be during the PM peak hour.[53] The Transportation Impact Study evaluated LOS at two study intersections (Orange Avenue/Cameron Avenue and Toluca Avenue/Cameron Avenue) under Existing and Year 2026 conditions. Orange Avenue/Cameron Avenue is a signalized intersection, and Toluca Avenue/Cameron Avenue is an unsignalized intersection.

Year 2026 conditions account for the development of related projects within one mile of the project site and background (or ambient) traffic growth between existing and future year 2026 conditions. Related projects within one mile of the project site were obtained from information on file with the City of West Covina and City of Baldwin Park Community Development Departments. Additionally, the ambient traffic growth rate of one percent per

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[51]City of West Covina, *City of West Covina Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, September 2020.

[52]LOS varies from LOS A (free flow conditions) to LOS F (jammed conditions). The acceptable operating condition for intersections in the City of West Covina is LOS E or better. Any intersection that operates at LOS F is considered deficient.

[53]Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Health Addition Project*, September 17, 2024.

year was used to account for typical growth in traffic volumes due to the development that would occur further than one mile of the project site.

Tables 3-14 and **3-15** present traffic conditions at the two study intersections under Existing (2023) and Year 2026 scenarios, respectively. Orange Avenue/Cameron Avenue intersection would operate at LOS B and C during the AM and PM peak hour, respectively, under Existing without and with the proposed project conditions. This intersection would operate at LOS A and B during the AM and PM peak hour, respectively, under Year 2026 conditions without and with proposed project conditions. The Toluca Avenue/Cameron Avenue intersection would operate at LOS B under Existing and Year 2026 without and with proposed project conditions during the weekday AM and PM peak hour conditions. The proposed project is not expected to cause any of the study intersections to operate at a deficient LOS (i.e., LOS F). The incremental increase in vehicle delay, or v/c ratio, would be 0.1 or less during the AM and PM peak hour conditions at the two intersections under Existing and Year 2026 scenarios. The proposed project would maintain acceptable operations (i.e., LOS E or better) at the two study intersections. Thus, intersection operations would not be degraded, and no intersection improvements or transportation demand management measures are proposed or required for the proposed project.[54]

TABLE 3-14: EXISTING WITHOUT AND WITH PROPOSED PROJECT PEAK HOUR TRAFFIC CONDITIONS

Intersection	Peak Hour	Existing without Project		Existing with Project		Change in Delay
		V/C or Delay	LOS	V/C or Delay	LOS	
Orange Ave./Cameron Ave.	AM	0.644	B	0.655	B	0.011
	PM	0.727	C	0.740	C	0.013
Toluca Ave./Cameron Ave.	AM	13.4	B	13.5	B	0.1
	PM	13.8	B	13.9	B	0.1

SOURCE: Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Heath Addition Project*, September 17, 2024.

TABLE 3-15: YEAR 2026 CONDITIONS WITHOUT AND WITH PROPOSED PROJECT PEAK HOUR TRAFFIC CONDITIONS

Intersection	Peak Hour	Year 2026 without Project		Year 2026 with Project		Change in Delay
		V/C or Delay	LOS	V/C or Delay	LOS	
Orange Ave./Cameron Ave.	AM	0.574	A	0.588	A	0.014
	PM	0.633	B	0.640	B	0.007
Toluca Ave./Cameron Ave.	AM	13.9	B	14.0	B	0.1
	PM	14.7	B	14.7	B	0.0

SOURCE: Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Heath Addition Project*, September 17, 2024.

Construction. Construction-related vehicle trips would be generated by construction worker vehicles, construction trucks, and miscellaneous/delivery trucks traveling to and from the project site. During peak construction activities, construction of the proposed project is estimated to generate approximately 212 vehicle trips on a daily basis to and from the site by construction workers. This estimated vehicle trips assumes overlapping construction phases. Construction-related activities would typically occur between 7:00 a.m. and 3:00

[54] *Ibid.*

p.m. Mondays through Fridays. Late departures would occur only when overtime is necessary to maintain the construction schedule but would occur no later than 5:00 p.m. A majority of construction worker trips would generally occur outside of peak commute hours of adjacent street traffic. Assuming that 50 percent of the construction worker trips would overlap with the weekday PM peak hour, a maximum of 53 outbound construction worker vehicle trips would occur during the weekday PM peak hour.

The construction workforce would likely be generated from all parts of the Los Angeles region, and construction worker-related traffic is anticipated to be largely freeway-oriented. Construction workers would likely arrive and depart via the on- and off-ramps serving the I-10 freeway. The most commonly used freeway ramps would be on Pacific Avenue and West Covina Parkway as these ramps are closest to the project site.

Construction truck trips may consist of trucks exporting and delivering materials and equipment to and from the project site site. CalEEMod generates default estimates of daily vehicle trips associated with land use development projects when project-specific information is not available. Since the number of construction trucks trips that would be required for the proposed project is currently unknown, CalEEMod was used to obtain the estimated number of truck trips that would occur during construction of the proposed project. CalEEMod estimates a maximum of 10 haul truck trips per day, or approximately 30 passenger car equivalent (PCE) vehicle trips per day, during peak construction activities. It is estimated that no more than 12 PCE vehicle trips would occur during both the weekday AM and PM peak hours.

Additional trips may be generated by miscellaneous/delivery trucks traveling to and from the project site. These trucks may consist of smaller pick-up trucks or four-wheel drive vehicles used by construction supervisors and/or City inspectors who are expected to travel to and from the project site. During peak construction activities, five miscellaneous trucks are anticipated. If these miscellaneous truck trips all occur during a single day, up to 10 truck trips per day, or approximately 20 daily PCE vehicle trips per day, would be generated to and from the project site by miscellaneous/delivery trucks. Of these trips, no more than 4 PCE vehicle trips would occur during both the weekday AM and PM peak hours.

When combined, construction worker vehicles, construction trucks, and miscellaneous trucks are forecasted to generate up to 262 daily PCE trips, 16 AM peak hour PCE vehicle trips, and 69 PM peak hour PCE vehicle trips during a typical weekday. While four related projects are within a one-mile radius of the project site, two of these related projects are located within two blocks of the project site, which is the distance that would typically be expected to result in potential concurrent construction traffic effects. It is possible that construction of some of these related projects could overlap with construction of the proposed project.

Although the proposed construction would generate more peak hour vehicle trips than proposed project operations, daily vehicle trips during the construction period would be less than the proposed project's overall daily operational trips. Construction vehicle trips are not expected to result in any deficiencies in the intersection LOS.

Construction of the proposed project is not expected to result in any street closures. However, portions of the sidewalks or lanes adjacent to the project site may need to be temporarily closed. If temporary sidewalk or lane closures are necessary, a construction staging and traffic management plan would be prepared, as required per City policy. This plan would require review and approval by the City's Department of Public Works. Related projects in the City would also be required to prepare and implement construction staging and traffic management plans to address any anticipated temporary lane closures or re-routing of vehicle and bicycle traffic, sidewalk closures or pedestrian re-routing. Thus, construction vehicle trips are not expected to result in any deficiencies in the intersection LOS.[55]

I-10 Off-Ramp Vehicle Queuing

The California Department of Transportation (Caltrans) *Interim Local Development Intergovernmental Review Safety Review Practitioners* provides guidance to Caltrans, lead agencies, developers, and consultants conducting safety reviews for land use projects and plans affecting the state highway system. The proposed project is expected to generate new project trips at the following intersections that are closest to the I-10 freeway off- ramps and project site:

- I-10 Freeway Eastbound Off-Ramp-Orange Avenue/Cameron Avenue, and
- I-10 Freeway Westbound Off-Ramp-Garvey Avenue North/West Covina Parkway.

The off-ramp vehicle queuing analysis is presented in the Transportation Impact Study for the proposed project (Appendix C). As discussed in the Transportation Impact Study, total vehicle queuing for the off-ramp lanes at the two I-10 off-ramp intersections closest to the project site would be able to accommodate vehicle queues exiting the I-10 freeway under Existing and Year 2926 without and with project scenarios during the weekday AM and PM peak hours. The proposed project is not expected to cause or contribute towards vehicle queuing which extends back into the I-10 freeway mainline travel lanes resulting in unsafe speed differentials between adjacent lanes.[56]

Vehicle Miles Traveled

VMT measures the amount and distance of vehicle travel attributed to a project or use. The following VMT analysis is based on the Transportation Impact Study for the proposed project, which is included in Appendix C.

The City of West Covina has adopted three screening criteria that may be applied to screen development projects out of detailed VMT analysis:

1) Transit Priority Area (TPA) screening
2) Low VMT area screening
3) Project type screening

Development projects are not required to satisfy all of the screening criteria in order to screen out of further VMT analysis; satisfaction of one criterion is sufficient for screening purposes.

Caltrans *Transportation Impact Study Guide* (TISG) provides guidance on Caltrans' review of land use projects. The TISG references the December 2018 *Technical Advisory* prepared by the state's Office of Planning and Research as the basis for guidance on VMT assessment. The City's adopted VMT methodology and screening criteria are substantially consistent with the recommendations provided in the *Technical Advisory* and also satisfies Caltrans' VMT analysis requirements.

TPA Screening Criteria. TPA is an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional

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[55] Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Health Addition Project*, September 17, 2024.

[56] *Ibid.*

transportation plan. PRC Section 21064.3 defines a major transit stop as an existing rail or bus rapid transit station or the intersection of two or more major bus routes with a service interval of 15 minute or less during the morning and afternoon peak commute periods. Development projects that are located within a TPA are presumed to have a less-than-significant impact, absent substantial evidence to the contrary. This presumption may not be appropriate if:

- The development project has a floor area ratio of less than 0.75;
- The development project includes more parking for use by residents, customers, or employees of the development project than required by the City;
- The development project is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Southern California Association of Governments); or
- The development project replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Although the project site is located within one-half mile of the bus stops for the Foothill Transit and the City's Go West Shuttle lines, these bus stops are not major transit stops as defined by PRC Section 21064.3. Thus, the proposed project would not screen out of the VMT analysis based on the TPA screening criteria.

Low VMT Area Screening Criteria. Low VMT areas are areas in the City where VMT falls below the City's adopted threshold of significance. Development projects that are located within areas that currently exhibit low VMT and incorporate similar features pertaining to density, land use mix, and transit availability would tend to exhibit similarly low VMT. In areas where the existing VMT generation already falls below the applicable thresholds and where development projects are likely to generate similar levels of VMT, projects may be screened out of preparing detailed VMT analysis. The City of West Covina has adopted a low VMT area screening criterion which may apply to residential, office, or other employment-related and mixed-use land use types.

The SCAG Travel Demand Forecasting Model was used to establish VMT performance for individual Traffic Analysis Zones (TAZ). The VMT values for each TAZ are then compared to the applicable City thresholds (i.e., VMT per capita, per employee, or per service population) to determine if the TAZ can be considered a low VMT area.

Based on the results of the SCAG Travel Demand Forecasting Model, which is provided in Appendix C of the Transportation Impact Study for the proposed project, the project site is located in a low VMT area. The project site is situated in a TAZ that currently exhibits 28.8 total VMT per service population, which is below the 29.56 total VMT per service population threshold for office project types. As the project site is located in a low VMT area, the project site satisfies the low VMT area screening criteria.[57]

Project Type Screening Criteria. Consistent with the OPR *Technical Advisory*, the City of West Covina has determined the following potential screening criteria for certain land development projects that may presume to result in a less than significant VMT impact as mentioned in the City's Transportation Study Guidelines:

- Local-serving retail less than 50,000 square feet, including gas stations, banks, restaurants, shopping center
- Local-serving K-12 schools, local parks, daycare centers, etc.

[57]Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Health Addition Project*, September 17, 2024.

- Local-serving hotels (e.g., non-destination hotels)
- Student housing projects or adjacent to college campuses
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (public libraries, fire stations, local government)
- Affordable, supportive, or transitional housing
- Assisted living facilities, senior housing
- Projects generating less than 110 daily vehicle trips
- Public parking garages and public parking lots

The proposed project would serve the local population and is considered a community institution, thereby shortening travel distances and reducing VMT. The proposed project satisfies the project type screening criteria.

VMT Summary. The proposed project does not satisfy the TPA screening criteria but satisfies the low VMT area and project type screening criteria. Therefore, the proposed project would screen out of further VMT analysis.

Summary

Implementation of Mitigation Measures **T-1** and **T-2** would support Policies 4.2, 4.3, and 4.5 of the City's General Plan Circulation Element and, thus, the proposed project would not conflict with any program plan, ordinance or policy addressing the circulation system. The proposed project would maintain acceptable operations (LOS E or better) at the two study intersections. The proposed project is not expected to cause or contribute towards vehicle queuing which extends back into the I-10 freeway mainline travel lanes. Additionally, the proposed project would be screened out of the VMT analysis based on the low VMT area and project type screening criteria. Therefore, with implementation of Mitigation Measures **T-1** and **T-2**, impacts would be less than significant.

b) **Less-Than-Significant Impact**. A significant impact would occur if the project was inconsistent with CEQA Guidelines Section 15064.3(b). CEQA Guidelines Section 15064.3 identifies VMT as a criteria for evaluating a project's transportation impact. As discussed in Response to Checklist Question 3.17a, above, the proposed project satisfies the low VMT area and project type screening criteria. Therefore, the proposed project screens out of further VMT analysis. Therefore, the proposed project would not conflict with CEQA Guidelines Section 15064.3(b), and impacts would be less than significant.

c) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project would introduce design features or incompatible uses that would increase hazards. Access and circulation within the project site would be designed and constructed in conformance with all applicable City requirements. Walkways would be provided on the project site to connect the proposed project to the public sidewalks and bike routes. The walkways would minimize the extent of pedestrian and bicycle interaction with vehicles at the project site and would provide a comfortable, convenient, and safe environment.

The proposed project would not require the construction of any new roads or the modification of any existing roads or pedestrian pathways. However, use of the off-site parking lot would increase since the proposed project would reduce the number of on-site parking spaces and would require staff and visitors of the West Covina Medical Center to park at its off-site parking lot. As a result, more pedestrians would use the existing crosswalk at the Orange Avenue/Cameron Avenue intersection to access the project site. To provide greater visibility and safety to pedestrians and motorists, Mitigation Measure **T-1** would be implemented. This mitigation measure would convert the existing crosswalk at the Orange Avenue/Cameron Avenue intersection to white continental crosswalks.

According to Table 9-8 of the American Association of State Highway and Transportation Officials' *A Policy on Geometric Design of Highways and Streets*, a design speed of 25 miles per hour would require a minimum stopping sight distance of 155 feet and an intersection sight distance of 240 feet for passenger cars. According to the Transportation Impact Study for the proposed project, when an existing motorist's vehicle (i.e., front bumper) traveling along Orange Avenue is placed 15 feet from the edge of the travel way to the motorists' eye, the project site provides a sight distance of 131 feet at the driveway for oncoming southbound approaching vehicles and 172 feet for oncoming northbound approaching vehicles. The minimum line of sight of 240 feet for passenger cars does not exist for the project site driveway. The Transportation Impact Study for the proposed project provides measures that would improve the line of sight between motorists at the project site driveway and motorists along Orange Avenue (assuming a north-south orientation for Orange Avenue). These measures include the following:

- Provide red curb markings and signages to prohibit on-street parking along the west side of Orange Avenue along the project site frontage;
- Remove the existing two-hour parking sign that is located to the north of the existing entrance canopy;
- Clear landscaping, signage, and objects that are taller than 36 inches in height;
- Extend the existing red curb marking immediately south of the project site driveway be extended by approximately 40 feet to connect with the next southerly red curb marking on Orange Avenue; and
- Remove the two-hour parking sign to the north of the existing entrance canopy.[58]

While the minimum intersection sight distances are not met given the location of the existing driveway and the roadway curvature from the freeway off-ramp to Orange Avenue, the majority of visitors and staff parking would be provided at the off-site parking lot at the southwest corner of Orange Avenue/Cameron Avenue, while vehicles utilizing the Orange Avenue driveway on-site would primarily be staff and ambulances that are transporting patients. Due to the expected increased usage of the off-site parking lot, the Transportation Impact Study for the proposed project recommend the following to improve sight distance at the off-site parking lot:

- Install/refresh the red curb markings for 20 feet on either side of the two driveways for the off-site parking lot (i.e., at the Garvey Avenue South and Orange Avenue driveways); and
- Install signs at the two driveways of the off-site parking lots indicating that the usage of the off-site parking lot is for the West Covina Medical Center staff and visitors only.[59]

Implementation of Mitigation Measure **T-2** would ensure that the measures contained within the Transportation Impact Study for the proposed project be implemented to improve the line of sight at the on-site and off-site parking lots.

As discussed in Response to Checklist Question 3.17a, the proposed project is not expected to cause or contribute towards vehicle queuing that extends back into the I-10 freeway mainline travel lanes. Thus, the proposed project would not result in unsafe speed differentials

[58] Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Health Addition Project*, September 17, 2024.

[59] Linscott Law & Greenspan, *Transportation Impact Study: West Covina Medical Center – Behavioral Health Addition Project*, September 17, 2024

between adjacent lanes, and the proposed project is not anticipated to negatively influence safety on the state highway system.

Implementation of Mitigation Measure **T-1** would be required to provide greater visibility and safety to pedestrians and motorists at the existing crosswalk at the Orange Avenue/Cameron Avenue intersection. Implementation of Mitigation Measure **T-2** would be required to improve the line of sight between the project site and oncoming traffic. Therefore, with implementation of Mitigation Measures **T-1** and **T-2**, a less than-significant impact related to transportation hazards would occur.

d) **No Impact**. A significant impact would occur if the proposed project would result in inadequate emergency access. The proposed project would be designed to accommodate emergency vehicles and would allow adequate emergency access to the project site in accordance with the City's driveway standards and WCFD requirements. Additionally, the proposed drive aisles would be designed to meet the minimum width and turning dimensions as required by WCFD. The turnaround area in front of the proposed building would be designed to accommodate fire trucks. The proposed project design would also be reviewed by the City's Planning Division, Building Division, and WCFD during the plan review process to ensure all applicable requirements are met. No roads would be closed by construction or operation of the proposed project. Emergency vehicles would be able to travel along roadways, and access to all surrounding properties would be maintained.

During construction, emergency vehicle access throughout the surrounding area would be maintained. As required by the California Vehicle Code (specifically Section 21806, Authorized Emergency Vehicles), "upon the immediate approach of an authorized emergency vehicle which is sounding a siren and which has at least one lighted lamp exhibiting red light that is visible, under normal atmospheric conditions, from a distance of 1,000 feet in front of a vehicle, the surrounding traffic shall, except as otherwise directed by a traffic officer, do the following:

> (a) (1) Except as required under paragraph (2), the driver of every other vehicle shall yield the right-of-way and shall immediately drive to the right-hand edge or curb of the highway, clear of any intersection, and thereupon shall stop and remain stopped until the authorized emergency vehicle has passed.
>
> (2) A person driving a vehicle in an exclusive or preferential use lane shall exit that lane immediately upon determining that the exit can be accomplished with reasonable safety.
>
> (b) The operator of every street car shall immediately stop the street car, clear of any intersection, and remain stopped until the authorized emergency vehicle has passed.
>
> (c) All pedestrians upon the highway shall proceed to the nearest curb or place of safety and remain there until the authorized emergency vehicle has passed."

If required, drivers of emergency vehicles are also trained to utilize center turn lanes, or travel in opposing through lanes to pass through crowded intersections or streets. Therefore, the proposed project would not result in inadequate emergency access, and no impact is expected.

MITGATION MEASURES

T-1 The existing crosswalk at the Orange Avenue/Cameron Avenue intersection shall be converted to white continental crosswalks to provide greater visibility and safety to pedestrians and motorists.

T-2 The applicant shall comply with all measures identified in the Transportation Impact Study for the proposed project. These measures include the following:

- Install red curb markings and signage to prohibit on-street parking along the west side of Orange Avenue along the project site frontage (assuming a north-south orientation for Orange Avenue). The existing red curb marking immediately south of the project site driveway shall be extended by approximately 40 feet to connect with the next southerly red curb marking on Orange Avenue.
- All existing red curb markings on Orange Avenue shall be refreshed for visibility.
- Remove the existing two-hour parking sign that is located to the north of the existing entrance canopy.
- Trim the existing trees and bushes along the west side of the Orange Avenue/freeway off-ramp north of the project site driveway to maintain a clear line of sight between motorists and oncoming motorists.
- Install advance warning signs for southbound approaching vehicles coming from the freeway off-ramp on both sides of Orange Avenue to indicate the presence of an intersection/driveway further ahead (see Figure 2-4, Intersection Sight Distance at Project Driveway, of the Transportation Impact Study for the proposed project for the proposed signs and the location of these signs).
- Install/refresh the red curb markings for 20 feet on either side of the two driveways for the off-site parking lot (i.e., at the Garvey Avenue South and Orange Avenue driveways).
- Install signs at the two driveways of the off-site parking lots to indicate that the usage of the off-site parking lot is for the West Covina Medical Center staff and visitors only.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.18 TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☑	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☑	☐	☐

a-b) Less-Than-Significant Impact with Mitigation Incorporated. A significant impact would occur if the proposed project would cause a substantial adverse change in the significance of a tribal cultural resource. The project site is currently developed with a medical center, surface parking, and landscaping. As discussed in Response to Checklist Question 3.5a, the project site was evaluated as a potential historical resource in the City's 2019 Historic Resource Inventory Update. The project site was evaluated according to the established designation criteria for listing in the National Register, California Register, and as a City of West Covina landmark or historic district. The DRP 523 form for the West Covina Medical Center indicates that the project site does not appear to be eligible for listing under any of the criteria for the National Register, California Register, or West Covina Landmark. [60]

To date, no significant tribal cultural resources have been identified on the project site. However, it is possible that tribal cultural resources could be discovered during ground disturbing activities. In accordance with Assembly Bill 52 (AB 52) requirements, California Native American tribes traditionally and culturally affiliated with the geographic area of the project site were notified of the proposed project on August 15, 2023. The Gabrieleno Band of Mission Indians - Kizh Nation responded and recommended that mitigation measures be imposed on the project site to ensure that any inadvertent discovery of tribal cultural resources encountered during ground-disturbing activities are properly documented, salvaged, and protected. Therefore, with implementation of Mitigation Measures **TR-1** through **TR-3**, impacts related to the tribal cultural resources would be less than significant.

MITIGATION MEASURES

TR-1 The project applicant shall retain a Native American monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh). The Native American monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the proposed project at all project locations (i.e., both on-site and any off-site locations that are included in the project description and/or required in connection with the proposed project, such as public improvement work). "Ground-disturbing activity," as defined by the Kizh, includes, but

[60] City of West Covina, *Historic Context Statement, 1945-1978 & Historic Resource Inventory Update*, Attachment 4, December 2019, https://www.westcovina.org/departments/community-development/planning-division/historic-preservation, accessed March 2023.

is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

The Native American monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Kizh. Monitor logs shall identify and describe any discovered tribal cultural resources, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the lead agency upon written request.

On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Kizh from a designated point of contact for the project applicant that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the proposed project are complete; or (2) a determination and written notification by the Kizh or Native American monitor to the project applicant and lead agency that no future, planned construction activity and/or construction phase at the project site possesses the potential to impact tribal cultural resources.

TR-2 Upon discovery of any tribal cultural resources, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered tribal cultural resources has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered tribal cultural resources in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TR-3 Native American human remains are defined in PRC Section 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute.

If Native American human remains and/or grave goods are discovered or recognized on the project site, construction activities shall be diverted at a minimum of 150 feet from the discovery and an exclusion zone shall be placed around the burial. PRC Section 5097.9 and Health and Safety Code Section 7050.5 shall be followed. Health and Safety Code Section 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. Work shall continue to be diverted while the coroner determines whether the remains are Native American. If the County Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Native American Heritage Commission shall be contacted by telephone within 24 hours. If the finds are determined to be Native American, the coroner will notify the Native American Heritage Commission as mandated by state law, who will then appoint a Most Likely Descendent.

Human remains and grave/burial goods shall be treated alike per PRC Section 5097.98(d)(1) and (2). Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

3.19 UTILITIES AND SERVICE SYSTEMS. Would the project:	**Potentially Significant Impact**	**Less-Than-Significant Impact with Mitigation Incorporated**	**Less-Than-Significant Impact**	**No Impact**
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or 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 project's projected demand in addition to the provider's 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 statutes and regulations related to solid waste?	☐	☐	☑	☐

a) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would require or result in the relocation or construction of new utilities facilities or service systems, which would cause significant environmental effects.

Water Supply. Water for the project site is served by Suburban Water Systems. Suburban Water Systems serves a population of about 300,000 through a water distribution system that includes 18 wells, 32 reservoirs, and more than 800 miles of pipeline. Their network of facilities pumps and distributes approximately 43,000 acre-feet of water annually.[61,62] Groundwater comes from Suburban-owned wells in the Main San Gabriel Basin and Central Basin. The well water is disinfected and treated prior to entering the distribution system. Water supply is supplemented with water purchased mainly from member agencies of the Metropolitan Water District of Southern California, Covina Irrigated Company, and California Domestic Water Company. Suburban Water Systems is divided into two main service areas: San Jose Hills Service Area and the Whittier/La Mirada Service Area. The project site is located in the San Jose Hills Service Area.

According to the 2020 Urban Water Management Plan for Suburban Water Systems, Suburban Water Systems had an annual water demand of 45,389 acre-feet for a service area population of 298,367 in 2020, while the San Jose Hills Service Area had an annual water demand of 23,371 acre-feet for a service area population of 175,529.

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[61]Suburban Water Systems, *Final 2020 Urban Water Management Plan*, June 2021, https://wuedata.water.ca.gov/public/uwmp_attachments/3673902213/Suburban%20Final%202020%20UWMP_2021-06-30.pdf.

[62]One acre-foot is about 326,000 gallons, which meets the annual average indoor/outdoor water needs of one or two households.

Tables 3-16, **3-17**, and **3-18** show the 2020 Urban Water Management Plan projected water supply and demand in the San Jose Hills Service Area under normal year, single dry year, and multiple dry year conditions, respectively, through 2045. As shown, Suburban Water Systems is projected to meet future water demands in the San Jose Hills Service Area for normal, single-dry, and multiple-dry year conditions through 2045.[63]

TABLE 3-16: SAN JOSE HILLS NORMAL YEAR SUPPLY AND DEMAND COMPARISON

Water Supply/Demand	Year				
	2025	2030	2035	2040	2045
Supply Totals (afy)	34,200	34,200	34,200	34,200	34,200
Demand Totals (afy)	24,175	24,415	24,658	24,904	25,151
Difference (afy)	10,025	9,785	9,542	9,296	9,049

afy = acre-feet per year
SOURCE: Suburban Water Systems, Final 2020 Urban Water Management Plan, Table 3.23, June 2021.

TABLE 3-17: SAN JOSE HILLS SINGLE DRY YEAR SUPPLY AND DEMAND COMPARISON

Water Supply/Demand	Year				
	2025	2030	2035	2040	2045
Supply Totals (afy)	29,579	29,579	29,579	29,579	29,579
Demand Totals (afy)	25,535	25,782	26,032	26,283	26,538
Difference (afy)	4,044	3,797	3,547	3,295	3,041

afy = acre-feet per year
SOURCE: Suburban Water Systems, *Final 2020 Urban Water Management Plan*, Table 3.26, June 2021.

TABLE 3-18: SAN JOSE HILLS MULTIPLE DRY YEAR SUPPLY AND DEMAND COMPARISON

Water Supply/Demand	Year				
	2025	2030	2035	2040	2045
FIRST YEAR					
Supply Totals (afy)	33,945	33,945	33,945	33,945	33,945
Demand Totals (afy)	24,374	24,610	24,848	25,088	25,331
Difference	9,571	9,336	9,098	8,857	8,614
SECOND YEAR					
Supply Totals (afy)	32,893	32,893	32,893	32,893	32,893
Demand Totals (afy)	24,374	24,610	24,848	25,088	25,331
Difference	8,519	8,284	8,046	7,805	7,562
THIRD YEAR					
Supply Totals (afy)	32,481	32,481	32,481	32,481	32,481
Demand Totals (afy)	24,374	24,610	24,848	25,088	25,331
Difference	8,107	7,872	7,634	7,393	7,150
FOURTH Year					
Supply Totals (afy)	29,579	29,579	29,579	29,579	29,579
Demand Totals (afy)	24,374	24,610	24,848	25,088	25,331
Difference	5,205	4,969	4,731	4,491	4,248

[63]Suburban Water Systems, *Final 2020 Urban Water Management Plan*, June 2021, https://wuedata.water.ca.gov/public/uwmp_attachments/3673902213/Suburban%20Final%202020%20UWMP_2021-06-30.pdf.

TABLE 3-18: SAN JOSE HILLS MULTIPLE DRY YEAR SUPPLY AND DEMAND COMPARISON					
Water Supply/Demand	**Year**				
	2025	**2030**	**2035**	**2040**	**2045**
FIFTH YEAR					
Supply Totals (afy)	36,662	36,662	36,662	36,662	36,662
Demand Totals (afy)	24,374	24,610	24,848	25,088	25,331
Difference	12,289	12,053	11,815	11,574	11,331

afy = acre-feet per year
SOURCE: Suburban Water Systems, *Final 2020 Urban Water Management Plan*, Table 3.29, June 2021

The proposed project is estimated to increase water demand by approximately 40,470 gallons per day, or 45.3 afy, which represents 0.4 to 0.5 percent of the Suburban Water Systems' available water supply for the San Jose Hills Service Area for a normal year from 2025 to 2045, 1.1 to 1.5 percent of the available water supply for a single-dry year from 2025 to 2045, and 0.4 to 1.1 percent of the available water supply for multiple-dry year.[64] Sufficient water supplies would be available to serve the proposed project.

The estimated water demand of the proposed project would be typical for a medical center and is not expected to exceed available supplies or the available capacity within the distribution infrastructure that would serve the project site. Prior to the issuance of a building permit, the applicant would be required to verify that the City's water system can accommodate the proposed project's fire flows and all potable water demand. Additionally, water used for irrigation and landscaping purposes would be required to comply with the City's Water Efficient Landscaping Ordinance (WCMC Chapter 26, Article III, Division 5) and the Planning Commission Guidelines for Water Efficient Landscaping. The estimated water demand of the proposed project is not expected to exceed available supplies or the available capacity within the distribution infrastructure that would serve the project site. Adequate water supplies would be available to the proposed project, and new or expanded water facilities would not be required. Therefore, impacts related to water supply infrastructure would be less than significant.

Wastewater. Wastewater generated from the project site is collected by sewer pipelines that are maintained by the City. Wastewater collected by the City is then directed to the Sanitation Districts of Los Angeles County (LACSD) trunk sewer pipelines where wastewater is conveyed to the LACSD San Jose Creek Water Reclamation Plant (SJCWRP). SJCWRP treats approximately 53.6 million gallons per day (mgd) of wastewater and has the capacity to treat up to 100 mgd of wastewater, which leaves an available capacity of 46.4 mgd.[65]

Wastewater generation is typically estimated to be approximately 90 percent of water usage. This estimate accounts for outdoor uses, such as landscape irrigation, where water does not become wastewater, as well as consumptive uses. The proposed project is estimated to generate approximately 36,423 gallons per day of wastewater, which is less than 0.1

[64]Based on a water demand of 570 gallons per bed per day for hospitals (Healthcare Design, "Hospitals Can Tap into Savings through Water Conservation," https://healthcaredesignmagazine.com/architecture/saving-water-saving-money/#:~:text=U.S.%20hospitals%20are%20water%20hogs,per%20staffed%20bed%2C%20per%20day, accessed August 2023).

[65]Los Angeles County Sanitation Districts, *San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse*, https://files.ceqanet.opr.ca.gov/89269-2/attachment/HNWjbgzSSydtx6C6GMyB0t8xWaW3cPilsA6z7m1IX7AXtQ13GbQ722U2K9pockBuyShwuBHlrqzc_r390, accessed August 2023.

percent of the available capacity at SJCWRP.[66] SJCWRP would have adequate available capacity to serve the proposed project, and the proposed project would not cause SJCWRP to exceed wastewater treatment requirements of the LARWQCB. Thus, new or expanded wastewater treatment facilities would not be required, and impacts would be less than significant.

Stormwater Drainage. Existing stormwater runoff from the project site generally flows south and southwest towards Orange Avenue. Surface runoff from the project site is currently collected by an existing catch basin located in the driveway on the project site and off-site on Orange Avenue, west of Cameron Avenue. A catch basin is also located on Cameron Avenue adjacent to the project site. The proposed project would increase the amount of impervious surfaces on the project site compared to existing conditions. The existing catch basin on the project site would be replaced with a new catch basin at a similar location. Another catch basin would be installed at the northeastern portion of the project site. The proposed project would also install a stormwater infiltration tank on the project site. New storm drain lines would be installed to connect the new on-site catch basins to the stormwater infiltration tank to capture stormwater on-site. Runoff that are not captured on-site would continue to flow off-site into the existing catch basin on Orange Avenue. With the installation and operation of the on-site catch basins and stormwater infiltration tank, stormwater runoff leaving the project site would not substantially increase compared to existing conditions. Construction of the proposed on-site storm drainage infrastructure are within the limits identified for the proposed project and, thus, the potential impacts associated with the proposed storm drain lines have been considered in the respective sections of this IS/MND.

The proposed project would also be subject to the latest requirements of the NPDES permit program, LARWQB, and applicable pollution control and stormwater drainage measures. As the proposed project would not cause a substantial increase in the peak flow rates or volumes that would exceed the drainage capacity of existing stormwater drainage facilities, new or expanded stormwater drainage facilities beyond those that would be installed by the proposed project would not be required, and impacts would be less than significant.

Electric Power and Natural Gas. Energy use associated with operation of the proposed project would be similar to the existing medical center, requiring electricity and natural gas for lighting, medical and other electronic equipment, and natural gas for interior and exterior building lighting, HVAC, machinery, refrigeration, appliances, security systems, and more. The proposed project would be served by Southern California Edison for electricity, and SoCalGas for natural gas. The project site is in a developed, urbanized portion of the City of West Covina that is served by existing electrical power and natural gas services. The proposed project would use the existing electricity and natural gas connections for the existing medical center. Additionally, no substantial electrical or natural gas infrastructure is present on or adjacent to the project site that would need to be relocated to accommodate the proposed project. Therefore, impacts associated with electric power and natural gas facilities would be less than significant.

Telecommunications. Telecommunication services include phone, television, and internet providers. The project site is in a developed, urbanized portion of the City of West Covina that is served by existing telecommunications services. The proposed project would use the same telecommunications services as the existing medical center. Upgrades and/or relocation of

[66]Water demand for a hospital is 570 gallons per bed per day for hospitals (Healthcare Design, "Hospitals Can Tap into Savings through Water Conservation," https://healthcaredesignmagazine.com/architecture/saving-water-saving-money/#:~:text=U.S.%20hospitals%20are%20water%20hogs,per%20staffed%20bed%2C%20per%20day, accessed August 2023).

existing telecommunications infrastructure may be required for the proposed project. Any potential upgrades or relocation of telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the existing system. No upgrades to off-site telecommunications systems are anticipated to occur as a result of the proposed project. Any work that may affect services to the existing telecommunications lines would be coordinated with service providers and is not expected to cause significant environmental effects. Therefore, impacts would be less than significant.

b) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would increase water usage such that the project site would not have enough water supplies during normal, dry and multiple dry years. As discussed in Response to Checklist Question 3.19a, the proposed project would increase water demand by approximately 45.3 afy, which represents 0.4 to 0.5 percent of the Suburban Water Systems' available water supply for the San Jose Hills Service Area for a normal year from 2025 to 2045, 1.1 to 1.5 percent of the available water supply for a single-dry year from 2025 to 2045, and 0.4 to 1.1 percent of the available water supply for multiple-dry year. Sufficient water supplies would be available to serve the proposed project during normal, single dry, and multiple dry years. Additionally, water used for irrigation and landscaping purposes would be required to comply with the City's Water Efficient Landscaping Ordinance (WCMC Chapter 26, Article III, Division 5) and the Planning Commission Guidelines for Water Efficient Landscaping. The estimated water demand of the proposed project is not expected to exceed available supplies or the available capacity within the distribution infrastructure that would serve the project site. Therefore, impacts on water supplies would be less than significant.

c) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project's wastewater demand exceeds the capacity of the project site's wastewater treatment provider. As discussed in Response to Checklist Question 3.19a, wastewater on the project site is treated at the SJCWRP, and the SJCWRP has sufficient remaining available treatment capacity to adequately serve the proposed project. The proposed project is estimated to generate approximately 36,423 gallons per day of wastewater, which is less than 0.1 percent of the available capacity at SJCWRP. It is anticipated that the amount of wastewater that would be generated by the proposed project would be met, and no new entitlements or resources would be required to meet the proposed project's expected wastewater needs. Therefore, less-than-significant impacts would occur.

d-e) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would generate solid waste in excess of state or local standards, in excess of the capacity of local infrastructure, impair the attainment of solid waste reduction goals, or would not comply with federal, state, and local management and reduction statutes and regulations related to solid waste. The City of West Covina is served by Athens Services, which is a private waste hauler contracted by the City to provide solid waste collection and recycling services to residents and businesses. Solid waste collected by Athens Services is not directly disposed of at landfills serving the City but is transported to the Athens Services-owned Materials Recovery Facility (MRF) in the City of Industry. Solid waste received at the MRF is sorted, and all recyclable materials found are removed and recycled. The City of Industry MRF can process 5,000 tons of mixed materials each day.[67] The remaining solid waste that cannot be recycled is sent to the Victorville Sanitary Landfill. The Victorville

[67]City of West Covina, *2016 General Plan Update and Downtown Plan and Code Final Environmental Impact Report,* December 2016.

Sanitary Landfill has a max permitted throughput of 3,000 tons per day, a max permitted capacity of 93,400,000 cubic yards, and a remaining capacity of 79,400,000 cubic yards.[68]

Assuming a solid waste generation factor of 16 pounds per bed per day for hospitals,[69] the proposed project would generate approximately 1,136 pounds of solid waste per day, which represent less than 0.1 percent of the permitted daily intake capacity at the Victorville Sanitary Landfill. The proposed project can be adequately served by the City's solid waste provider.

Construction and operations of the proposed project would comply with all applicable standards and regulations related to solid waste reduction. The applicant of the proposed project would be required to comply with PRC Section 41780.01(a), which states that it is California's policy goal to reduce, recycle, or compost at least 75 percent of solid waste generated by 2020, and annually thereafter. The applicant of the proposed project would also be required to comply with CalGreen Code Section 4.408, which requires that at least 65 percent of demolition and construction debris be diverted from landfills by recycling and/or salvage for reuse. WCMC Chapter 7, Article XVI (Reduction, Reuse and Recycling of Construction and Demolition Debris) requires applicants of projects that involves 1,000 square feet or more of construction and demolition material to divert construction and demolition debris to reduce landfill waste. The proposed project would be required to comply with WCMC Chapter 7, Article XVI since it would involve more than 1,000 square feet of construction. As the proposed project can be adequately served by the City's solid waste provider and would comply with applicable regulations related to solid waste, less-than-significant impacts would occur.

[68]CalRecycle, *Victorville Sanitary Landfill (36-AA-0045)*, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652, accessed September 2023.

[69]CalRecycle, *Estimated Solid Waste Generation Rates*, https://www2.calrecycle.ca.gov/wastecharacterization/general/rates, accessed September 2023.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.20 WILDFIRE. 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?	☐	☐	☐	☑

a) **No Impact**. A significant impact would occur if the proposed project would be located in or near a state responsibility area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ) and would substantially impair an adopted emergency response plan or emergency evacuation plan. A fire hazard severity zone is a mapped area developed by CalFire that designates zones with varying degrees of fire hazard (i.e., moderate, high, and very high). Areas that are designated as Very High or High Fire Hazard Severity Zones are the most likely to experience wildfire. The project site is not located in or near a state responsibility area or in a VHFHSZ, as identified by CalFire. The nearest fire hazard zone (including VHFHSZ) is located approximately 2.6 miles southeast of the project site.[70] Additionally, the proposed project would not involve activities that would expose people or structures to the risk of loss, injury, or death involving wildland fires. Therefore, the project site would not be subject to severe wildfires or wildfires of greater concern.

As discussed in Response to Checklist Question 3.9f, the project site is adjacent to the I-10 freeway, a freeway disaster route. Additionally, the project site is identified as a critical facility in the City's NHMP. The proposed project does not involve any uses or features that would interfere with the NHMP or designated disaster routes near the project site. The proposed project would be designed to accommodate emergency access to the project site. The driveway would be designed to meet the minimum width and turning dimension requirements of WCFD. Furthermore, the proposed building would be constructed to meet the current City's Fire Code and building code requirements for fire safety. The applicant would be required to submit project plans to WCFD and incorporate WCFD fire protection and suppression features that are appropriate for the proposed project.

Emergency access to the project site and the surrounding uses would be maintained during construction and operations of the proposed project and would not interfere with the NHMP or any evacuation routes. As the project site is not located in a VHFHSZ and would not impair an adopted emergency response plan or emergency evacuation plan, no impact would occur.

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[70]California Department of Forestry and Fire Protection, *California Fire Hazard Severity Zone Viewer*, https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414, accessed May 2023.

b) **No Impact**. A significant impact would occur if the proposed project would be located in or near a state responsibility area or land classified as VHFHSZ and would exacerbate wildfire risks that would expose project occupants to pollutant concentrations for a wildfire or the uncontrolled spread of a wildfire. As discussed in Response to Checklist Question 3.20a, the proposed project is not located in or near a state responsibility area or in a VHFHSZ. The project site is in an urbanized area. The southern California region, including the City of West Covina, is susceptible to strong wind gusts that typically have little to no accommodating precipitation, which are known as windstorms. The City is typically affected by the Santa Ana winds, which are generally warm, offshore dry winds that originate from the east or northeast.[71] Because southern California is generally a windstorm susceptible region, much of this region encounters winds capable of spreading wildfire and wildfire pollutants. However, areas that are especially susceptible to exacerbating such fire risks are those that receive high gusts of wind and are within a fire hazard severity zone and has been a historically burn area. The project site is not within a fire hazard severity zone or a historic burn area.[72] As a result, it is unlikely that the proposed project would expose project occupants to uncontrolled spread of a wildfire or pollutant concentrations from wildfire. Therefore, no impact would occur.

c) **No Impact**. A significant impact would occur if the proposed project would be located in or near a state responsibility area or land classified as VHFHSZ and would require the installation or maintenance of infrastructure that may exacerbate the risk of fire or ongoing impacts to the environment. As discussed in Response to Checklist Question 3.20a, the project site is not located in or near a state responsibility area or in a VHFHSZ. The project site would be adequately served by existing facilities and utilities and would not require additional installation or maintenance of roads, fuel breaks, emergency water sources, or power lines. Thus, the proposed project would not require installation or maintenance of associated structures that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Furthermore, the proposed project would adhere to relevant building design codes, including the City's Fire Code. Therefore, no impact would occur.

d) **No Impact**. A significant impact would occur if the proposed project would be located in or near a state responsibility area or land classified as VHFHSZ and would expose people or structures to significant risks after a wildfire, such as downslope or downstream flooding or landslides. As discussed in Response to Checklist Question 3.20a, the proposed project is not located in or near a state responsibility area or in a VHFHSZ. Thus, people or structures would not be exposed to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, no impact would occur.

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[71] City of West Covina, *Natural Hazard Mitigation Plan: Section 10: Windstorm*, https://www.westcovina.org/departments/fire/disaster-preparedness/natural-hazard-mitigation-plan/section-10-windstorm, accessed May 2023.

[72] *Ibid.*

3.21 **MANDATORY FINDINGS OF SIGNIFICANCE**. Would the project:	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	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 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 which are individually limited, but cumulatively considerable? (Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☐	☑	☐	☐
c) Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?	☐	☑	☐	☐

a) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project would have the potential to degrade the quality of the environment; substantially reduce, threaten, or eliminate fish, plant, or wildlife habitats or population, including rare or endangered species; or eliminate historical, archaeological, or paleontological resources. The preceding analyses conclude that no significant unmitigated impacts to the environment would occur. The proposed project is located within a highly urbanized area, and the project site is currently developed with medical offices and a medical hospital. As discussed in Response to Checklist Question 3.1c, the proposed project would remove 38 trees, of which 25 trees are classified as significant trees. The proposed project would be required to comply with the City's Preservation, Protection and Removal of Trees Ordinance, which require any significant trees that would be removed to be replaced with trees of comparable species, size, and conditions as the existing trees. If it is not possible to relocate the existing trees or provide replacement trees on or off the project site, the applicant would be required to provide payment of the proper restitution value of the trees, or donation of boxed trees to the City to be used elsewhere in the City. As it is not possible for the applicant to relocate or replace the existing 25 trees that would be removed by the proposed project, the applicant would be required to plant replacement trees off site, provide payment for the restitution value of the trees, or to donate box trees to the City.

Construction of the proposed project has the potential to affect the health or structural integrity, encroach the dripline, encroach the optimal tree protection zone, and/or encroach the structural rooting radius of 15 trees that would remain on the project site. After construction, 4 of these trees may be at increased risk of failure during atypical weather events that produce high winds and oversaturated soils. Mitigation Measure **A-1** would be implemented to ensure that the trees to remain on the project site would not be adversely affected by the proposed project. Additionally, the applicant would be required to comply with the City's landscape requirements. Compliance with Mitigation Measure **A-1**; the City's Preservation, Protection and Removal of Trees Ordinance; the City's landscaping requirements; and other applicable regulations that governs scenic quality, the proposed project would not degrade the visual character or quality of the project site and its surrounding area.

As discussed in Section 3.4, Biological Resources, of this IS/MND, the project site does not contain suitable habitat for special-status wildlife species (including rare, threatened, and endangered species) and no special-status species were identified or have a high likelihood of occurring on the project site. Additionally, the project site does not contain any riparian habitat or features necessary to support riparian habitat. The proposed project would not 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, or reduce the number or restrict the range of a rare or endangered plant or animal. Although the proposed project would remove trees on the project site, which may provide nesting habitat for birds, Mitigation Measure **BR-1** would be implemented to ensure that nesting birds would not be adversely affected by the proposed tree removal.

As discussed in Response to Checklist Question 3.5a, no historic resources are located on the project site. Similarly, no archaeological, paleontological, and tribal cultural resources are known to exist on the project site (Response to Checklist Questions 3.5b and 3.18a-b). However, it is possible that unanticipated archaeological, paleontological, or tribal cultural resources may be encountered during ground disturbance activities, and Mitigation Measures **CR-1**, **GS-1**, and **TR-1** through **TR-3** would reduce the potential for the destruction of any significant archaeological, paleontological, and tribal cultural resources.

As discussed in Response to Checklist Questions 3.17a and c, Mitigation Measures **T-1** Mitigation Measure **T-2** would improve safety along Orange Avenue, at the Orange Avenue/Cameron Avenue intersection and would support Policies 4.2, 4.3, 4.5 of the City's General Plan Circulation Element.

With implementation of Mitigation Measures **A-1**, **BR-1**, **CR-1**, **GS-1**, **T-1**, **T-2**, and **TR-1** through **TR-3**, the proposed project would not degrade the quality of the environment, substantially reduce the habitat of wildlife species, cause 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 major periods of California history or prehistory. Therefore, impacts would be less than significant with implementation of mitigation measures.

b) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project, in conjunction with related projects, would result in impacts that are less than significant when viewed separately but significant when viewed together. **Table 3-19** provides a list of related projects that are near the project site.

TABLE 3-19: CUMULATIVE PROJECTS

Location	Description	Status	Distance from Project Site (miles)
1600 W. Cameron Ave.	84-unit townhomes	Under Construction	0.1
1024 W. Workman Ave.	119-unit townhomes	Under Construction	0.9
1115 S. Sunset Ave.	Queen of the Valley Expansion – 108,361-square-foot medical office building	Under Construction	0.3
1920 Pacific Lane	7-unit townhomes	Proposed	0.2
SOURCE: City of West Covina, 2023; Linscott, Law & Greenspan, 2024.			

The environmental topic areas that were found to have no impact are not expected to cause the proposed project to make any contributions to potential cumulative impacts because a no impact conclusion means that the proposed project would have no contribution to that particular environmental topic area. Similarly, the environmental topic areas that were found to have a less-than-significant impact are not expected to cause the proposed project to significantly contribute to cumulative impacts since the proposed project's contribution to that particular environmental topic area is not large enough to contribute to significant cumulative impacts.

As discussed in this Initial Study, the proposed project would have either no impact or less-than-significant impacts to Agriculture and Forestry Resources, Air Quality, Energy, GHG Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire. Impacts in these issue areas are generally limited to the proposed project, and the proposed project would not contribute to a significant cumulative impact.

Potential impacts to Aesthetics; Migratory Wildlife; and Archaeological, Paleontological, and Tribal Cultural Resources; Noise (construction); and Transportation would be reduced to less than significant levels with implementation of mitigation measures. The following analysis evaluates whether the proposed project would contribute to significant cumulative impacts in these environmental topic areas.

As with the proposed project, related projects would be required to comply with the City's zoning and other regulations that govern scenic quality and would not degrade the visual character and quality of the surrounding area. The proposed project and other related projects would be required to comply with the City's Preservation, Protection and Removal of Trees Ordinance. As with the proposed project, related projects that would involve tree removal would also be required to conduct a tree survey. As discussed in Response to Checklist Question 3.1c, construction of the proposed project has the potential to negatively affect the health and structural integrity, encroach into the dripline and/or the optimal tree protection zone, and/or affect the structural rooting radius of trees that would remain on the project site. The proposed project would implement Mitigation Measure **A-1** to ensure that the proposed project would not adversely affect trees that would remain on the project site. With implementation of Mitigation Measure **A-1**, the proposed project's effect on visual character and quality would be reduced to a level that would not be cumulatively considerable.

While development of related projects, when combined with the proposed project, have the potential to uncover or disturb known or previously unknown archaeological, paleontological, and tribal cultural resources, Mitigation Measures **CR-1**, and **TR-1** through **TR-3** would reduce proposed project impacts on archaeological and tribal cultural resources to less than significant levels. Mitigation Measure **GS-1** would reduce proposed project impacts on paleontological resources to less than significant levels. Therefore, the proposed project's effect on archaeological, paleontological, and tribal cultural resources would be reduced to a level that would not be cumulatively considerable.

The proposed project would be located on the same property as the existing West Covina Medical Center, which includes medical facilities that are sensitive to increased noise levels. These facilities, which are owned and operated by the applicant, may experience short-term disruptive noise events during construction of the proposed project. Mitigation Measure **N-1** would reduce construction noise levels at noise sensitive uses. Construction noise impacts are localized to a project site and sensitive receptors within the immediate vicinity of the project site. The nearest related project is approximately 510 feet south of the project site.

If construction of the proposed project were to occur at the same time as related projects, it is not likely that noise generated from construction of the proposed project and the related projects would result in the exposure of sensitive receptors to excessive construction noise due to the localized nature of noise impacts. Therefore, with implementation of Mitigation Measure **N-1**, the proposed project's effect on construction noise would be reduced to a level that would not be cumulatively considerable.

The proposed project would increase the use of the off-site parking lot that is part of the West Covina Medical Center. As a result, more pedestrians would use the existing crosswalk at the Orange Avenue/Cameron Avenue intersection to access the project site. Mitigation Measure **T-1** would be implemented to provide greater visibility and safety to pedestrians and motorists. Additionally, the project site driveway does not have an adequate line of sight. Implementation of Mitigation Measure **T-2** would improve the line of sight between the project site and oncoming traffic. The nearest related project is located approximately 510 feet south of the project site on Cameron Avenue. The additional vehicles from this and other nearby related project, in combination with the proposed project, is not expected to result in cumulatively considerable impacts related to transportation plans and transportation hazards with implementation of Mitigation Measures **T-1** and **T-2**.

None of the environmental topic areas that would result in less-than-significant impacts with implementation of mitigation measures would cause the proposed project to contribute to significant cumulative impacts. Therefore, the proposed project would not have impacts that are individually limited but cumulatively considerable. Impacts would be less than significant.

c) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact may occur if the proposed project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. As discussed throughout this IS/MND, the proposed project would have less-than-significant impacts (with and without incorporation of mitigation measures) or no impacts on the environment. The proposed project would have a less-than-significant impact with implementation of mitigation measures for the following environmental topic areas: Aesthetics; Migratory Wildlife; and Archaeological, Paleontological, and Tribal Cultural Resources; and Noise (construction). The proposed project would have less-than-significant impacts or no impacts for all other environmental topic areas. All potential impacts of the proposed project have been identified and mitigation measures have been prescribed, where applicable, to reduce all potential impacts to less than significant levels. Upon implementation of mitigation measures included in this IS/MND and compliance with existing regulations, the proposed project would not have the potential to result in substantial adverse impacts on human beings either directly or indirectly. Therefore, a less-than-significant impact is anticipated with incorporation of the mitigation measures identified in this IS/MND.

4.0 LIST OF PREPARERS AND SOURCES CONSULTED

This section identifies the lead agency and the consultant team members who participated in the preparation of this IS/MND. This section also documents all the sources and references used in the preparation of this IS/MND.

4.1 LEAD AGENCY

City of West Covina
Community Development Department
Planning Division
1444 West Garvey Avenue South
West Covina, CA 91790

Contact: Jo-Anne Burns, Deputy Community Development Director
(626) 939-8422

4.2 INITIAL STUDY PREPARERS

Terry A. Hayes Associates Inc.
3535 Hayden Avenue, Suite 350
Culver City, CA 90232

Contact: Teresa Li, AICP, Senior Planner
Kevin Ferrier, Senior Planner
Sam Silverman, Senior Associate
Anders Sutherland, Air Quality/Greenhouse Gas
Kieran Bartholow, Noise
Henry Hapov, GIS Specialist
Natasha Mapp, Document Production

4.3 SOURCES CONSULTED

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Appendix A

Air Quality and Greenhouse Gas Emissions Calculations

West Covina Medical Center Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	West Covina Medical Center
Construction Start Date	1/6/2025
Operational Year	2027
Lead Agency	City of West Covina
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	22.4
Location	34.07149996134895, -117.94444172083607
County	Los Angeles-South Coast
City	West Covina
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4958
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

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

Medical Office Building	42.0	1000sqft	0.39	42,000	4,167	—	—	—
Other Asphalt Surfaces	22.0	1000sqft	0.51	22,041	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-9	Use Dust Suppressants
Energy	E-7*	Require Higher Efficacy Public Street and Area Lighting

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

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.	1.69	1.47	6.05	23.3	0.01	0.18	3.23	3.40	0.16	0.76	0.92	—	4,909	4,909	0.21	0.17	13.1	4,978
Mit.	1.69	1.47	6.05	23.3	0.01	0.18	3.23	3.40	0.16	0.76	0.92	—	4,909	4,909	0.21	0.17	13.1	4,978
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.68	26.7	8.66	20.8	0.01	0.36	3.23	3.40	0.33	1.06	1.40	—	4,737	4,737	0.21	0.18	0.34	4,795
Mit.	1.68	26.7	8.66	20.8	0.01	0.36	3.23	3.40	0.33	1.02	1.35	—	4,737	4,737	0.21	0.18	0.34	4,795

% Reduced	—	—	—	—	—	—	—	—	—	4%	3%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.02	1.73	4.06	13.0	0.01	0.11	2.01	2.12	0.10	0.47	0.57	—	2,914	2,914	0.13	0.11	3.35	2,953
Mit.	1.02	1.73	4.06	13.0	0.01	0.11	1.95	2.07	0.10	0.46	0.57	—	2,914	2,914	0.13	0.11	3.35	2,953
% Reduced	—	—	—	—	—	—	3%	3%	—	1%	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.32	0.74	2.37	< 0.005	0.02	0.37	0.39	0.02	0.09	0.10	—	483	483	0.02	0.02	0.56	489
Mit.	0.19	0.32	0.74	2.37	< 0.005	0.02	0.36	0.38	0.02	0.08	0.10	—	483	483	0.02	0.02	0.56	489
% Reduced	—	—	—	—	—	—	3%	3%	—	1%	1%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.69	1.47	6.05	23.3	0.01	0.18	3.23	3.40	0.16	0.76	0.92	—	4,909	4,909	0.21	0.17	13.1	4,978
2026	1.52	1.31	5.67	22.1	0.01	0.16	3.23	3.38	0.14	0.76	0.90	—	4,837	4,837	0.20	0.17	11.9	4,905
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.68	1.46	8.66	20.8	0.01	0.36	3.23	3.40	0.33	1.06	1.40	—	4,737	4,737	0.21	0.18	0.34	4,795
2026	1.52	26.7	5.80	19.8	0.01	0.16	3.23	3.38	0.14	0.76	0.90	—	4,668	4,668	0.20	0.17	0.31	4,724
2027	0.37	26.7	2.79	4.31	0.01	0.06	0.69	0.76	0.06	0.09	0.14	—	706	706	0.03	0.01	0.01	710
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.02	0.89	4.06	13.0	0.01	0.11	2.01	2.12	0.10	0.47	0.57	—	2,914	2,914	0.13	0.11	3.35	2,953
2026	0.93	1.73	3.70	12.4	0.01	0.10	1.96	2.06	0.09	0.45	0.54	—	2,850	2,850	0.12	0.10	3.06	2,887
2027	< 0.005	0.05	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.38	1.38	< 0.005	< 0.005	< 0.005	1.39
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	0.16	0.74	2.37	< 0.005	0.02	0.37	0.39	0.02	0.09	0.10	—	483	483	0.02	0.02	0.56	489
2026	0.17	0.32	0.68	2.27	< 0.005	0.02	0.36	0.38	0.02	0.08	0.10	—	472	472	0.02	0.02	0.51	478
2027	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23

2.3. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.69	1.47	6.05	23.3	0.01	0.18	3.23	3.40	0.16	0.76	0.92	—	4,909	4,909	0.21	0.17	13.1	4,978
2026	1.52	1.31	5.67	22.1	0.01	0.16	3.23	3.38	0.14	0.76	0.90	—	4,837	4,837	0.20	0.17	11.9	4,905

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.68	1.46	8.66	20.8	0.01	0.36	3.23	3.40	0.33	1.02	1.35	—	4,737	4,737	0.21	0.18	0.34	4,795
2026	1.52	26.7	5.80	19.8	0.01	0.16	3.23	3.38	0.14	0.76	0.90	—	4,668	4,668	0.20	0.17	0.31	4,724
2027	0.37	26.7	2.79	4.31	0.01	0.06	0.22	0.28	0.06	0.04	0.10	—	706	706	0.03	0.01	0.01	710
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.02	0.89	4.06	13.0	0.01	0.11	1.95	2.07	0.10	0.46	0.57	—	2,914	2,914	0.13	0.11	3.35	2,953
2026	0.93	1.73	3.70	12.4	0.01	0.10	1.91	2.00	0.09	0.45	0.54	—	2,850	2,850	0.12	0.10	3.06	2,887
2027	< 0.005	0.05	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.38	1.38	< 0.005	< 0.005	< 0.005	1.39
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	0.16	0.74	2.37	< 0.005	0.02	0.36	0.38	0.02	0.08	0.10	—	483	483	0.02	0.02	0.56	489
2026	0.17	0.32	0.68	2.27	< 0.005	0.02	0.35	0.37	0.02	0.08	0.10	—	472	472	0.02	0.02	0.51	478
2027	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23

2.4. 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.	2.17	2.96	1.49	17.0	0.04	0.05	3.29	3.34	0.05	0.83	0.88	255	4,680	4,935	25.7	0.17	12.0	5,640
Mit.	2.17	2.96	1.49	17.0	0.04	0.05	3.29	3.34	0.05	0.83	0.88	255	4,680	4,935	25.7	0.17	12.0	5,640
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.66	2.49	1.58	13.0	0.04	0.05	3.29	3.33	0.04	0.83	0.88	255	4,520	4,774	25.7	0.17	1.36	5,471

Mit.	1.66	2.49	1.58	13.0	0.04	0.05	3.29	3.33	0.04	0.83	0.88	255	4,520	4,774	25.7	0.17	1.36	5,471
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	2.79	1.61	15.2	0.04	0.05	3.24	3.29	0.04	0.82	0.87	255	4,568	4,822	25.7	0.18	5.80	5,524
Mit.	1.99	2.79	1.61	15.2	0.04	0.05	3.24	3.29	0.04	0.82	0.87	255	4,568	4,822	25.7	0.18	5.80	5,524
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	0.51	0.29	2.78	0.01	0.01	0.59	0.60	0.01	0.15	0.16	42.1	756	798	4.26	0.03	0.96	915
Mit.	0.36	0.51	0.29	2.78	0.01	0.01	0.59	0.60	0.01	0.15	0.16	42.1	756	798	4.26	0.03	0.96	915
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. 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	1.64	1.48	1.17	13.9	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,566	3,566	0.16	0.13	11.0	3,621
Area	0.50	1.47	0.02	2.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.5
Energy	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,051	1,051	0.10	0.01	—	1,056
Water	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Waste	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Vegetation	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Total	2.17	2.96	1.49	17.0	0.04	0.05	3.29	3.34	0.05	0.83	0.88	255	4,680	4,935	25.7	0.17	12.0	5,640
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	1.46	1.28	12.7	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,417	3,417	0.16	0.14	0.28	3,463
Area	—	1.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,051	1,051	0.10	0.01	—	1,056
Water	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Waste	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Vegetation	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Total	1.66	2.49	1.58	13.0	0.04	0.05	3.29	3.33	0.04	0.83	0.88	255	4,520	4,774	25.7	0.17	1.36	5,471
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.62	1.45	1.30	13.1	0.03	0.02	3.24	3.26	0.02	0.82	0.84	—	3,457	3,457	0.16	0.14	4.73	3,508
Area	0.34	1.32	0.02	1.91	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.84	7.84	< 0.005	< 0.005	—	7.87
Energy	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,051	1,051	0.10	0.01	—	1,056
Water	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Waste	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Vegetation	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Total	1.99	2.79	1.61	15.2	0.04	0.05	3.24	3.29	0.04	0.82	0.87	255	4,568	4,822	25.7	0.18	5.80	5,524
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.30	0.26	0.24	2.39	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	572	572	0.03	0.02	0.78	581
Area	0.06	0.24	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.30	1.30	< 0.005	< 0.005	—	1.30
Energy	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	174	174	0.02	< 0.005	—	175
Water	—	—	—	—	—	—	—	—	—	—	—	1.67	5.68	7.35	0.17	< 0.005	—	12.9
Waste	—	—	—	—	—	—	—	—	—	—	—	40.5	0.00	40.5	4.05	0.00	—	142
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Vegetation	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.92	2.92	—	—	—	2.92
Total	0.36	0.51	0.29	2.78	0.01	0.01	0.59	0.60	0.01	0.15	0.16	42.1	756	798	4.26	0.03	0.96	915

2.6. 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	1.64	1.48	1.17	13.9	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,566	3,566	0.16	0.13	11.0	3,621
Area	0.50	1.47	0.02	2.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.5
Energy	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,051	1,051	0.10	0.01	—	1,056

Water	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Waste	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Vegetation	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Total	2.17	2.96	1.49	17.0	0.04	0.05	3.29	3.34	0.05	0.83	0.88	255	4,680	4,935	25.7	0.17	12.0	5,640
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	1.46	1.28	12.7	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,417	3,417	0.16	0.14	0.28	3,463
Area	—	1.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,051	1,051	0.10	0.01	—	1,056
Water	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Waste	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Vegetation	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Total	1.66	2.49	1.58	13.0	0.04	0.05	3.29	3.33	0.04	0.83	0.88	255	4,520	4,774	25.7	0.17	1.36	5,471
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.62	1.45	1.30	13.1	0.03	0.02	3.24	3.26	0.02	0.82	0.84	—	3,457	3,457	0.16	0.14	4.73	3,508
Area	0.34	1.32	0.02	1.91	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.84	7.84	< 0.005	< 0.005	—	7.87
Energy	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,051	1,051	0.10	0.01	—	1,056
Water	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Waste	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Vegetation	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Total	1.99	2.79	1.61	15.2	0.04	0.05	3.24	3.29	0.04	0.82	0.87	255	4,568	4,822	25.7	0.18	5.80	5,524
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.30	0.26	0.24	2.39	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	572	572	0.03	0.02	0.78	581
Area	0.06	0.24	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.30	1.30	< 0.005	< 0.005	—	1.30
Energy	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	174	174	0.02	< 0.005	—	175
Water	—	—	—	—	—	—	—	—	—	—	—	1.67	5.68	7.35	0.17	< 0.005	—	12.9
Waste	—	—	—	—	—	—	—	—	—	—	—	40.5	0.00	40.5	4.05	0.00	—	142
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Vegetation	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.92	2.92	—	—	—	2.92
Total	0.36	0.51	0.29	2.78	0.01	0.01	0.59	0.60	0.01	0.15	0.16	42.1	756	798	4.26	0.03	0.96	915

3. Construction Emissions Details

3.1. Site Preparation (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.93	2.92	< 0.005	0.07	—	0.07	0.06	—	0.06	—	432	432	0.02	< 0.005	—	434
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.41	0.41	—	0.06	0.06	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.57	0.57	< 0.005	0.06	0.06	—	8.48	8.48	< 0.005	< 0.005	< 0.005	8.91
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.84	7.84	< 0.005	< 0.005	—	7.87
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.5	65.5	< 0.005	< 0.005	0.01	66.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.04	0.01	0.67	0.25	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	527	527	0.03	0.08	0.03	552
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.29	7.29	< 0.005	< 0.005	0.01	7.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	57.7	57.7	< 0.005	0.01	0.06	60.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.21	1.21	< 0.005	< 0.005	< 0.005	1.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.55	9.55	< 0.005	< 0.005	0.01	10.0

3.2. Site Preparation (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.93	2.92	< 0.005	0.07	—	0.07	0.06	—	0.06	—	432	432	0.02	< 0.005	—	434
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.41	0.41	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	8.48	8.48	< 0.005	< 0.005	< 0.005	8.91

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.84	7.84	< 0.005	< 0.005	—	7.87
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.5	65.5	< 0.005	< 0.005	0.01	66.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	0.01	0.67	0.25	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	527	527	0.03	0.08	0.03	552

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.29	7.29	< 0.005	< 0.005	0.01	7.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	57.7	57.7	< 0.005	0.01	0.06	60.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.21	1.21	< 0.005	< 0.005	< 0.005	1.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.55	9.55	< 0.005	< 0.005	0.01	10.0

3.3. Grading (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	0.91	8.60	8.32	0.01	0.36	—	0.36	0.33	—	0.33	—	1,429	1,429	0.06	0.01	—	1,434
Dust From Material Movement	—	—	—	—	—	—	1.92	1.92	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.57	0.57	< 0.005	0.06	0.06	—	8.48	8.48	< 0.005	< 0.005	< 0.005	8.91
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.6	19.6	< 0.005	< 0.005	—	19.6

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.24	3.24	< 0.005	< 0.005	—	3.25
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.3	98.3	< 0.005	< 0.005	0.01	99.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	0.91	8.60	8.32	0.01	0.36	—	0.36	0.33	—	0.33	—	1,429	1,429	0.06	0.01	—	1,434
Dust From Material Movement	—	—	—	—	—	—	1.92	1.92	—	0.98	0.98	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	8.48	8.48	< 0.005	< 0.005	< 0.005	8.91
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.6	19.6	< 0.005	< 0.005	—	19.6
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.24	3.24	< 0.005	< 0.005	—	3.25

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.3	98.3	< 0.005	< 0.005	0.01	99.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	1.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	4.63	6.43	0.01	0.17	—	0.17	0.16	—	0.16	—	1,258	1,258	0.05	0.01	—	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	4.63	6.43	0.01	0.17	—	0.17	0.16	—	0.16	—	1,258	1,258	0.05	0.01	—	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.69	3.74	0.01	0.10	—	0.10	0.09	—	0.09	—	731	731	0.03	0.01	—	734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.49	0.68	< 0.005	0.02	—	0.02	0.02	—	0.02	—	121	121	< 0.005	< 0.005	—	121
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.15	1.03	1.04	16.7	0.00	0.00	3.14	3.14	0.00	0.74	0.74	—	3,318	3,318	0.14	0.11	12.1	3,368
Vendor	0.02	0.01	0.38	0.19	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	333	333	0.01	0.05	0.91	348
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.14	1.02	1.15	14.2	0.00	0.00	3.14	3.14	0.00	0.74	0.74	—	3,145	3,145	0.15	0.12	0.31	3,185
Vendor	0.02	0.01	0.39	0.19	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	333	333	0.01	0.05	0.02	347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.59	0.72	8.64	0.00	0.00	1.80	1.80	0.00	0.42	0.42	—	1,855	1,855	0.08	0.07	3.05	1,880
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.23	202
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.13	1.58	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	307	307	0.01	0.01	0.51	311
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.1	32.1	< 0.005	< 0.005	0.04	33.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	4.63	6.43	0.01	0.17	—	0.17	0.16	—	0.16	—	1,258	1,258	0.05	0.01	—	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.52	0.43	4.63	6.43	0.01	0.17	—	0.17	0.16	—	0.16	—	1,258	1,258	0.05	0.01	—	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.69	3.74	0.01	0.10	—	0.10	0.09	—	0.09	—	731	731	0.03	0.01	—	734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.49	0.68	< 0.005	0.02	—	0.02	0.02	—	0.02	—	121	121	< 0.005	< 0.005	—	121
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.15	1.03	1.04	16.7	0.00	0.00	3.14	3.14	0.00	0.74	0.74	—	3,318	3,318	0.14	0.11	12.1	3,368
Vendor	0.02	0.01	0.38	0.19	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	333	333	0.01	0.05	0.91	348
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.14	1.02	1.15	14.2	0.00	0.00	3.14	3.14	0.00	0.74	0.74	—	3,145	3,145	0.15	0.12	0.31	3,185
Vendor	0.02	0.01	0.39	0.19	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	333	333	0.01	0.05	0.02	347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.59	0.72	8.64	0.00	0.00	1.80	1.80	0.00	0.42	0.42	—	1,855	1,855	0.08	0.07	3.05	1,880
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.23	202

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.13	1.58	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	307	307	0.01	0.01	0.51	311
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.1	32.1	< 0.005	< 0.005	0.04	33.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.38	6.40	0.01	0.15	—	0.15	0.14	—	0.14	—	1,258	1,258	0.05	0.01	—	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.38	6.40	0.01	0.15	—	0.15	0.14	—	0.14	—	1,258	1,258	0.05	0.01	—	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.25	2.60	3.80	0.01	0.09	—	0.09	0.08	—	0.08	—	746	746	0.03	0.01	—	748
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.05	0.47	0.69	< 0.005	0.02	—	0.02	0.02	—	0.02	—	123	123	0.01	< 0.005	—	124
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.88	0.93	15.5	0.00	0.00	3.14	3.14	0.00	0.74	0.74	—	3,252	3,252	0.13	0.11	11.0	3,300
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	327	327	0.01	0.05	0.88	342
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.88	1.04	13.2	0.00	0.00	3.14	3.14	0.00	0.74	0.74	—	3,083	3,083	0.14	0.11	0.29	3,120
Vendor	0.02	0.01	0.38	0.18	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	327	327	0.01	0.05	0.02	342
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.67	8.21	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,855	1,855	0.08	0.07	2.82	1,880
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.23	203
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.50	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	307	307	0.01	0.01	0.47	311
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.1	32.1	< 0.005	< 0.005	0.04	33.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - 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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.38	6.40	0.01	0.15	—	0.15	0.14	—	0.14	—	1,258	1,258	0.05	0.01	—	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.38	6.40	0.01	0.15	—	0.15	0.14	—	0.14	—	1,258	1,258	0.05	0.01	—	1,262
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.25	2.60	3.80	0.01	0.09	—	0.09	0.08	—	0.08	—	746	746	0.03	0.01	—	748
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.47	0.69	< 0.005	0.02	—	0.02	0.02	—	0.02	—	123	123	0.01	< 0.005	—	124
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.88	0.93	15.5	0.00	0.00	3.14	3.14	0.00	0.74	0.74	—	3,252	3,252	0.13	0.11	11.0	3,300
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	327	327	0.01	0.05	0.88	342
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.88	1.04	13.2	0.00	0.00	3.14	3.14	0.00	0.74	0.74	—	3,083	3,083	0.14	0.11	0.29	3,120
Vendor	0.02	0.01	0.38	0.18	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	327	327	0.01	0.05	0.02	342
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.67	8.21	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,855	1,855	0.08	0.07	2.82	1,880
Vendor	0.01	0.01	0.22	0.10	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.23	203
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.50	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	307	307	0.01	0.01	0.47	311
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.1	32.1	< 0.005	< 0.005	0.04	33.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.21	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	296	296	0.01	< 0.005	—	297
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.57	0.57	< 0.005	0.06	0.06	—	8.34	8.34	< 0.005	< 0.005	< 0.005	8.76
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.8	34.8	< 0.005	< 0.005	—	34.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	0.98	0.98	< 0.005	< 0.005	< 0.005	1.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.76	5.76	< 0.005	< 0.005	—	5.78
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.17
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.2	64.2	< 0.005	< 0.005	0.01	65.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.65	7.65	< 0.005	< 0.005	0.01	7.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.28

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.21	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	296	296	0.01	< 0.005	—	297
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	8.34	8.34	< 0.005	< 0.005	< 0.005	8.76
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.8	34.8	< 0.005	< 0.005	—	34.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.98	0.98	< 0.005	< 0.005	< 0.005	1.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.76	5.76	< 0.005	< 0.005	—	5.78
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.17

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	64.2	64.2	< 0.005	< 0.005	0.01	65.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.65	7.65	< 0.005	< 0.005	0.01	7.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.13	1.18	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	296	296	0.01	< 0.005	—	297
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.57	0.57	< 0.005	0.06	0.06	—	8.18	8.18	< 0.005	< 0.005	< 0.005	8.61
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.58	0.58	< 0.005	< 0.005	—	0.58
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.10	0.10	< 0.005	< 0.005	—	0.10
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.0	63.0	< 0.005	< 0.005	0.01	63.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.18	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	296	296	0.01	< 0.005	—	297
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	8.18	8.18	< 0.005	< 0.005	< 0.005	8.61
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.58	0.58	< 0.005	< 0.005	—	0.58
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.10	0.10	< 0.005	< 0.005	—	0.10

Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.0	63.0	< 0.005	< 0.005	0.01	63.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.58	1.91	< 0.005	0.03	—	0.03	0.03	—	0.03	—	281	281	0.01	< 0.005	—	282
Architectural Coatings	—	26.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.90	9.90	< 0.005	< 0.005	—	9.94
Architectural Coatings	—	0.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.64	1.64	< 0.005	< 0.005	—	1.65
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.3	58.3	< 0.005	< 0.005	0.01	59.0

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2026) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.58	1.91	< 0.005	0.03	—	0.03	0.03	—	0.03	—	281	281	0.01	< 0.005	—	282
Architectural Coatings	—	26.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.90	9.90	< 0.005	< 0.005	—	9.94
Architectural Coatings	—	0.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.64	1.64	< 0.005	< 0.005	—	1.65
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.3	58.3	< 0.005	< 0.005	0.01	59.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.11
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.35

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.55	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.01	< 0.005	—	282
Architectural Coatings	—	26.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.55	0.55	< 0.005	< 0.005	—	0.55
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.09	0.09	< 0.005	< 0.005	—	0.09

Architect Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.2	57.2	< 0.005	< 0.005	< 0.005	57.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2027) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.55	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.01	< 0.005	—	282
Architectural Coatings	—	26.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.55	0.55	< 0.005	< 0.005	—	0.55
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.09	0.09	< 0.005	< 0.005	—	0.09
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.2	57.2	< 0.005	< 0.005	< 0.005	57.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	1.64	1.48	1.17	13.9	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,566	3,566	0.16	0.13	11.0	3,621

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.64	1.48	1.17	13.9	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,566	3,566	0.16	0.13	11.0	3,621
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	1.63	1.46	1.28	12.7	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,417	3,417	0.16	0.14	0.28	3,463
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.63	1.46	1.28	12.7	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,417	3,417	0.16	0.14	0.28	3,463
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.30	0.26	0.24	2.39	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	572	572	0.03	0.02	0.78	581
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.30	0.26	0.24	2.39	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	572	572	0.03	0.02	0.78	581

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	1.64	1.48	1.17	13.9	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,566	3,566	0.16	0.13	11.0	3,621

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.64	1.48	1.17	13.9	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,566	3,566	0.16	0.13	11.0	3,621
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	1.63	1.46	1.28	12.7	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,417	3,417	0.16	0.14	0.28	3,463
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.63	1.46	1.28	12.7	0.03	0.02	3.28	3.31	0.02	0.83	0.85	—	3,417	3,417	0.16	0.14	0.28	3,463
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.30	0.26	0.24	2.39	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	572	572	0.03	0.02	0.78	581
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.30	0.26	0.24	2.39	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	572	572	0.03	0.02	0.78	581

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	710	710	0.07	0.01	—	714
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	710	710	0.07	0.01	—	714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	710	710	0.07	0.01	—	714
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	710	710	0.07	0.01	—	714
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	118
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	118

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	710	710	0.07	0.01	—	714
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	710	710	0.07	0.01	—	714
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	710	710	0.07	0.01	—	714
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	710	710	0.07	0.01	—	714
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	118
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	118	118	0.01	< 0.005	—	118

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	56.5	56.5	< 0.005	< 0.005	—	56.6
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	56.5	56.5	< 0.005	< 0.005	—	56.6

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.03	< 0.005	—	342
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	56.5	56.5	< 0.005	< 0.005	—	56.6
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	56.5	56.5	< 0.005	< 0.005	—	56.6

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	—	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.50	0.46	0.02	2.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.5
Total	0.50	1.47	0.02	2.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	1.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	0.06	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.30	1.30	< 0.005	< 0.005	—	1.30
Total	0.06	0.24	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.30	1.30	< 0.005	< 0.005	—	1.30

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	—	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.50	0.46	0.02	2.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.5
Total	0.50	1.47	0.02	2.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	1.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.06	0.06	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.30	1.30	< 0.005	< 0.005	—	1.30
Total	0.06	0.24	< 0.005	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.30	1.30	< 0.005	< 0.005	—	1.30

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1.67	5.68	7.35	0.17	< 0.005	—	12.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.67	5.68	7.35	0.17	< 0.005	—	12.9

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.1	34.3	44.4	1.04	0.03	—	77.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	1.67	5.68	7.35	0.17	< 0.005	—	12.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.67	5.68	7.35	0.17	< 0.005	—	12.9

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	40.5	0.00	40.5	4.05	0.00	—	142
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	40.5	0.00	40.5	4.05	0.00	—	142

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	244	0.00	244	24.4	0.00	—	855
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	40.5	0.00	40.5	4.05	0.00	—	142
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	40.5	0.00	40.5	4.05	0.00	—	142

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.07	1.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.18	0.18

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)

Equipme 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 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. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.64	0.64	—	—	—	0.64
Buddhist Pine (Podocarpus)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	—	—	—	0.59
Carrotwood(Cupaniopsis anacardioides)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	—	—	—	0.17
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.48	2.48	—	—	—	2.48
Mexican fan palm(Washingtonia robusta)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.34	0.34	—	—	—	0.34
Red frangipani (Plumeria)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	—	—	—	0.04
Subtotal	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.26	4.26	—	—	—	4.26
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Weeping Fig (Ficus benjamina)	—	—	—	—	—	—	—	—	—	—	—	—	3.14	3.14	—	—	—	3.14
Buddhist Pine (Podocarpus)	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80	—	—	—	0.80
Carrotwood(Cupaniopsis anacardioides)	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27	—	—	—	0.27
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	—	—	—	—	—	—	—	—	—	—	8.16	8.16	—	—	—	8.16
Mexican fan palm(Washingtonia robusta)	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80	—	—	—	0.80
Red frangipani (Plumeria)	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21	—	—	—	0.21
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	13.4	13.4	—	—	—	13.4
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Buddhist Pine (Podocarpus)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—

Carrotwood(Cupaniopsis anacardioides)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Mexican fan palm(Washingtonia robusta)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red frangipani (Plumeria)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Subtotal	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.64	0.64	—	—	—	0.64
Buddhist Pine (Podocarpus)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	—	—	—	0.59
Carrotwood(Cupaniopsis anacardioides)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	—	—	—	0.17

Indian Laurel Fig (Ficus microcarpa v. nitida)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.48	2.48	—	—	—	2.48
Mexican fan palm(Washingtonia robusta)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.34	0.34	—	—	—	0.34
Red frangipani (Plumeria)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	—	—	—	0.04
Subtotal	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.26	4.26	—	—	—	4.26
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	—	—	—	—	—	—	—	—	—	—	3.14	3.14	—	—	—	3.14
Buddhist Pine (Podocarpus)	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80	—	—	—	0.80
Carrotwood(Cupaniopsis anacardioides)	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27	—	—	—	0.27
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	—	—	—	—	—	—	—	—	—	—	8.16	8.16	—	—	—	8.16
Mexican fan palm(Washingtonia robusta)	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80	—	—	—	0.80

Red frangipani (Plumeria)	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21	—	—	—	0.21
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	13.4	13.4	—	—	—	13.4
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Buddhist Pine (Podocarpus)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Carrotwood(Cupaniopsis anacardioides)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Mexican fan palm(Washingtonia robusta)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red frangipani (Plumeria)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Subtotal	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Weeping Fig (Ficus benjamina)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	—	—	—	0.11
Buddhist Pine (Podocarpus)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	—	—	—	0.10
Carrotwood(Cupaniopsis anacardioides)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	—	—	—	0.03
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.41	0.41	—	—	—	0.41
Mexican fan palm(Washingtonia robusta)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	—	—	—	0.06
Red frangipani (Plumeria)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	—	—	—	0.01
Subtotal	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.71	0.71	—	—	—	0.71
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52	—	—	—	0.52
Buddhist Pine (Podocarpus)	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13	—	—	—	0.13

Carrotwood(Cupaniopsis anacardioides)	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04	—	—	—	0.04
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35	—	—	—	1.35
Mexican fan palm(Washingtonia robusta)	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13	—	—	—	0.13
Red frangipani (Plumeria)	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04	—	—	—	0.04
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	2.21	2.21	—	—	—	2.21
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Buddhist Pine (Podocarpus)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Carrotwood(Cupaniopsis anacardioides)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—

Mexican fan palm(Washingtonia robusta)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red frangipani (Plumeria)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Subtotal	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.92	2.92	—	—	—	2.92

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.64	0.64	—	—	—	0.64
Buddhist Pine (Podocarpus)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	—	—	—	0.59
Carrotwood(Cupaniopsis anacardioides)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	—	—	—	0.17

Indian Laurel Fig (Ficus microcarpa v. nitida)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.48	2.48	—	—	—	2.48
Mexican fan palm(Washingtonia robusta)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.34	0.34	—	—	—	0.34
Red frangipani (Plumeria)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	—	—	—	0.04
Subtotal	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.26	4.26	—	—	—	4.26
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	—	—	—	—	—	—	—	—	—	—	3.14	3.14	—	—	—	3.14
Buddhist Pine (Podocarpus)	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80	—	—	—	0.80
Carrotwo od(Cupa niopsis anacardi oides)	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27	—	—	—	0.27
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	—	—	—	—	—	—	—	—	—	—	8.16	8.16	—	—	—	8.16
Mexican fan palm(Washingtonia robusta)	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80	—	—	—	0.80

Red frangipani (Plumeria)	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21	—	—	—	0.21
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	13.4	13.4	—	—	—	13.4
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Buddhist Pine (Podocarpus)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Carrotwood(Cupaniopsis anacardioides)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Mexican fan palm(Washingtonia robusta)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red frangipani (Plumeria)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Subtotal	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.64	0.64	—	—	—	0.64
Buddhist Pine (Podocarpus)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	—	—	—	0.59
Carrotwood(Cupaniopsis anacardioides)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	—	—	—	0.17
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.48	2.48	—	—	—	2.48
Mexican fan palm(Washingtonia robusta)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.34	0.34	—	—	—	0.34
Red frangipani (Plumeria)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	—	—	—	0.04
Subtotal	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.26	4.26	—	—	—	4.26
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	—	—	—	—	—	—	—	—	—	—	3.14	3.14	—	—	—	3.14
Buddhist Pine (Podocarpus)	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80	—	—	—	0.80

Carrotwood(Cupaniopsis	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27	—	—	—	0.27
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	—	—	—	—	—	—	—	—	—	—	8.16	8.16	—	—	—	8.16
Mexican fan palm(Washingtonia robusta)	—	—	—	—	—	—	—	—	—	—	—	—	0.80	0.80	—	—	—	0.80
Red frangipani (Plumeria)	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21	—	—	—	0.21
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	13.4	13.4	—	—	—	13.4
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Buddhist Pine (Podocarpus)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Carrotwood(Cupaniopsis anacardioides)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—

Mexican fan palm(Washingtonia robusta)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red frangipani (Plumeria)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Subtotal	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	0.01	—	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.6	17.6	—	—	—	17.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	—	—	—	0.11
Buddhist Pine (Podocarpus)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	—	—	—	0.10
Carrotwood(Cupaniopsis anacardioides)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	—	—	—	0.03
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.41	0.41	—	—	—	0.41
Mexican fan palm(Washingtonia robusta)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	—	—	—	0.06
Red frangipani (Plumeria)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	—	—	—	0.01

Subtotal	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.71	0.71	—	—	—	0.71
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52	—	—	—	0.52
Buddhist Pine (Podocarpus)	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13	—	—	—	0.13
Carrotwood(Cupaniopsis anacardioides)	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04	—	—	—	0.04
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	—	—	—	—	—	—	—	—	—	—	1.35	1.35	—	—	—	1.35
Mexican fan palm(Washingtonia robusta)	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13	—	—	—	0.13
Red frangipani (Plumeria)	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04	—	—	—	0.04
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	2.21	2.21	—	—	—	2.21
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Weeping Fig (Ficus benjamina)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Buddhist Pine (Podocarpus)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—

Carrotwood (Cupaniopsis anacardioides)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Indian Laurel Fig (Ficus microcarpa v. nitida)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Mexican fan palm(Washingtonia robusta)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red frangipani (Plumeria)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Subtotal	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.92	2.92	—	—	—	2.92

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/6/2025	2/28/2025	5.00	40.0	—
Grading	Grading	3/3/2025	3/7/2025	5.00	5.00	—
Building Construction	Building Construction	3/10/2025	10/30/2026	5.00	430	—
Paving	Paving	11/2/2026	1/1/2027	5.00	45.0	—
Architectural Coating	Architectural Coating	12/14/2026	1/1/2027	5.00	15.0	—

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
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29

Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	7.60	20.0	HHDT
Site Preparation	Onsite truck	1.00	2.00	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	1.00	2.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	240	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	10.5	10.2	HHDT,MHDT

Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	5.00	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	1.00	2.00	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.54	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	7.60	20.0	HHDT
Site Preparation	Onsite truck	1.00	2.00	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	1.00	2.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	240	18.5	LDA,LDT1,LDT2

Building Construction	Vendor	10.5	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	5.00	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	1.00	2.00	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.54	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	57%	57%
Sweep paved roads once per month	9%	9%

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	0.00	0.00	63,000	21,000	1,322

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Site Preparation	—	—	0.00	1,215	—
Grading	—	—	1.88	0.00	—
Paving	0.00	0.00	0.00	0.00	0.51

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Medical Office Building	0.00	0%
Other Asphalt Surfaces	0.51	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005

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
Medical Office Building	452	452	452	165,104	4,631	4,631	4,631	1,690,174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Medical Office Building	452	452	452	165,104	4,631	4,631	4,631	1,690,174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

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	0.00	63,000	21,000	1,322

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Medical Office Building	748,452	346	0.0330	0.0040	1,064,552
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

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)
Medical Office Building	748,452	346	0.0330	0.0040	1,064,552
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Medical Office Building	5,270,183	58,440
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Medical Office Building	5,270,183	58,440
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Medical Office Building	454	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Medical Office Building	454	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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)
Weeping Fig (Ficus benjamina)	-4.00	6,000	29.4

Buddhist Pine (Podocarpus)	-4.00	5,549	26.9
Carrotwood(Cupaniopsis anacardioides)	-1.00	1,549	7.90
Indian Laurel Fig (Ficus microcarpa v. nitida)	-13.0	22,636	116
Mexican fan palm(Washingtonia robusta)	-8.00	3,471	14.2
Red frangipani (Plumeria)	-1.00	460	1.60

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Weeping Fig (Ficus benjamina)	-4.00	6,000	29.4
Buddhist Pine (Podocarpus)	-4.00	5,549	26.9
Carrotwood(Cupaniopsis anacardioides)	-1.00	1,549	7.90
Indian Laurel Fig (Ficus microcarpa v. nitida)	-13.0	22,636	116
Mexican fan palm(Washingtonia robusta)	-8.00	3,471	14.2
Red frangipani (Plumeria)	-1.00	460	1.60

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	22.5	annual days of extreme heat
Extreme Precipitation	6.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	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	2	1	2	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	2	2	2
Wildfire	1	2	2	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	2	2	4

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	2	1	3	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	2	2	2
Wildfire	1	2	2	2

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	2	2	4

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

6.4.1. Temperature and Extreme Heat

User Selected Measures	Co-Benefits Achieved	Exposure Reduction	Sensitivity Reduction	Adaptive Capacity Increase
D-3: Install Drought Resistant Landscaping	Water Conservation	—	1.00	1.00

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	75.1
AQ-PM	79.5
AQ-DPM	65.5
Drinking Water	86.9
Lead Risk Housing	79.5
Pesticides	11.7

Toxic Releases	78.5
Traffic	85.4
Effect Indicators	—
CleanUp Sites	74.9
Groundwater	16.9
Haz Waste Facilities/Generators	46.8
Impaired Water Bodies	33.2
Solid Waste	0.00
Sensitive Population	—
Asthma	64.4
Cardio-vascular	49.6
Low Birth Weights	66.6
Socioeconomic Factor Indicators	—
Education	57.5
Housing	24.5
Linguistic	59.8
Poverty	24.7
Unemployment	47.0

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	54.86975491
Employed	59.69459772
Median HI	64.81457718
Education	—

Bachelor's or higher	40.56204286
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	48.06877967
Active commuting	40.21557808
Social	—
2-parent households	45.92583087
Voting	17.18208649
Neighborhood	—
Alcohol availability	69.02348261
Park access	9.842166046
Retail density	55.37020403
Supermarket access	44.01385859
Tree canopy	15.68073912
Housing	—
Homeownership	85.25599897
Housing habitability	59.39946105
Low-inc homeowner severe housing cost burden	65.27653022
Low-inc renter severe housing cost burden	15.38560246
Uncrowded housing	36.04516874
Health Outcomes	—
Insured adults	30.60438855
Arthritis	50.5
Asthma ER Admissions	47.4
High Blood Pressure	58.0
Cancer (excluding skin)	38.7

Asthma	86.2
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	65.3
Diagnosed Diabetes	31.9
Life Expectancy at Birth	64.7
Cognitively Disabled	87.2
Physically Disabled	45.1
Heart Attack ER Admissions	36.1
Mental Health Not Good	63.6
Chronic Kidney Disease	45.1
Obesity	63.1
Pedestrian Injuries	47.9
Physical Health Not Good	48.3
Stroke	45.2
Health Risk Behaviors	—
Binge Drinking	76.5
Current Smoker	70.9
No Leisure Time for Physical Activity	45.4
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	67.0
Elderly	20.7
English Speaking	42.2
Foreign-born	61.5
Outdoor Workers	29.9
Climate Change Adaptive Capacity	—

Impervious Surface Cover	56.5
Traffic Density	84.1
Traffic Access	56.2
Other Indices	—
Hardship	65.8
Other Decision Support	—
2016 Voting	38.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	39.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
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

Screen	Justification

Construction: Construction Phases	project specific estimates
Construction: Off-Road Equipment	Project specific estimates
Construction: Trips and VMT	maximum crew size 120
Construction: Paving	—
Land Use	Project specific data
Construction: Demolition	assume 34,404 sf demo'd, 9 in depth, 1.2 tons/cy
Operations: Vehicle Data	trip generation data from traffic consultant

Project Report - i-Tree Planting Calculator

Location: West Covina, California 91790
Electricity Emissions Factor: 556.45 pounds CO2 equivalent/MWh
Fuel Emissions Factor: 114.64 pounds CO2 equivalent/MMBtu
Lifetime: 30 years
Project Lifetime Tree Mortality: 69.999%

All amounts in the tables are for the full lifetime of the project.

Location		CO_2 (Carbon Dioxide) Benefits			
Group Identifier	Tree Group Characteristics	CO_2 (Carbon Dioxide) Avoided (pounds)	CO_2 Avoided ($)	CO_2 Sequestered (pounds)	CO_2 Sequestered ($)
2	• (1.0) Carrotwood(Cupaniopsis anacardioides) at 9.5 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in poor condition and planted in full sun.	1,854.3	$43.13	2,912.4	$67.73
5	• (13.0) Green indian laurel fig(Ficus microcarpa v. nitida) at 18.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	27,114.2	$630.59	89,381.3	$2,078.73
6	• (8.0) Mexican fan palm(Washingtonia robusta) at 17.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	3,744.8	$87.09	8,735.5	$203.16
9	• (1.0) Plumeria spp(Plumeria) at 7.000000000000001 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	462.3	$10.75	2,315.8	$53.86
10	• (4.0) Benjamin fig(Ficus benjamina) at 14.000000000000002 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	7,037.3	$163.67	34,357.1	$799.04

Location		CO_2 (Carbon Dioxide) Benefits			
Group Identifier	Tree Group Characteristics	CO_2 (Carbon Dioxide) Avoided (pounds)	CO_2 Avoided ($)	CO_2 Sequestered (pounds)	CO_2 Sequestered ($)
12	• (4.0) Plum Pine spp(Podocarpus) at 6.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	6,472.2	$150.52	8,785.5	$204.32
Total		**46,685.1**	**$1,085.75**	**146,487.6**	**$3,406.85**

Location		Energy Benefits			
Group Identifier	Tree Group Characteristics	Electricity Saved (kWh) (Kilowatt-Hours)	Electricity Saved ($)	Fuel Saved (MMBtu) (Millions of British Thermal Units)	Fuel Saved ($)
2	• (1.0) Carrotwood(Cupaniopsis anacardioides) at 9.5 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in poor condition and planted in full sun.	1,549.0	$317.08	7.9	$102.55
5	• (13.0) Green indian laurel fig(Ficus microcarpa v. nitida) at 18.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	22,635.9	$4,633.57	116.0	$1,500.36
6	• (8.0) Mexican fan palm(Washingtonia robusta) at 17.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	3,470.5	$710.42	14.2	$183.49
9	• (1.0) Plumeria spp(Plumeria) at 7.000000000000001 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	460.3	$94.21	1.6	$20.46
10	• (4.0) Benjamin fig(Ficus benjamina) at 14.000000000000002 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	6,000.4	$1,228.29	29.4	$380.76

Location		Energy Benefits			
Group Identifier	Tree Group Characteristics	Electricity Saved (kWh) (Kilowatt-Hours)	Electricity Saved ($)	Fuel Saved (MMBtu) (Millions of British Thermal Units)	Fuel Saved ($)
12	• (4.0) Plum Pine spp(Podocarpus) at 6.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	5,548.9	$1,135.87	26.9	$348.09
Total		**39,665.0**	**$8,119.43**	**196.0**	**$2,535.71**

Location		Ecological Benefits			
Group Identifier	Tree Group Characteristics	Tree Biomass (short ton)	Rainfall Interception (gallons)	Runoff Avoided (gallons)	Runoff Avoided ($)
2	• (1.0) Carrotwood(Cupaniopsis anacardioides) at 9.5 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in poor condition and planted in full sun.	0.5	6,361.5	2,391.6	$21.37
5	• (13.0) Green indian laurel fig(Ficus microcarpa v. nitida) at 18.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	16.9	146,570.9	55,102.6	$492.40
6	• (8.0) Mexican fan palm(Washingtonia robusta) at 17.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	1.5	113,380.4	42,624.8	$380.90
9	• (1.0) Plumeria spp(Plumeria) at 7.000000000000001 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	0.3	4,600.7	1,729.6	$15.46
10	• (4.0) Benjamin fig(Ficus benjamina) at 14.000000000000002 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	5.7	38,183.4	14,354.9	$128.28

Location		Ecological Benefits			
Group Identifier	Tree Group Characteristics	Tree Biomass (short ton)	Rainfall Interception (gallons)	Runoff Avoided (gallons)	Runoff Avoided ($)
12	• (4.0) Plum Pine spp(Podocarpus) at 6.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	1.4	18,433.3	6,929.9	$61.93
Total		**26.3**	**327,530.3**	**123,133.4**	**$1,100.32**

Location		Air Benefits									
Group Identifier	Tree Group Characteristics	O_3 (Ozone) Removed (pounds)	NO_2 (Nitrogen Dioxide) Avoided (pounds)	NO_2 (Nitrogen Dioxide) Removed (pounds)	SO_2 (Sulfur Dioxide) Avoided (pounds)	SO_2 (Sulfur Dioxide) Removed (pounds)	VOC (Volatile Organic Compound) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Avoided (pounds)	$PM_{2.5}$ (Particulate matter smaller than 2.5 micrometers in diameter) Removed (pounds)	Avoided Value (Values for avoided pollutants) ($)	Removal Value (Values for removed pollutants) ($)

2	• (1.0) Carrotwood(Cupaniopsis anacardioides) at 9.5 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in poor condition and planted in full sun.	11.04	0.13	2.59	0.47	0.20	0.82	0.51	0.08	$3.11	$63.86
5	• (13.0) Green indian laurel fig(Ficus microcarpa v. nitida) at 18.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	234.34	1.95	57.96	6.86	4.13	11.96	7.47	2.42	$45.46	$1,489.50

6	• (8.0) Mexican fan palm(Washingtonia robusta) at 17.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	125.76	0.27	28.28	0.95	2.30	1.81	1.14	0.65	$6.81	$684.72
9	• (1.0) Plumeria spp(Plumeria) at 7.000000000000001 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	6.52	0.03	1.47	0.12	0.11	0.24	0.15	0.05	$0.89	$37.63

10	• (4.0) Benjamin fig(Ficus benjamina) at 14.000000000000002 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	60.94	0.51	15.07	1.78	1.07	3.16	1.98	0.63	$11.99	$387.06
12	• (4.0) Plum Pine spp(Podocarpus) at 6.0 inches DBH (Diameter at Breast Height). • Planted 0-19 feet and north (0°) of buildings that were built post-1980 with heating and cooling. • Trees are in fair condition and planted in full sun.	26.83	0.47	6.49	1.64	0.48	2.92	1.83	0.24	$11.08	$163.86
Total		**465.43**	**3.36**	**111.86**	**11.82**	**8.29**	**20.93**	**13.08**	**4.07**	**$79.34**	**$2,826.62**

Sequestration and biomass are gross values that exclude losses to mortality.

Application v2.6.0, powered by engine v0.14.0 (APIv2) and database v12.0.54.

www.fs.fed.us
www.davey.com
www.arborday.org
www.urban-forestry.com
www.isa-arbor.com
www.caseytrees.org
www.esf.edu
www.northeasternforests.org

Version 2.6.0

Appendix B

Noise Calculations

Noise Monitoring Data

Site 1: Cameron Avenue and Garvey Avenue

Session Report

3/20/2023

Information Panel

Name	West Covina Med Center_Site 1
Start Time	3/16/2023 10:38:31 AM
Stop Time	3/16/2023 10:53:31 AM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13J
Comments	

Summary Data Panel

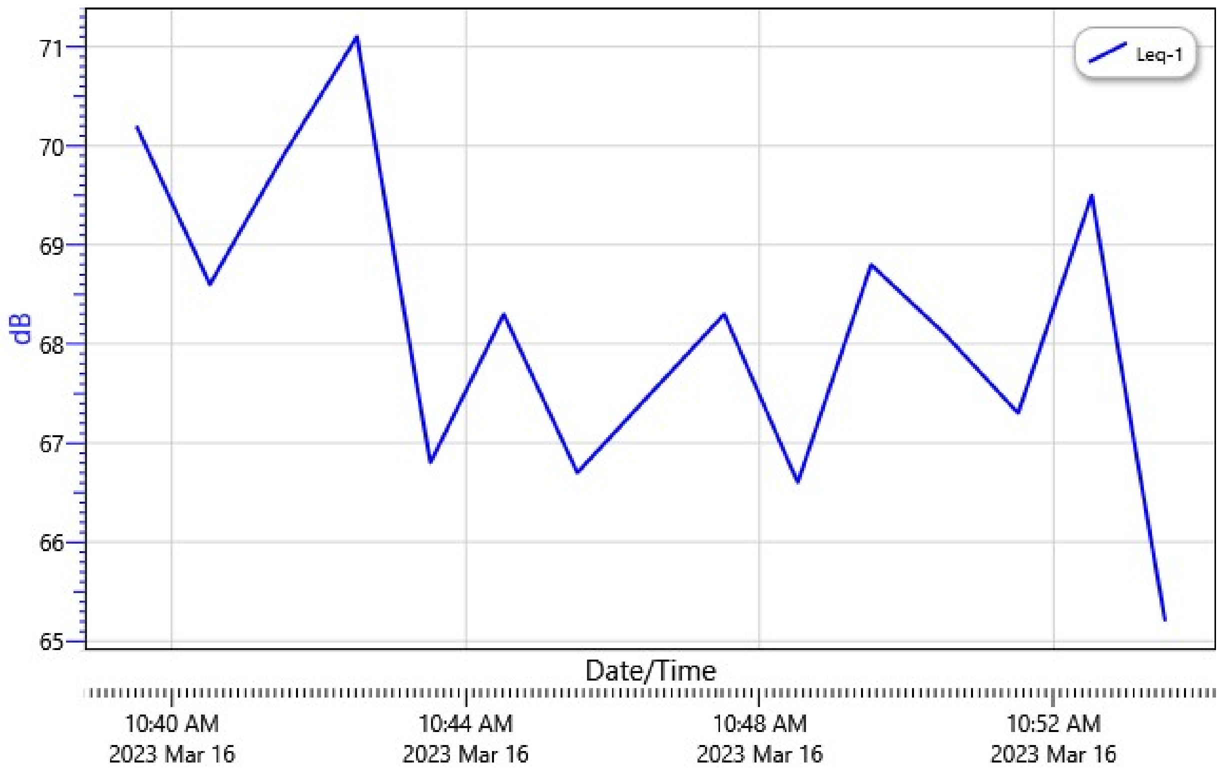
Description	Meter	Value	Description	Meter	Value
Leq	1	68.4 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

Logged Data Table

Date/Time	Leq-1
3/16/2023 10:39:31 AM	70.2
10:40:31 AM	68.6
10:41:31 AM	69.9
10:42:31 AM	71.1
10:43:31 AM	66.8
10:44:31 AM	68.3
10:45:31 AM	66.7
10:46:31 AM	67.5
10:47:31 AM	68.3
10:48:31 AM	66.6
10:49:31 AM	68.8
10:50:31 AM	68.1
10:51:31 AM	67.3
10:52:31 AM	69.5
10:53:31 AM	65.2

Logged Data Chart

West Covina Med Center_Site 1: Logged Data Chart



Site 2: Pacific Avenue and Garvey Avenue

Session Report

3/20/2023

Information Panel

Name	West Covina Med Center_Site 2
Start Time	3/16/2023 11:10:31 AM
Stop Time	3/16/2023 11:25:31 AM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13J
Comments	

Summary Data Panel

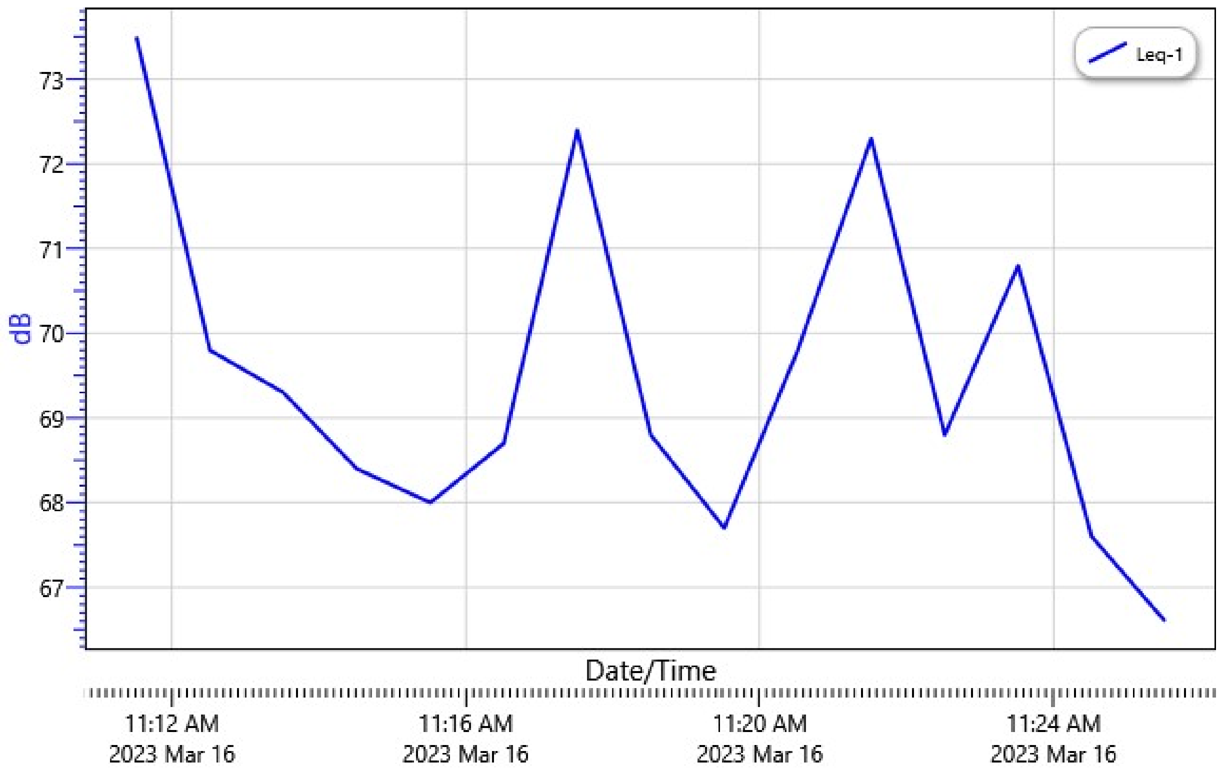
Description	Meter	Value	Description	Meter	Value
Leq	1	69.9 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

Logged Data Table

Date/Time	Leq-1
3/16/2023 11:11:31 AM	73.5
11:12:31 AM	69.8
11:13:31 AM	69.3
11:14:31 AM	68.4
11:15:31 AM	68
11:16:31 AM	68.7
11:17:31 AM	72.4
11:18:31 AM	68.8
11:19:31 AM	67.7
11:20:31 AM	69.8
11:21:31 AM	72.3
11:22:31 AM	68.8
11:23:31 AM	70.8
11:24:31 AM	67.6
11:25:31 AM	66.6

Logged Data Chart

West Covina Med Center_Site 2: Logged Data Chart



Site 3: Orange Avenue and Cameron Avenue

Session Report

3/20/2023

Information Panel

Name	West Covina Med Center_Site 3
Start Time	3/16/2023 11:36:46 AM
Stop Time	3/16/2023 11:51:46 AM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13J
Comments	

Summary Data Panel

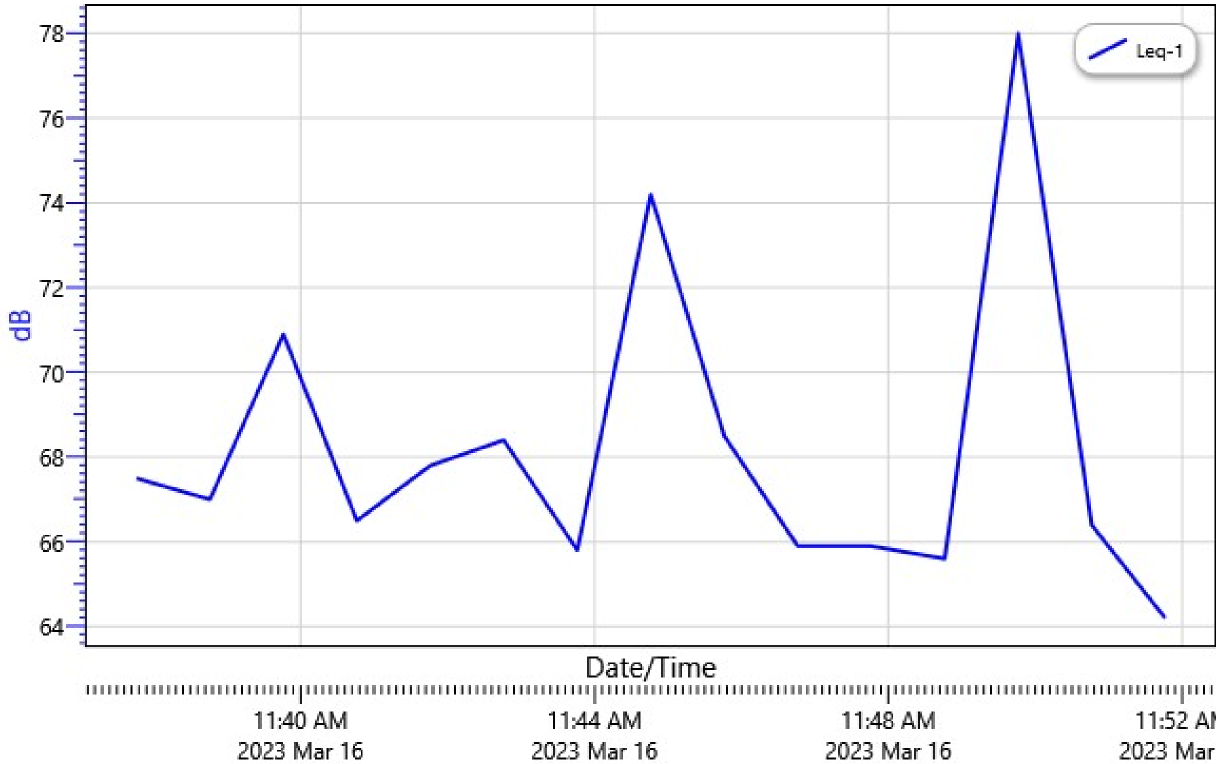
Description	Meter	Value	Description	Meter	Value
Leq	1	70.2 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

Logged Data Table

Date/Time	Leq-1
3/16/2023 11:37:46 AM	67.5
11:38:46 AM	67
11:39:46 AM	70.9
11:40:46 AM	66.5
11:41:46 AM	67.8
11:42:46 AM	68.4
11:43:46 AM	65.8
11:44:46 AM	74.2
11:45:46 AM	68.5
11:46:46 AM	65.9
11:47:46 AM	65.9
11:48:46 AM	65.6
11:49:46 AM	78
11:50:46 AM	66.4
11:51:46 AM	64.2

Logged Data Chart

West Covina Med Center_Site 3: Logged Data Chart



Site 4: 830 Van Horn Avenue

Session Report

3/20/2023

Information Panel

Name	West Covina Med Center_Site 4
Start Time	3/16/2023 12:01:37 PM
Stop Time	3/16/2023 12:16:37 PM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13J
Comments	

Summary Data Panel

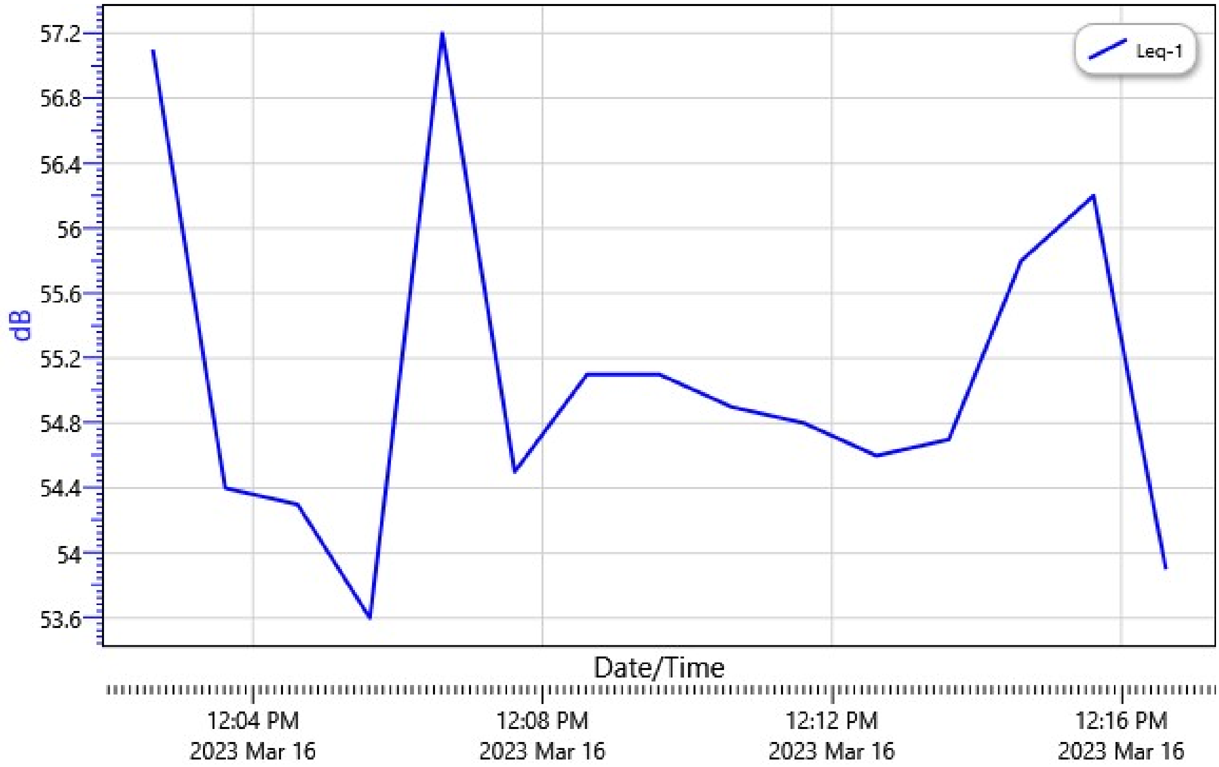
Description	Meter	Value	Description	Meter	Value
Leq	1	55.2 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

Logged Data Table

Date/Time	Leq-1
3/16/2023 12:02:37 PM	57.1
12:03:37 PM	54.4
12:04:37 PM	54.3
12:05:37 PM	53.6
12:06:37 PM	57.2
12:07:37 PM	54.5
12:08:37 PM	55.1
12:09:37 PM	55.1
12:10:37 PM	54.9
12:11:37 PM	54.8
12:12:37 PM	54.6
12:13:37 PM	54.7
12:14:37 PM	55.8
12:15:37 PM	56.2
12:16:37 PM	53.9

Logged Data Chart

West Covina Med Center_Site 4: Logged Data Chart



Noise and Vibration Calculations

Noise Formulas

Noise Distance Attenuation

Hard Site

Ni = No - 20 * LOG(Di/Do)

Ni = attenuated noise level of interest

No = reference noise level

Di = distance to receptor (Di>Do)

Do = reference distance

Source: (Bolt, Beranek, and Newman, 1971)

Summation of Noise Levels

Equation: Ns=10 x LOG10((10^(N1/10))+(10^(N2/10))+(10^(N3/10))+(10^(N4/10)))

Ns = Noise Level Sum
N1 = Noise Level 1
N2 = Noise Level 2
N3 = Noise Level 3
N4 = Noise Level 4

Source: California Department of Transportation, Technical Noise Supplement, 2013

PHASED CONSTRUCTION NOISE LEVELS	
Construction Equipment	**Noise Level at 50 feet (dBA)**
Site Preparation	
Backhoe	73.6
Excavator	76.7
Site Preparation Combined	**78.4**
Grading	
Backhoe	73.6
Dozer	77.7
Excavator	76.7
Grading Combined	**80.2**
Building Construction	
Backhoe	73.6
Crane	72.6
Forklift	79.4
Gradall	79.4
Building Construction Combined	**82.4**
Paving Phase	
Backhoe	73.6
Concrete Mixer Truck	74.8
Paving Combined	**77.3**
Architectural Coating	
Air Compressor	73.7
Aerial Lift	67.7
Architectural Coating Combined	**74.7**
SOURCE: FHWA, *Roadway Construction Noise Model* , 2008	

UNMITIGATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS				
Sensitive Receptors	**Distance to Construction (Feet)**	**Existing Ambient Noise Level (dBA, Leq)**	**Reference Construction Noise Level**	**Typical Construction Noise Level at Sensitive Receptor (dBA, Leq)**
Mauna Loa Garden Apartments	365	69.2	82.4	65.1
Assisted Home Health & Hospice	415	68.4	82.4	64
SOURCE: TAHA, 2024.				

Vibration Formulas

Vibration PPV Attenuation

Equation: PPVequip = PPVref x (25/D)^1.5

PPV (equip) is the peak particle velocity in in/sec of the equipment adjusted for distance
PPV (ref) is the reference vibration level in in/sec at 25 feet from Table 12-2
D is the distance from the equipment to the receiver.

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

Vibration VdB Attenuation

Equation: Lv(D) = Lv(25 ft) – 30log(D/25)
D = Distance (feet)
Lv(D) = Vibration Level

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

Vibration Damage and Annoyance Analysis

Construction Vibration Damage Criteria	
Building/Structural Category	**PPV, in/sec**
Reinforced-concrete, steel or timber	0.500
Non-engineered timber and masonry buildings	0.200
Buildings extremely susceptible to vibration damage	0.120

Vibration Velocities for Construction Equipment				
Equipment	**PPV at 25 Feet (Inches/Second)**	**PPV at 50 Feet (Inches/Second)**	**VdB at 25 feet (Micro-Inches/Second)**	**VdB at 50 feet (Micro-Inches/Second)**
Caisson Drill	0.089	0.031	87	78
Excavator	0.040	0.014	80	71
Small Bulldozer	0.003	0.001	58	49

Drilling Locations Vibration Analysis				
Receptor	**Distance to Nearest Structure**	**Reference Vibration Level (Inches/Second)**	**PPV at Structure (Inches/Second)**	**Exceed Threshold?**
West Covina Medical Center	10	0.089	0.352	No
Commercial building to the southwest	300	0.089	0.002	No

Traffic Noise Model Runs

REPORT: **INPUT TRAFFIC FOR TNM VEHICLES (LAeq)**

TNM VERSION:	3.1.7970.37608	REPORT DATE:	6 December 2023
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	12/6/2023 1:58:48 PM
CASE:	West Covina Medical Center Project_Existing	ORGANIZATION:	
ANALYSIS BY:	kbartholow	PROJECT/CONTRACT:	

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Name	No.	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]
Orange Ave. between Garvey Ave. and Cameron Ave.	Point-0	0	891	25	9	25	0	0	0	0	0	0
	Point-1	1	891	25	9	25	0	0	0	0	0	0
	Point-3	2	891	25	9	25	0	0	0	0	0	0
Cameron Ave. between Pacific Ave. and Orange Ave.	Point-6	5	1313	35	13	35	0	0	0	0	0	0
	Point-7	6	1313	35	13	35	0	0	0	0	0	0
	Point-9	7	1313	35	13	35	0	0	0	0	0	0
	Point-11	8	1313	35	13	35	0	0	0	0	0	0
	Point-13	9	1313	35	13	35	0	0	0	0	0	0
Cameron Ave. between Orange Ave. and Toluca Ave.	Point-14	10	1433	35	14	35	0	0	0	0	0	0
	Point-15	11	1433	35	14	35	0	0	0	0	0	0

Roadway Name	Road Segment Start Point Name	No.	Auto Volume [Veh/hr]	Auto Speed [mph]	Medium Truck Volume [Veh/hr]	Medium Truck Speed [mph]	Heavy Truck Volume [Veh/hr]	Heavy Truck Speed [mph]	Bus Volume [Veh/hr]	Bus Speed [mph]	Motorcycle Volume [Veh/hr]	Motorcycle Speed [mph]
Cameron Ave. between Orange Ave. and Toluca Ave.	Point-17	12	1433	35	14	35	0	0	0	0	0	0
	Point-19	13	1433	35	14	35	0	0	0	0	0	0
Toluca Ave. between Cameron Ave. and Pacific Ave.	Point-20	14	486	25	5	25	0	0	0	0	0	0
	Point-21	15	486	25	5	25	0	0	0	0	0	0
	Point-23	16	486	25	5	25	0	0	0	0	0	0

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	6 December 2023
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	12/6/2023 1:58:48 PM
CASE:	West Covina Medical Center Project_Existing	ORGANIZATION:	
UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Cameron Ave. between Pacific Ave. and Orange Ave.	1	1	---	66.9	0.0	---	---	Sound Level
Orange Ave. between Garvey Ave. and Cameron Ave.	2	1	---	61.6	0.0	---	---	Sound Level
Cameron Ave. between Orange Ave. and Toluca Ave.	3	1	---	67.0	0.0	---	---	Sound Level
Toluca Ave. between Cameron Ave. and Pacific Ave.	4	1	---	59.2	0.0	---	---	Sound Level

REPORT: **INPUT TRAFFIC FOR TNM VEHICLES (LAeq)**

TNM VERSION:	3.1.7970.37608	REPORT DATE:	6 December 2023
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	12/6/2023 2:01:42 PM
CASE:	West Covina Medical Center Project_FutureWithoutProjecf	ORGANIZATION:	
ANALYSIS BY:	kbartholow	PROJECT/CONTRACT:	

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Name	No.	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]
Orange Ave. between Garvey Ave. and Cameron Ave.	Point-0	0	917	25	9	25	0	0	0	0	0	0
	Point-1	1	917	25	9	25	0	0	0	0	0	0
	Point-3	2	917	25	9	25	0	0	0	0	0	0
Cameron Ave. between Pacific Ave. and Orange Ave.	Point-6	5	1392	35	14	35	0	0	0	0	0	0
	Point-7	6	1392	35	14	35	0	0	0	0	0	0
	Point-9	7	1392	35	14	35	0	0	0	0	0	0
	Point-11	8	1392	35	14	35	0	0	0	0	0	0
	Point-13	9	1392	35	14	35	0	0	0	0	0	0
Cameron Ave. between Orange Ave. and Toluca Ave.	Point-14	10	1589	35	16	35	0	0	0	0	0	0
	Point-15	11	1589	35	16	35	0	0	0	0	0	0

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Name	No.	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]
Cameron Ave. between Orange Ave. and Toluca Ave.	Point-17	12	1589	35	16	35	0	0	0	0	0	0
	Point-19	13	1589	35	16	35	0	0	0	0	0	0
Toluca Ave. between Cameron Ave. and Pacific Ave.	Point-20	14	513	25	5	25	0	0	0	0	0	0
	Point-21	15	513	25	5	25	0	0	0	0	0	0
	Point-23	16	513	25	5	25	0	0	0	0	0	0

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	6 December 2023
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CASE:	West Covina Medical Center Project_FutureWithout Projecf	ORGANIZATION:	
UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Cameron Ave. between Pacific Ave. and Orange Ave.	1	1	---	67.2	0.0	---	---	Sound Level
Orange Ave. between Garvey Ave. and Cameron Ave.	2	1	---	61.7	0.0	---	---	Sound Level
Cameron Ave. between Orange Ave. and Toluca Ave.	3	1	---	67.4	0.0	---	---	Sound Level
Toluca Ave. between Cameron Ave. and Pacific Ave.	4	1	---	59.5	0.0	---	---	Sound Level

REPORT:	**INPUT TRAFFIC FOR TNM VEHICLES (LAeq)**		
TNM VERSION:	3.1.7970.37608	REPORT DATE:	6 December 2023
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	12/6/2023 2:03:47 PM
CASE:	West Covina Medical Center Project_FutureWithProjecf	ORGANIZATION:	
ANALYSIS BY:	kbartholow	PROJECT/CONTRACT:	

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Name	No.	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]
Orange Ave. between Garvey Ave. and Cameron Ave.	Point-0	0	944	25	10	25	0	0	0	0	0	0
	Point-1	1	944	25	10	25	0	0	0	0	0	0
	Point-3	2	944	25	10	25	0	0	0	0	0	0
Cameron Ave. between Pacific Ave. and Orange Ave.	Point-6	5	1411	35	14	35	0	0	0	0	0	0
	Point-7	6	1411	35	14	35	0	0	0	0	0	0
	Point-9	7	1411	35	14	35	0	0	0	0	0	0
	Point-11	8	1411	35	14	35	0	0	0	0	0	0
	Point-13	9	1411	35	14	35	0	0	0	0	0	0
Cameron Ave. between Orange Ave. and Toluca Ave.	Point-14	10	1600	35	16	35	0	0	0	0	0	0
	Point-15	11	1600	35	16	35	0	0	0	0	0	0

Roadway Name	Road Segment Start Point		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Name	No.	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]	Volume [Veh/hr]	Speed [mph]
Cameron Ave. between Orange Ave. and Toluca Ave.	Point-17	12	1600	35	16	35	0	0	0	0	0	0
	Point-19	13	1600	35	16	35	0	0	0	0	0	0
Toluca Ave. between Cameron Ave. and Pacific Ave.	Point-20	14	521	25	5	25	0	0	0	0	0	0
	Point-21	15	521	25	5	25	0	0	0	0	0	0
	Point-23	16	521	25	5	25	0	0	0	0	0	0

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	6 December 2023
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UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Cameron Ave. between Pacific Ave. and Orange Ave.	1	1	---	67.3	0.0	---	---	Sound Level
Orange Ave. between Garvey Ave. and Cameron Ave.	2	1	---	61.9	0.0	---	---	Sound Level
Cameron Ave. between Orange Ave. and Toluca Ave.	3	1	---	67.5	0.0	---	---	Sound Level
Toluca Ave. between Cameron Ave. and Pacific Ave.	4	1	---	59.5	0.0	---	---	Sound Level

Appendix C

Transportation Impact Study

LINSCOTT
LAW &
GREENSPAN
engineers

TRANSPORTATION IMPACT STUDY

WEST COVINA MEDICAL CENTER –
BEHAVIORAL HEALTH ADDITION PROJECT

City of West Covina, California
September 17, 2024

Prepared for:

Terry A. Hayes & Associates
3535 Hayden Avenue, Suite 350
Culver City, California 90232

LLG Ref. 1-23-4524-1

REGISTERED PROFESSIONAL ENGINEER
ALFRED C. YING
No. TR1944
Exp. 06/30/26
TRAFFIC
STATE OF CALIFORNIA

Prepared by:

Chin S. Taing, PTP, RSP1
Senior Transportation Planner

Under the Supervision of:

Alfred C. Ying, PE, PTP
Senior Transportation Engineer

Linscott, Law & Greenspan, Engineers
600 S. Lake Avenue
Suite 500
Pasadena, CA 91106
626.796.2322 T
626.792.0941 F
www.llgengineers.com

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TRANSPORTATION IMPACT STUDY
WEST COVINA MEDICAL CENTER – BEHAVIORAL HEALTH ADDITION PROJECT
City of West Covina, California
September 17, 2024

1.0 INTRODUCTION

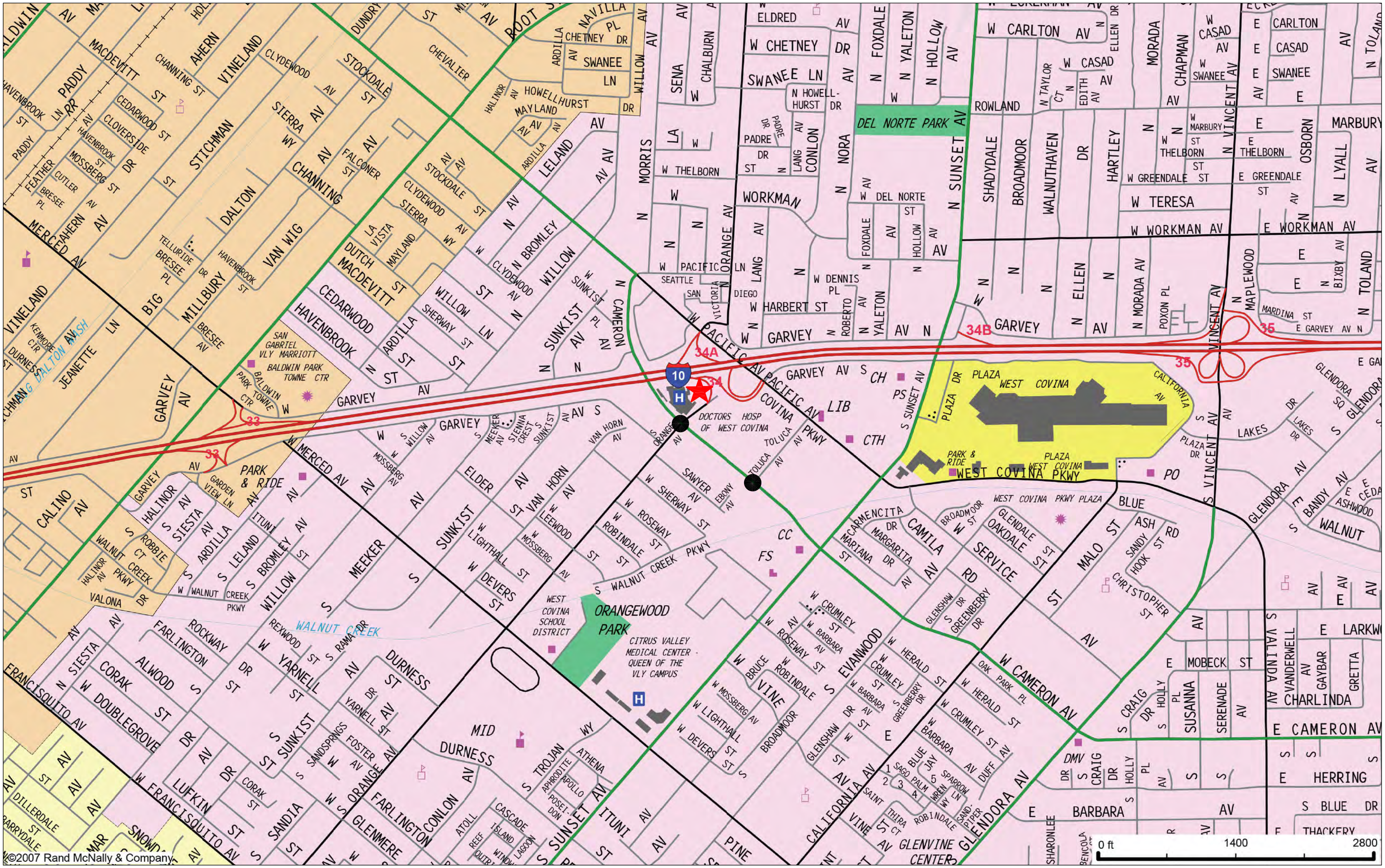
1.1 Transportation Study Overview

This transportation impact study has been conducted to identify and evaluate the potential transportation impacts of the proposed West Covina Medical Center Behavioral Health Addition project ("proposed project"). The project site is located at 725 South Orange Avenue, adjacent to the I-10 Freeway eastbound off-ramp to Orange Avenue, in the City of West Covina. The proposed project site is generally bounded by the I-10 Freeway and the eastbound off-ramp to the north and west, Cameron Avenue and an existing surface parking lot to the south, and Orange Avenue to the east (assuming a north-south orientation for Orange Avenue). The project site and general vicinity are shown in ***Figure 1-1***.

The transportation assessment follows the analysis methodology that is consistent with the *City of West Covina Transportation Study Guidelines*[1]. In compliance with the California Environmental Quality Act (CEQA) Sections 15064.3 and 15064.7, the City of West Covina has adopted Vehicle Miles Traveled (VMT) for the purpose of analyzing transportation impacts under CEQA. In addition, the City maintains vehicle Level of Service (LOS) standards for local transportation infrastructure. Therefore, the Guidelines identify both CEQA based analysis requirements and non-CEQA based analysis requirements for analyzing the potential transportation impacts of proposed development projects.

This study evaluates potential project-related VMT impacts pursuant to the screening criteria, analysis tools, and thresholds adopted and approved for use by the City of West Covina. The study also evaluates potential project-related effects on LOS at two (2) key intersections in the vicinity of the project site. The study intersections were determined in consultation with City of West Covina staff. The Intersection Capacity Utilization (ICU) method and the Highway Capacity Manual (HCM) method were used to determine LOS for the signalized intersection and unsignalized intersection, respectively.

[1] *City of West Covina Transportation Study Guidelines for Vehicle Miles Traveled and Level of Service Assessment*, September 2020.



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MAP SOURCE: RAND MCNALLY & COMPANY

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LINSCOTT LAW & GREENSPAN engineers

Project Site

Study Location

Figure 1-1
Vicinity Map

This report (i) presents the proposed project's existing transportation network context, (ii) presents existing traffic volumes, (iii) forecasts cumulative baseline conditions, (iv) forecasts project-generated traffic, (v) assesses the potential for project-related transportation impacts consistent with the CEQA compliant and non-CEQA compliant metrics set forth by the City of West Covina, and (vi) recommends transportation mitigation and/or improvement measures, where necessary.

1.2 Study Methodology

The CEQA and non-CEQA analysis criteria for this transportation assessment were identified in consultation with City of West Covina staff. The analysis criteria were determined based on the City's Guidelines, the proposed project description and location, and the characteristics of the surrounding transportation system. As the Lead Agency under CEQA, the City of West Covina confirmed the appropriateness of the analysis criteria when it approved the transportation assessment Scope of Work Memorandum of Understanding (MOU).

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743 (Steinberg, 2013). Among other things, SB 743 created a process to change the methodology to analyze transportation impacts under CEQA (Public Resources Code section 21000 and following) in order to promote: 1) the reduction of greenhouse gas emissions, 2) the development of multimodal transportation networks, and 3) a diversity of land uses. On December 30, 2013, the State of California Governor's Office of Planning and Research (OPR) released a preliminary evaluation of alternative methods of transportation analysis, which included analysis based on project VMT rather than impacts to intersection Level of Service. OPR issued other draft discussion documents in March 2015 and January 2016, suggesting some new revisions to the state CEQA Guidelines. In November 2017, OPR submitted the proposed amendments to the CEQA Guidelines to the State's Natural Resources Agency (that include a proposed new Guidelines section 15064.3 which governs how VMT-based analyses of potential traffic impacts should be conducted). On January 26, 2018, the Natural Resources Agency published a Notice of Rulemaking, commencing the formal rulemaking process for the amendments to the CEQA Guidelines. On December 28, 2018, the California Office of Administrative Law adopted the proposed amendments, formally implementing the use of VMT as the metric for transportation analysis under CEQA and providing a grace period allowing local agencies to opt-in to the new metrics. State-wide implementation of the new metric was required by July 1, 2020.

In anticipation of the mandated change to VMT, the San Gabriel Valley Council of Governments (SGVCOG), of which the City of West Covina is a member agency, undertook the SGVCOG SB 743 Implementation Study to assist with answering important implementation questions about the methodology, thresholds, and mitigation approaches for VMT impact analysis in the member agencies. The City of West Covina utilized the information produced through the Implementation Study to adopt a methodology and significance thresholds for use in CEQA compliant transportation analyses. In alignment with the goals of SB 743, the City also requires an evaluation of a project's impact on the multi-modal pedestrian, bicycle, and transit network.

The City's Guidelines further note that SB 743 does not prevent agencies from continuing to analyze delay or LOS outside of CEQA review for other transportation planning or analysis purposes (i.e., general plans, impact fee programs, corridor studies, congestion reduction, or ongoing network monitoring). The City has LOS standards which local transportation infrastructure should strive to maintain. The LOS standards apply to discretionary approvals of new land use development projects. Therefore, the City's Guidelines also include requirements for non-CEQA analyses. Specifically, the City requires utilization of the Intersection Capacity Utilization (ICU) methodology and the latest version of the Highway Capacity Manual (HCM) methodology to evaluate LOS at signalized and unsignalized intersections, respectively.

The proposed project's CEQA transportation impacts have been evaluated based on the City of West Covina's adopted VMT screening criteria, methodology, and thresholds. In order to evaluate the proposed project's effect on local transportation infrastructure, a non-CEQA analysis of two (2) study intersections has been conducted for the weekday AM and PM peak hours, utilizing the ICU/HCM analysis methodologies for signalized and unsignalized intersections.

1.3 Los Angeles County Congestion Management Program Status

The Los Angeles County Congestion Management Program (CMP) was previously a state-mandated program that was enacted by the California State Legislature with the passage of Proposition 111 in 1990 that primarily utilized a level of service (LOS) performance metric. Pursuant to California Government Code §65088.3, local jurisdictions may opt out of the CMP requirement without penalty if a majority of the local jurisdictions representing a majority of the County's population formally adopt resolutions requesting to opt out of the program. As stated in a letter from the Los Angeles County Metropolitan Transportation Authority (Metro)[2], by August 28, 2019, 57 local jurisdictions, which in total represent 8.5 million in population, had adopted resolutions electing to be exempt from the CMP. With the Los Angeles County region having reached the statutorily required threshold, the provisions of the CMP are no longer applicable to any of the 89 local jurisdictions within Los Angeles County, regardless of whether or not a jurisdiction adopted an opt-out resolution. Therefore, CMP Traffic Impact Analysis is no longer required in Environmental Impact Reports.

[2] Kalieh Honish, Los Angeles County Metropolitan Transportation Authority, to Seleta Reynolds, City of Los Angeles Department of Transportation, "Re: Dissolution of the Congestion Management Program in Los Angeles County," August 28, 2019.

2.0 PROJECT DESCRIPTION

2.1 Existing Project Site

The existing project site of approximately 2.83 acres is located at 725 South Orange Avenue, adjacent to the I-10 Freeway eastbound off-ramp to Orange Avenue, in the City of West Covina. The site is generally bounded by the I-10 Freeway and the eastbound off-ramp to the north and west, Cameron Avenue and an existing surface parking lot to the south, and Orange Avenue to the east. The proposed project site and general vicinity are shown in *Figure 1-1*.

The assessor's parcel number for the project site is 8474-001-022. The site is currently developed with the existing West Covina subacute hospital building (28,000 square feet with 33 beds), an existing single-story medical office building (15,000 square feet), and another three-story medical office building (18,000 square feet). The prior West Covina general acute hospital building (46 beds), transitioned to a subacute hospital when it eliminated 13 medical surgical beds and the two operating rooms in January 2023. An aerial photograph of the existing project site is presented in ***Figure 2-1***.

2.2 Proposed Project Description

The proposed project consists of expanding the existing West Covina Medical Center to include an approximate 42,000 square-foot four-story behavioral health transition facility to the northeast side of the existing building. The proposed building addition would remove a portion of the existing surface parking lot currently located at the northeast portion of the site. The expansion would feature three levels of nursing units over an at-grade arrival lobby and include an additional 71 licensed beds which would increase the total to 104 licensed beds (i.e., 33 existing beds plus 71 additional beds). All patients are expected to be transported via emergency service vehicles from their institutional place of living (i.e., other skilled nursing and residential care facilities) to this transitional facility for treatment.

Vehicular access to the project site will continue to be provided via the existing driveway on Orange Avenue. All drop-off/pick-up of patients for the project and other existing uses on-site will utilize the designated on-site loading area and no drop-off/pick-up activities are permitted on Orange Avenue. The conceptual site plan is illustrated in ***Figure 2-2***. The project build-out and occupancy year is anticipated by the year 2026.

2.3 Project Site Access

2.3.1 *Vehicular Site Access*

Direct vehicular access to the project site is planned to be accommodated by an existing driveway on Orange Avenue as well as two driveways for the off-site surface parking lot as shown in *Figure 2-1*. The site access and circulation plan for the proposed project is also displayed in *Figure 2-2*. The access for the off-site surface parking lot is accommodated by an existing driveway on Orange Avenue, south of Cameron Avenue, and another existing driveway on Garvey Avenue South, west

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MAP SOURCE: GOOGLE EARTH PRO

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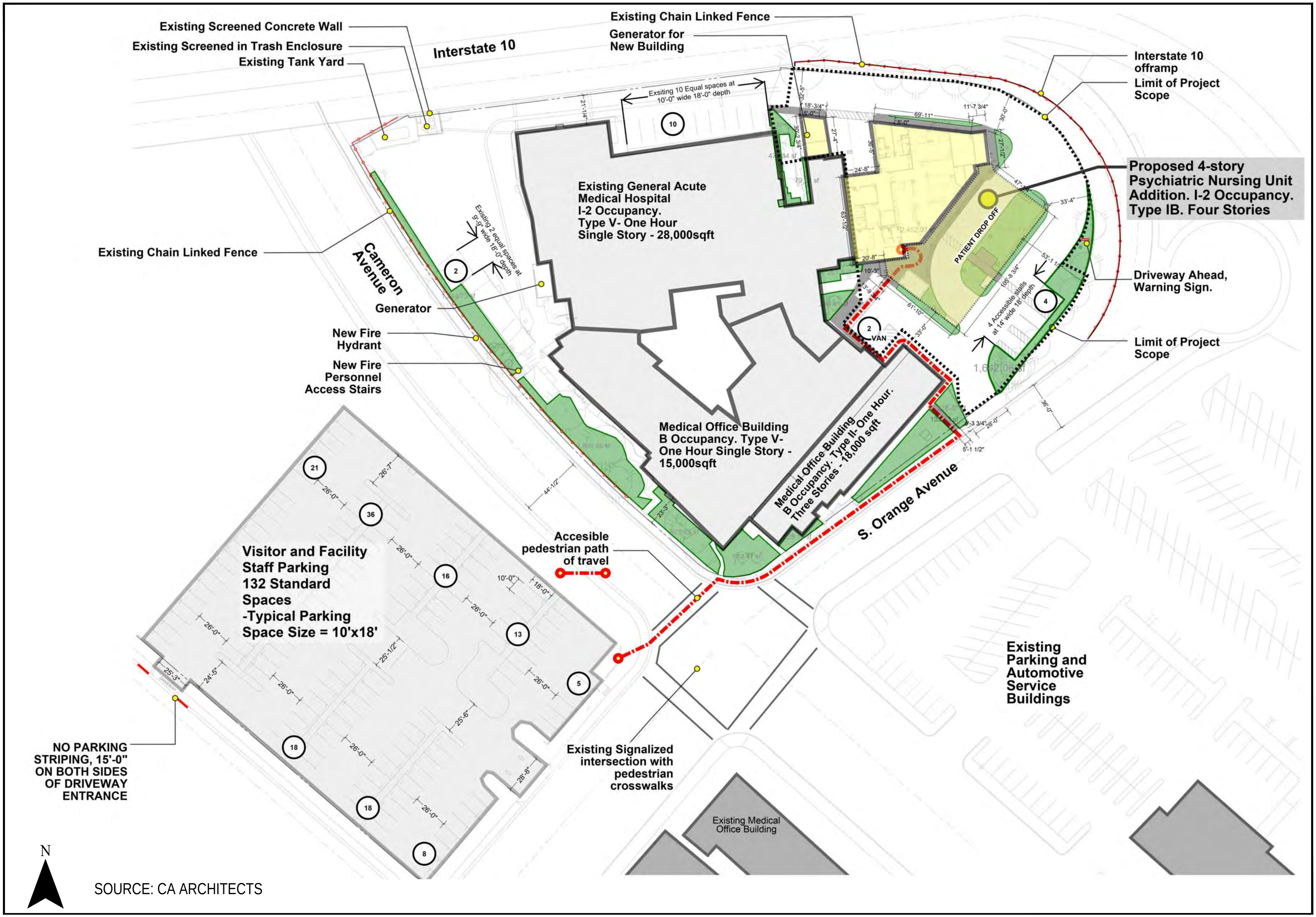
Project Site

Off-Site Parking Lot

Existing Driveway

Figure 2-1
Aerial Photograph of Existing Project Site



Linscott Law & Greenspan engineers

Figure 2-2
Site Plan

of Orange Avenue. Descriptions of the project site access points are provided in further detail below:

- Orange Avenue Driveway
  An existing driveway along the west side of Orange Avenue will continue to provide access to the on-site parking area/s. The Orange Avenue driveway currently accommodates full access (i.e., inbound and outbound left-turn and right-turn movements) from Orange Avenue. A sight distance review is prepared for the Orange Avenue project driveway. Access to the on-site surface parking lot (i.e., which includes 18 parking spaces designated primarily for staff) will also be provided by the 28-foot wide Orange Avenue driveway.

- Orange Avenue Off-Site Lot Driveway
  An existing driveway along the west side of Orange Avenue approximately mid-way between Cameron Avenue and Garvey Avenue South will continue to provide access to the off-site parking lot for visitors/staff parking. The 29-foot wide driveway currently accommodates full access (i.e., inbound and outbound left-turn and right-turn movements) from Orange Avenue.

- Garvey Avenue South Off-Site Lot Driveway
  An existing driveway along the north side of Garvey Avenue South, west of Orange Avenue, will continue to provide access to the off-site parking lot. The 25-foot wide driveway currently accommodates full access (i.e., inbound and outbound left-turn and right-turn movements) from Garvey Avenue South.

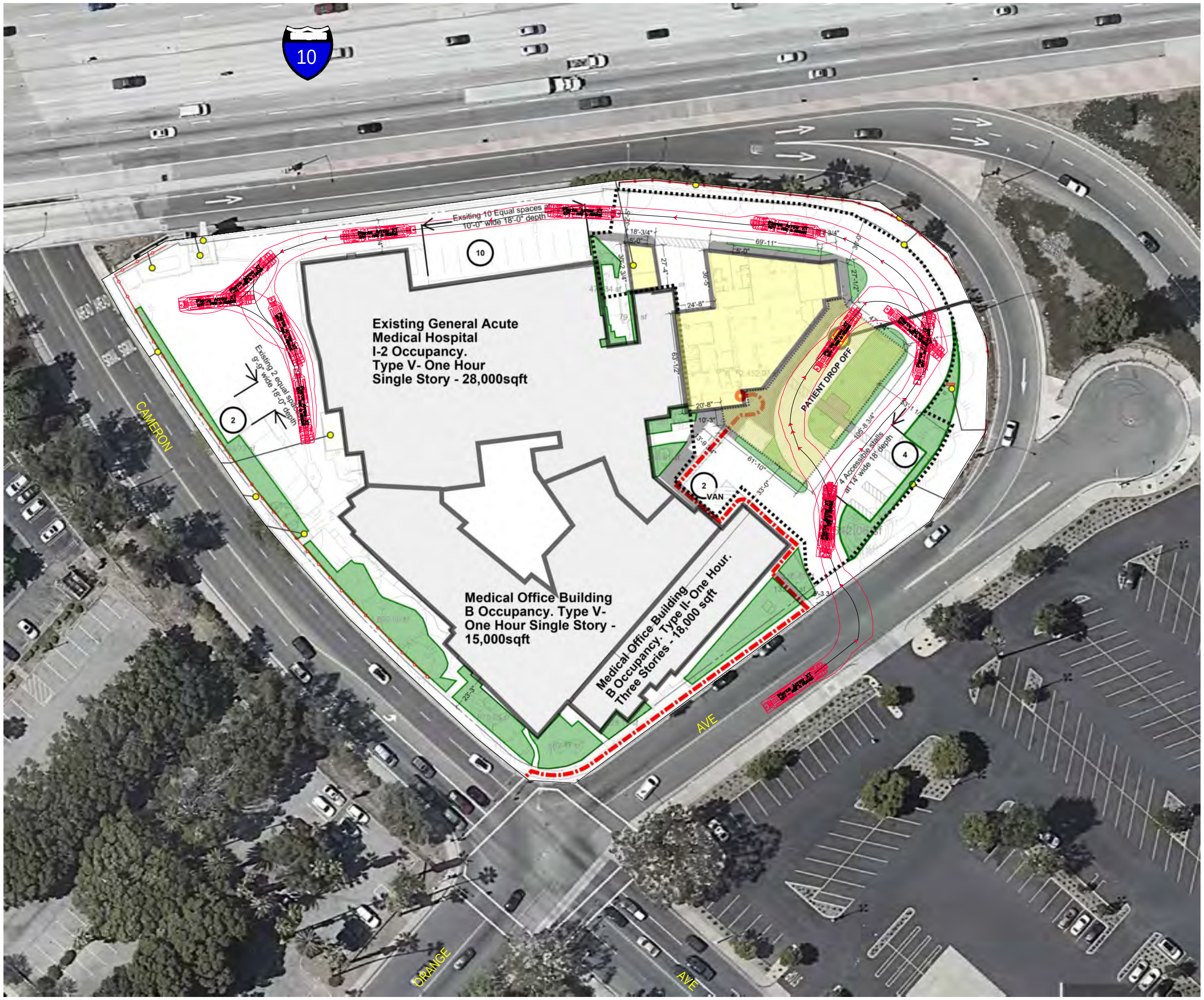
Within the project site, vehicle circulation will continue to be accommodated by the drive aisle situated along the perimeter of the building in the northeast portion of the site. As mentioned previously, no drop-off/pick-up activities will be permitted on Orange Avenue.

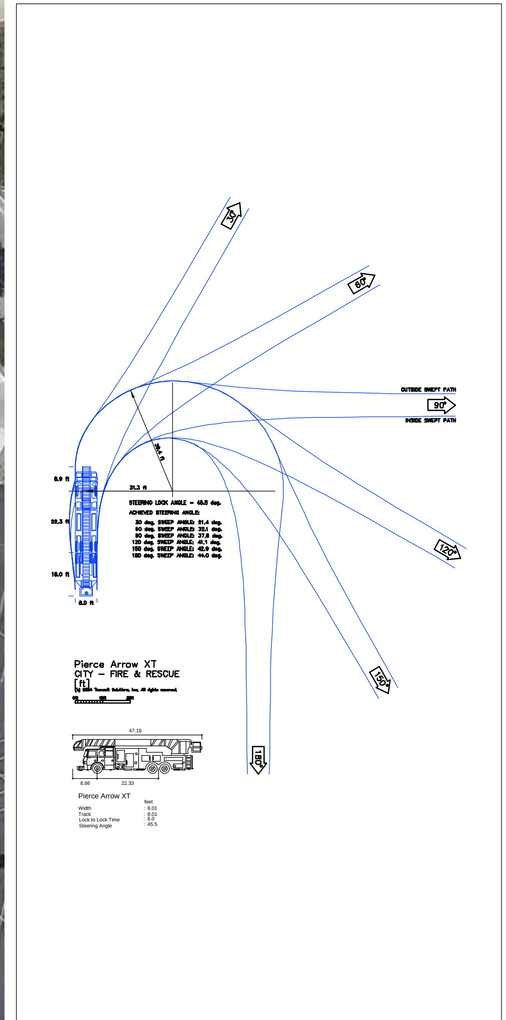
2.3.2 *Fire Truck/Emergency Site Access*

Fire truck/emergency vehicles would also access the site via the Orange Avenue driveway. As shown in ***Figure 2-3***, the turnaround area in front of the building could accommodate the fire truck access. The Fire Department access lane is also provided along the northerly perimeter of the site as well as behind the existing subacute hospital building where a turnaround area is provided in the western portion of the site.

2.3.3 *Non-Vehicular Site Access*

The project is designed to accommodate non-vehicular access to the proposed project site. Pedestrian access within the project site will be accommodated by Americans with Disabilities Act (ADA) compliant walkways near the eastern portion of the site. As shown in *Figure 2-2*, an accessible pedestrian path of travel is provided from the off-site parking lot to the entrance of the proposed project building by utilizing the existing crosswalk at the Orange Avenue/Cameron Avenue intersection and the existing sidewalk on the west side of Orange Avenue and then





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LINSCOTT LAW & GREENSPAN engineers

Figure 2-3

Vehicle Turning Maneuvers for Fire Truck Access

West Covina Medical Center - Behavioral Health Addition Project

connecting to planned walkways onsite. These walkways will provide exclusive pedestrian and bicycle access to/from the existing public sidewalk along the project site frontage. The walkways thus minimize the extent of pedestrian and bicycle interaction with vehicles at the site and provide a comfortable, convenient, and safe environment for pedestrians and bicyclists accessing the building from outside the project site. Due to the anticipated increased usage of the off-site parking lot, more pedestrians are expected to utilize the existing crosswalk at the Orange Avenue/Cameron Avenue intersection to access the site as shown in *Figure 2-2*. As such, it is recommended that the existing crosswalk at the Orange Avenue/Cameron Avenue intersection be converted to white continental crosswalks to provide greater visibility and safety to both pedestrians and motorists.

2.4 Sight Distance Review

A review has been conducted to evaluate the adequacy of sight distance at the project driveway intersection with Orange Avenue, which is planned to serve as the access to and from the project site for those being transported as well as some staff parking behind the buildings. The critical sight distance was determined to be between exiting motorists and motorists traveling on Orange Avenue or from the I-10 Freeway eastbound off-ramp. Specifically, a sight distance analysis has been prepared at the subject location in order to determine the adequacy of motorists' lines of sight and focuses on the northbound and southbound approaching vehicles on Orange Avenue (assuming a north-south orientation for Orange Avenue) as well as the exiting right-turn vehicles at the project site driveway (i.e., intersection sight distance). The sight distance analysis is based on the criteria set forth in the American Association of State Highway and Transportation Officials' (AASHTO) *A Policy on Geometric Design of Highways and Streets*.[3] Stopping sight distance is the distance that a driver of a vehicle, traveling at a certain speed, is able to bring the vehicle to a stop after an object on the road becomes visible. Sight distance is also provided for intersections (including private streets and driveways) to allow the drivers of stopped vehicles a sufficient view of the intersecting roadway to decide when to enter the intersecting roadway or to cross it. If available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major roadway, then drivers have sufficient sight distance to anticipate and avoid collisions.

2.4.1 *Intersection Sight Distance at Project Driveway*

According to Table 9-8 *(Design Intersection Sight Distance-Case B2-Right Turn from Stop, Case B3-Crossing Maneuver)* of the AASHTO document, a design speed of 25 miles per hour would require a minimum stopping sight distance of 155 feet and an intersection sight distance of 240 feet for passenger cars. The sight distance values summarized in Table 9-8 of the AASHTO document are for a stopped vehicle to turn right onto or to cross a two-lane highway without a raised median island. No adjustments were necessary to be made for Orange Avenue.

[3] *A Policy on Geometric Design of Highways and Streets*, Chapter 9, American Association of State Highway and Transportation Officials (AASHTO), 7th Edition, 2018.

Figure 2-4 displays the conceptual plan of the proposed project with the adjacent street system and the minimum required intersection sight distances for the project site driveway. The existing lines of sight for the northbound and southbound motorists approaching the Orange Avenue project driveway are also illustrated in *Figure 2-4*. *Figure 2-4* shows that when an exiting motorist's vehicle (i.e., front bumper) is placed 15 feet from the edge of the travel way to the motorists' eye according to AASHTO guidelines, a line of sight to meet the stated minimum would not exist for the project site driveway for the critical case, which is Case B2 – Right Turn from Stop and Case B3 – Crossing Maneuver. As shown in *Figure 2-4*, the line of sight should be clear of any tall landscaping, signage, or objects (i.e., be less than 36 inches in height) so as to maintain a clear line of sight between exiting motorists and oncoming motorists.

Based on the utilization of a design speed of 25 mph along Orange Avenue, the sight distance analyses contained herein, and strict application of the AASHTO guidelines, it can be concluded that the existing intersection sight distance at the Orange Avenue project driveway does not meet the minimum requirements for exiting project driveway motorists and oncoming northbound and southbound (approaching) vehicles on Orange Avenue. While the intersection sight distance of less than 240 feet is provided for the oncoming northbound (approaching) vehicles on Orange Avenue, these vehicles will be controlled by the existing intersection of Orange Avenue/Cameron Avenue and thus will not likely be traveling at the design speed just north of Cameron Avenue.

In order to maintain the clear lines of sight at the project driveway, it is therefore recommended that red curb markings and signage be installed to prohibit on-street parking along the west side of Orange Avenue along the project frontage. It is recommended that the existing red curb marking immediately south of the project driveway be extended by approximately 40 feet to connect with the next southerly red curb marking on Orange Avenue. All existing red curb markings on Orange Avenue are to be refreshed for visibility. The two-hour parking sign that is located to the north of the existing entrance canopy is to be removed. It is also recommended that the existing trees and bushes along the west side of Orange Avenue/freeway off-ramp north of the project driveway be trimmed as they currently obstruct the required line of sight of approaching southbound vehicles on Orange Avenue. There is currently a 20 miles per hour speed advisory sign at the beginning of the freeway off-ramp north of the driveway. As shown in ***Figure 2-4***, the installation of an advance warning signs (i.e., W2-1 and W70, Cross Traffic Ahead) on both sides of Orange Avenue would also be recommended for southbound approaching vehicles coming from the freeway off-ramp to indicate the presence of an intersection/driveway further ahead. With the on-street parking removal, trimming of the existing vegetation and advance warning signages, intersection sight distance would be improved between exiting motorists at the project driveway and oncoming (approaching) vehicles in both directions on Orange Avenue. Further, while the minimum intersection sight distances are not met given the location of the existing driveway and the roadway curvature from the freeway off-ramp to Orange Avenue, the majority of visitors/staff parking will be provided at the off-site parking lot at the southwest corner of Orange Avenue/Cameron Avenue, while vehicles utilizing the Orange Avenue driveway on-site will primarily be staff and ambulances that are transporting patients. Due to the expected increased usage of the off-site parking lot, red curb markings are to be installed/refreshed for 20 feet on either side of both driveways for the off-site parking lot (i.e., at

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NOT TO SCALE

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PROPOSED SIGNS

W2-1 W70-(CA) W16-5P

Figure 2-4
Intersection Sight Distance at Project Driveway

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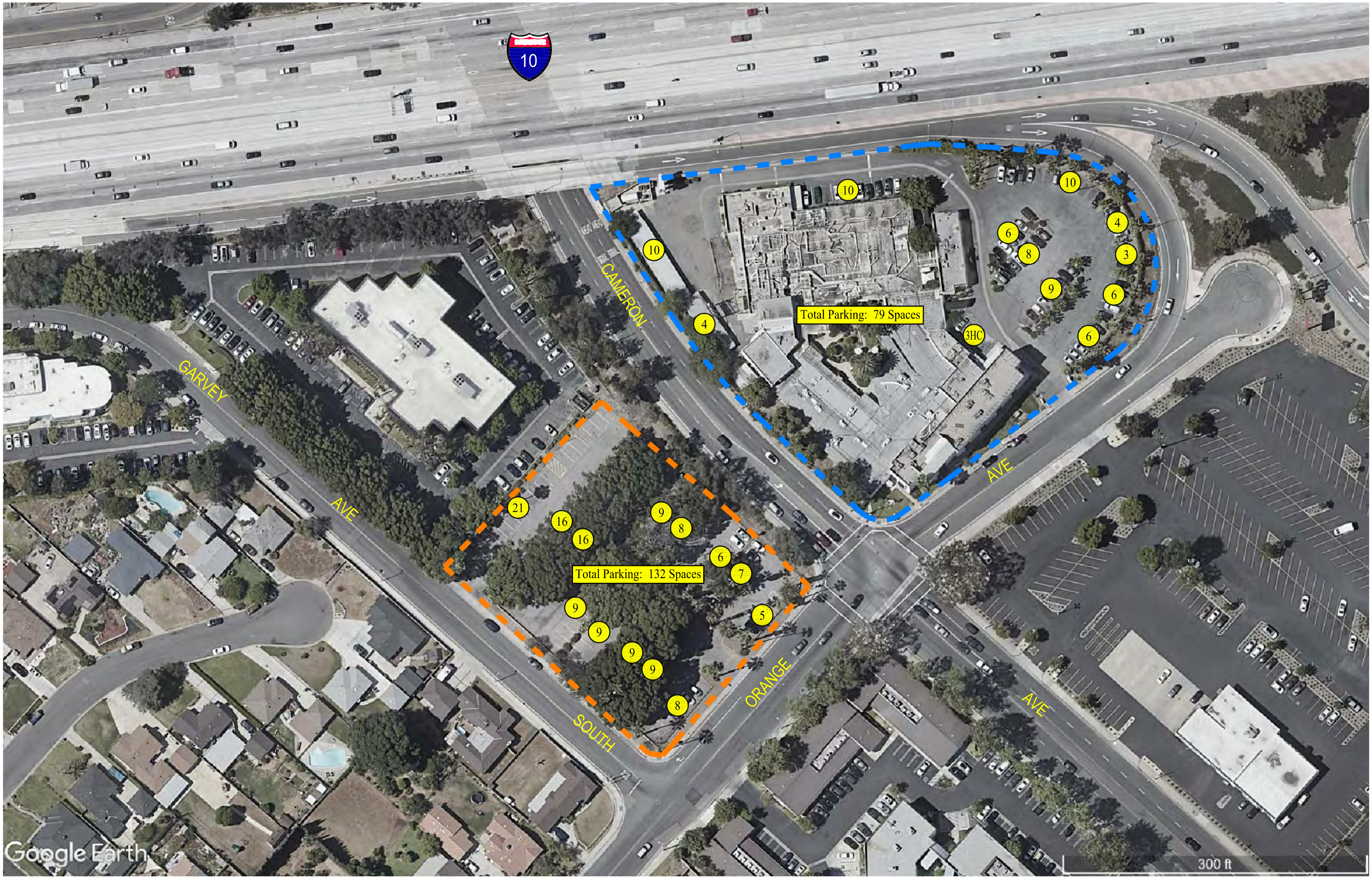
Garvey Avenue South and Orange Avenue driveways). Appropriate signages will also be installed at both driveways indicating the usage of the off-site parking lot for the West Covina Medical Center staff and visitors only. The number of entering and exiting (i.e., inbound and outbound) vehicles forecast with the development of the proposed project is discussed in detail in Section 2.11 of this report.

Collision data were requested from the California Highway Patrol's (CHP) Statewide Integrated Traffic Records System (SWITRS) for the City of West Covina for the most recent five (5) year period. According to SWITRS, data from seven (7) months prior to the date of request should be considered incomplete due to a collision records processing backlog. Therefore, the most recent five-year period is assumed to include September 1, 2019 through April 10, 2023. Collisions which occurred after April 10, 2023 to the date of request are included for informational purposes only. A summary of the collision records was compiled in order to identify any collisions which occurred adjacent to the project site, along Orange Avenue, Cameron Avenue, and at the intersection of Orange Avenue/Cameron Avenue. The collisions which were identified are presented in ***Appendix A***. During the five-year period, a total of ten (10) collisions were identified of which four (4) occurred at the intersection, four (4) occurred north of the intersection, and two (2) occurred south of the intersection. Development of the proposed project will not change the existing roadway conditions along this roadway segment with the majority of project trips anticipated to/from the off-site parking lot. Sight distances recommendations at the Orange Avenue driveway intersection (i.e., on-street parking removal, trees/brush trimming, and advance warning signage) will also improve the visibility and safety at the project driveway and along the project frontage on Orange Avenue.

2.5 Existing and Future Total Parking Supply

Figure 2-5 provides an aerial photograph illustration of the overall existing site as well as the various surface parking areas provided on-site and off-site. As illustrated in *Figure 2-5*, the on-site surface parking lot for the WCMC currently provides a total of 79 spaces (i.e., 62 standard spaces, 14 reserved spaces, and 3 handicap accessible spaces). In addition to the on-site parking spaces, a total of 132 parking spaces are currently provided in the off-site surface lot located at the southwest corner of Orange Avenue/Cameron Avenue. A total of six (6) spaces are provided on-street, along the west side of Orange Avenue north of Cameron Avenue. For purposes of this parking analysis, when accounting for the off-site spaces, the total off-site lot and on-street parking supply consists of 138 spaces. Therefore, the combined existing site-wide parking supply totals 217 spaces (i.e., 79 on-site spaces, 6 on-street spaces, 132 off-site spaces).

Parking for the existing Medical Center as well as the proposed behavioral health building addition will be provided at the on-site and off-site surface parking lots. With the proposed building addition for the project, the on-site parking spaces would be reduced to 18 spaces from the existing 79 spaces. As shown in *Figure 2-2*, the future on-site parking supply consists of 12 standard spaces and 6 handicap accessible spaces. Therefore, the combined future site-wide parking supply for the overall site is 150 parking spaces (i.e., 18 on-site spaces and 132 off-site spaces).



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MAP SOURCE: GOOGLE EARTH PRO

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Linscott Law & Greenspan engineers

Project Site

Off-Site Parking Lot

Figure 2-5
Existing Parking Supply

2.6 City Code Parking Requirements

A calculation of the Code parking requirement was prepared in accordance with the City of West Covina Municipal Code off-street parking requirements (Section 26-582, Parking Ratios, nonresidential). In accordance with the Municipal Code parking regulations, the following parking requirements most applicable to the existing site and proposed project are as follows:

• Medical and dental office	For buildings having less than 20,000 square feet of gross floor area: 1 space for every 150 square feet of gross floor area. For buildings having more than 20,000 square feet of gross floor area: 1 space for every 200 square feet of gross floor area.
• Hospitals and sanitariums	1.5 spaces per bed.

Source: City of West Covina Municipal Code (Section 26-582, Parking ratios, nonresidential).

Through strict application of the Municipal Code parking regulations, the following parking requirement would be calculated for the existing hospital and medical office along with the proposed project. The net square footage applied below for the medical office excludes the space allocated to restrooms, janitor and mechanical closets, and stairwells. As noted previously in the project description, the total gross floor area of the behavioral health building addition is 42,000 square feet with 71 beds:

- Existing Subacute Hospital: 33 beds x 1.5 spaces/bed = 50 spaces
- Existing Medical Offices: 29,200 SF x 1.0 space/200 SF = 146 spaces
- Proposed Project Addition: 71 beds x 1.5 spaces/bed = rounded to 107 spaces

  Total Code Required Parking = 303 spaces

As summarized above, a total of 303 spaces would be required for the existing subacute hospital, existing medical offices, and proposed behavioral health addition based on direct application of the Zoning Code parking requirements. Specifically, the Code parking requirement for the proposed behavioral health building addition is 107 spaces of the total 303 required spaces for the overall medical campus.

When comparing the above Municipal Code parking requirement of 303 spaces to the proposed overall sitewide future parking supply of 150 spaces, a theoretical deficit of 153 parking spaces is calculated. However, it is important to note that the City of West Covina Municipal Code also contains provisions which allow for the joint use of parking spaces, dependent upon the land uses and nature of offset parking demands. Empirical parking demands for the existing site and future projections for the proposed use based on information pertaining to the site operations were also reviewed.

2.7 Comparison of Industry Standard Parking Ratios

2.7.1 *ITE Parking Demand Ratios*

In addition to reviewing Code parking requirements, the average peak parking demands for various land uses are often estimated using parking ratios contained in other industry standard parking publications. LLG reviewed parking ratios contained in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*[4] publication. The *Parking Generation Manual* presents the state-of-the-practice understanding of the relationship between parking demand and various characteristics associated with individual land use developments, based on parking studies conducted at locations throughout North America. While the *Parking Generation Manual* contains a parking ratio for hospital facilities, this land use type may not be directly applicable for the proposed project site operations. Nonetheless, the ITE Land Use 610 (Hospital) average peak parking demand ratios were reviewed and compared with that expected through application of the Code parking requirements. When utilizing the ITE publication, the parking demand can be calculated through application of the average peak parking demand ratios based on the total building gross floor area. The average weekday parking demand ratios for the two land use types are summarized below:

- ITE Land Use Code 610 (Hospital) average weekday peak period parking demand ratio: 2.25 spaces for every 1,000 square feet of gross floor area (15 study sites, average building size: 449,000 SF); 3.89 spaces per bed (51 study sites, average number of 390 beds)
- ITE Land Use Code 720 (Medical-Dental Office Building-Hospital Campus) average weekday peak period parking demand ratio: 3.58 spaces for every 1,000 square feet of gross floor area (16 study sites, average building size: 53,000 SF)

Application of the ITE published parking demand ratios above to the existing site and proposed project would yield an average weekday peak parking demand of 263 spaces for the overall site as calculated below.

- Existing Hospital: 28,000 x 2.25 spaces/1,000 SF = 63 spaces
- Existing Medical Offices: 29,200 SF x 3.58 spaces/1,000 SF = rounded to 105 spaces
- Proposed BH Addition: 42,000 SF x 2.25 spaces/1,000 SF = rounded to 95 spaces

Total ITE Parking Demand = 263 spaces

Thus, the Code parking requirement for the proposed project (i.e., 303 spaces) is 40 spaces more than the parking demand forecast utilizing the ITE parking demand ratios (i.e., 263 spaces).

[4] *Parking Generation Manual*, 6th Edition, Institute of Transportation Engineers, Washington D.C., October 2023.

2.8 Site Specific Operations and Forecast Parking Demand

Due to the unique characteristics of the project, parking spaces are expected to be shared with the existing subacute general hospital, medical office, and the proposed project. Details pertaining to site-specific operations for the proposed behavioral health building as well as the existing subacute hospital and medical office was provided by the Project Applicant team to forecast the future parking demand for the proposed project and the overall site as a whole. The site-specific parking demand analysis was prepared to determine whether adequate site-wide parking supply would be provided to accommodate the peak parking demand considering the existing parking demands of the subacute hospital, the medical office, and the proposed behavioral health building addition. The forecast parking needs of each user group for the subacute hospital, medical office, and the proposed behavioral health building addition are summarized below in ***Table 2-1***.

Table 2-1
Existing and Project Peak Parking Demands

Existing Subacute Hospital User Groups		# Parking Spaces
Employees/Staff	10 employees/peak shift	20 spaces
Visitors	3 visits/day	3 spaces
Inspectors/Maintenance/Other	--	5 spaces
Total Parking for Existing Subacute Hospital		**28 spaces**
Existing Medical Office (starting 1/2025) User Groups		**# Parking Spaces**
Employees/Staff	8 employees/daily shift	8 spaces
Visitors	0 visits/day	0 spaces
Day Care Patients	10 visits/day	Mini-vans Drop-Off
Total Parking for Medical Office		**8 spaces**
Proposed Behavioral Health Addition User Groups		**# Parking Spaces**
Employees/Staff	16 employees/peak shift	32 spaces
Visitors	5 visits/day	5 spaces
Emergency Ambulance	10 visits/day	Ambulance Drop-Off Area
Total Parking for Behavioral Health Addition		**37 spaces**
Total Parking for Subacute Hospital, Medical Office and Proposed Behavioral Health Addition Project		**73 spaces**

For the proposed project, the Applicant anticipates that a total of 50 employees would be required for the project and two (2) shifts would be expected for typical site operations. Thus, with two planned shifts per day (i.e., from 7:00 AM to 7:00 PM and 7:00 PM to 7:00 AM), an average of 16 employees is expected per peak shift. It is noted that the site-specific expected employee figure during the peak shift was utilized to estimate the number of parking spaces/vehicles based on an average vehicle ridership (AVR) of 1.0 persons per vehicle without application of an absenteeism rate adjustment. It was also conservatively assumed that all employees would drive alone to the site and does not account for utilization of other modes of transportation (i.e., walk, bike, arriving via public transportation, carpool, etc.). The 32 staff spaces allocated also account for any potential overlap that could occur between the shift changes. The patients are transported to the site by ambulances and no more than ten (10) emergency ambulance visits are anticipated on a given day. The ambulance or non-emergency transport vans will arrive to awaiting staff in the rear entrance on the east side of the property in the drop-off area and thus will not utilize parking spaces on-site. Based on the site-specific parking needs for each of the user groups, a total peak parking demand for the project is forecasted to be 37 spaces. Altogether, the site-specific parking needs for the site as a whole is forecast to be 73 spaces.

2.9 Existing Site Parking Demand

The existing parking demand was also measured at the on-site parking spaces as well as the adjacent surface parking lot in order to determine the adequacy of the future planned parking supply to accommodate the peak parking demand generated by the existing occupied subacute hospital and medical office buildings along with the proposed project. Additionally, the parking demand data were used as a basis for forecasting future parking demand following the full occupancy of the overall site.

The existing parking demand was determined by conducting parking accumulation counts of the on-site and off-site surface lot parking areas. Parking demand associated with the existing WCMC that were observed to utilize street parking (i.e., along the west side of Orange Avenue north of Cameron Avenue) or off-site parking lots (i.e., at the surface parking lot at the southwest corner of the Orange Avenue/Cameron Avenue intersection or the surface parking lot at the northeast corner of the Orange Avenue/Cameron Avenue intersection) were also included as part of the total existing parking demand for the WCMC. The parking accumulation counts were conducted by a subconsultant (City Traffic Counters) in 60-minute increments from 9:00 AM to 7:00 PM during two consecutive weekdays and one weekend day (Saturday) in April 2023. These days and time periods were selected so as to capture the hourly parking trend in order to determine the peak facility usage periods. Summaries of the parking accumulation surveys for the observation days are presented in ***Tables 2-2(a)***, ***2-2(b)*** for the weekdays and ***Table 2-3*** for the weekend (Saturday). As noted in *Tables 2-2* and *2-3* and shown in *Figure 2-5*, the parking areas were disaggregated so as to gain a better understanding of parking demand and usage within the site and off-site parking areas. As can be expected, the areas of highest utilization are nearest to the existing building entrances, which are the most conveniently located spaces in the parking areas.

Table 2-2(a)
WEEKDAY PARKING ACCUMULATION SURVEY
OBSERVATION DATE: TUESDAY, APRIL 4, 2023

		NUMBER OF PARKING SPACES																					
	PKG	9:00 AM		10:00 AM		11:00 AM		12:00 PM		1:00 PM		2:00 PM		3:00 PM		4:00 PM		5:00 PM		6:00 PM		7:00 PM	
PARKING LOCATIONS	SUPPLY	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
On-Site Parking Locations																							
Rear of Bldg 725 & 741 Orange Ave - Reserved	14	9	64.3%	10	71.4%	11	78.6%	10	71.4%	9	64.3%	8	57.1%	10	71.4%	10	71.4%	7	50.0%	7	50.0%	7	50.0%
Northside of Bldg 725 & 741 Orange Ave	10	7	70.0%	7	70.0%	6	60.0%	8	80.0%	5	50.0%	5	50.0%	4	40.0%	4	40.0%	4	40.0%	3	30.0%	2	20.0%
Bldg 725 & 741 Orange Ave - HC	3	1	33.3%	1	33.3%	1	33.3%	3	100.0%	1	33.3%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Bldg 725 & 741 Orange Ave - Standard	52	50	96.2%	49	94.2%	49	94.2%	48	92.3%	41	78.8%	39	75.0%	39	75.0%	24	46.2%	21	40.4%	21	40.4%	15	28.8%
TOTAL ON-SITE PARKING	**79**	**67**	**84.8%**	**67**	**84.8%**	**67**	**84.8%**	**69**	**87.3%**	**56**	**70.9%**	**53**	**67.1%**	**54**	**68.4%**	**38**	**48.1%**	**32**	**40.5%**	**31**	**39.2%**	**24**	**30.4%**
On-Street/Off-Site Parking Locations																							
W/s of Orange Ave N/o Cameron Ave	6	5	83.3%	2	33.3%	2	33.3%	6	100.0%	1	16.7%	1	16.7%	1	16.7%	1	16.7%	2	33.3%	2	33.3%	0	0.0%
Surface Lot (SWC of Orange Ave/Cameron Ave)	132	6	4.5%	11	8.3%	12	9.1%	18	13.6%	11	8.3%	9	6.8%	10	7.6%	9	6.8%	6	4.5%	4	3.0%	2	1.5%
Surface Lot (Floor & Décor Lot)	[C]	19	--	24	--	23	--	17	--	17	--	17	--	13	--	11	--	7	--	4	--	1	--
TOTAL ON-STREET & OFF-SITE PARKING	**138**	**30**	**21.7%**	**37**	**26.8%**	**37**	**26.8%**	**41**	**29.7%**	**29**	**21.0%**	**27**	**19.6%**	**24**	**17.4%**	**21**	**15.2%**	**15**	**10.9%**	**10**	**7.2%**	**3**	**2.2%**
TOTAL ON-SITE & OFF-SITE PARKING	**217**	**97**	**44.7%**	**104**	**47.9%**	**104**	**47.9%**	**110**	**50.7%**	**85**	**39.2%**	**80**	**36.9%**	**78**	**35.9%**	**59**	**27.2%**	**47**	**21.7%**	**41**	**18.9%**	**27**	**12.4%**

Notes: [A] Inventory conducted by LLG Engineers March 23, 2023.
[B] Parking counts conducted by City Traffic Counters.
[C] Parking spaces at the Floor & Décor Lot utilized by WCMC staff are excluded from the total parking supply but included in the parking demand.

Table 2-2(b)
WEEKDAY PARKING ACCUMULATION SURVEY
OBSERVATION DATE: WEDNESDAY, APRIL 5, 2023

		NUMBER OF PARKING SPACES																					
	PKG	9:00 AM		10:00 AM		11:00 AM		12:00 PM		1:00 PM		2:00 PM		3:00 PM		4:00 PM		5:00 PM		6:00 PM		7:00 PM	
PARKING LOCATIONS	SUPPLY	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
On-Site Parking Locations																							
Rear of Bldg 725 & 741 Orange Ave - Reserved	14	12	85.7%	14	100.0%	14	100.0%	13	92.9%	11	78.6%	11	78.6%	13	92.9%	11	78.6%	11	78.6%	7	50.0%	6	42.9%
Northside of Bldg 725 & 741 Orange Ave	10	7	70.0%	10	100.0%	8	80.0%	8	80.0%	9	90.0%	10	100.0%	7	70.0%	6	60.0%	5	50.0%	2	20.0%	2	20.0%
Bldg 725 & 741 Orange Ave - HC	3	2	66.7%	3	100.0%	3	100.0%	2	66.7%	3	100.0%	3	100.0%	2	66.7%	1	33.3%	1	33.3%	1	33.3%	2	66.7%
Bldg 725 & 741 Orange Ave - Standard	52	50	96.2%	50	96.2%	49	94.2%	50	96.2%	42	80.8%	51	98.1%	47	90.4%	30	57.7%	21	40.4%	16	30.8%	16	30.8%
TOTAL ON-SITE PARKING	**79**	**71**	**89.9%**	**77**	**97.5%**	**74**	**93.7%**	**73**	**92.4%**	**65**	**82.3%**	**75**	**94.9%**	**69**	**87.3%**	**48**	**60.8%**	**38**	**48.1%**	**26**	**32.9%**	**26**	**32.9%**
On-Street/Off-Site Parking Locations																							
W/s of Orange Ave N/o Cameron Ave	6	6	100.0%	5	83.3%	6	100.0%	5	83.3%	5	83.3%	4	66.7%	4	66.7%	3	50.0%	2	33.3%	1	16.7%	0	0.0%
Surface Lot (SWC of Orange Ave/Cameron Ave)	132	4	3.0%	8	6.1%	9	6.8%	12	9.1%	9	6.8%	7	5.3%	5	3.8%	6	4.5%	5	3.8%	2	1.5%	2	1.5%
Surface Lot (Floor & Décor Lot)	[C]	27	--	33	--	32	--	29	--	27	--	25	--	24	--	22	--	14	--	2	--	2	--
TOTAL ON-STREET & OFF-SITE PARKING	**138**	**37**	**26.8%**	**46**	**33.3%**	**47**	**34.1%**	**46**	**33.3%**	**41**	**29.7%**	**36**	**26.1%**	**33**	**23.9%**	**31**	**22.5%**	**21**	**15.2%**	**5**	**3.6%**	**4**	**2.9%**
TOTAL ON-SITE & OFF-SITE PARKING	**217**	**108**	**49.8%**	**123**	**56.7%**	**121**	**55.8%**	**119**	**54.8%**	**106**	**48.8%**	**111**	**51.2%**	**102**	**47.0%**	**79**	**36.4%**	**59**	**27.2%**	**31**	**14.3%**	**30**	**13.8%**

Notes: [A] Inventory conducted by LLG Engineers March 23, 2023.
[B] Parking counts conducted by City Traffic Counters.
[C] Parking spaces at the Floor & Décor Lot utilized by WCMC staff are excluded from the total parking supply but included in the parking demand.

Table 2-3
WEEKEND PARKING ACCUMULATION SURVEY
OBSERVATION DATE: SATURDAY, APRIL 1, 2023

		NUMBER OF PARKING SPACES																					
	PKG	9:00 AM		10:00 AM		11:00 AM		12:00 PM		1:00 PM		2:00 PM		3:00 PM		4:00 PM		5:00 PM		6:00 PM		7:00 PM	
PARKING LOCATIONS	**SUPPLY**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**	**NO.**	**%**
On-Site Parking Locations																							
Rear of Bldg 725 & 741 Orange Ave - Reserved	14	9	64.3%	9	64.3%	9	64.3%	9	64.3%	7	50.0%	7	50.0%	7	50.0%	7	50.0%	7	50.0%	8	57.1%	6	42.9%
Northside of Bldg 725 & 741 Orange Ave	10	1	10.0%	1	10.0%	1	10.0%	1	10.0%	1	10.0%	1	10.0%	1	10.0%	1	10.0%	1	10.0%	0	0.0%	0	0.0%
Bldg 725 & 741 Orange Ave - HC	3	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%
Bldg 725 & 741 Orange Ave - Standard	52	12	23.1%	12	23.1%	12	23.1%	8	15.4%	12	23.1%	12	23.1%	10	19.2%	7	13.5%	7	13.5%	7	13.5%	6	11.5%
TOTAL ON-SITE PARKING	**79**	**23**	**29.1%**	**23**	**29.1%**	**23**	**29.1%**	**19**	**24.1%**	**21**	**26.6%**	**21**	**26.6%**	**19**	**24.1%**	**16**	**20.3%**	**16**	**20.3%**	**16**	**20.3%**	**13**	**16.5%**
On-Street/Off-Site Parking Locations																							
W/s of Orange Ave N/o Cameron Ave	6	0	0.0%	0	0.0%	0	0.0%	1	16.7%	1	16.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Surface Lot (SWC of Orange Ave/Cameron Ave)	132	1	0.8%	0	0.0%	0	0.0%	2	1.5%	1	0.8%	1	0.8%	0	0.0%	1	0.8%	0	0.0%	0	0.0%	0	0.0%
Surface Lot (Floor & Décor Lot)	[C]	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--	0	--
TOTAL ON-STREET & OFF-SITE PARKING	**138**	**1**	**0.7%**	**0**	**0.0%**	**0**	**0.0%**	**3**	**2.2%**	**2**	**1.4%**	**1**	**0.7%**	**0**	**0.0%**	**1**	**0.7%**	**0**	**0.0%**	**0**	**0.0%**	**0**	**0.0%**
TOTAL ON-SITE & OFF-SITE PARKING	**217**	**24**	**11.1%**	**23**	**10.6%**	**23**	**10.6%**	**22**	**10.1%**	**23**	**10.6%**	**22**	**10.1%**	**19**	**8.8%**	**17**	**7.8%**	**16**	**7.4%**	**16**	**7.4%**	**13**	**6.0%**

Notes: [A] Inventory conducted by LLG Engineers March 23, 2023.
[B] Parking counts conducted by City Traffic Counters.
[C] Parking spaces at the Floor & Décor Lot utilized by WCMC staff are excluded from the total parking supply but included in the parking demand.

As documented in the parking observations, parking usage by staff of the existing subacute hospital/medical office at the adjacent retail (i.e., Floor & Décor) parking lot was observed and included in the overall existing parking demand for the site. However, the parking supply is excluded for a conservative assessment since no formal shared parking agreement exists between the two properties.

It is noted that these parking accumulation counts were conducted when the existing medical offices were still occupied by various tenants (i.e., orthopedic surgery practice, skin care clinic, podiatry clinic, internal medicine physician practice, chiropractic clinic, and a certified nurses aid training school that opens on Saturday only). The existing medical office tenants include a total of approximately 24 staff during the peak shift and roughly six (6) visitors per hour during the average weekday based on tenant information provided by the Project Applicant. Assuming an AVR of 1.0 for the staff and visitor population for the medical offices, it is conservatively estimated that the existing parking demand of 30 spaces would be eliminated once the majority of the medical office tenants are vacated. The existing medical offices are planned to primarily be vacated by January 2025, with the exception of one tenant. The remaining tenant (i.e., Psychiatric Day Treatment Group Therapy Program) currently provides continued treatment to patients who arrive from residential care facilities for daily treatment. The program is slated for expansion in January 2025 and will require two (2) additional staff (from six to eight total professional staff), and adult day care patients are expected to increase from 30-40 patients to 40-50 patients. All of the adult day care patients will continue to be transported in three (3) minivans with staggered trips in the morning and return trips in the afternoon, Monday through Friday. No visitors are expected with the continued operation of the Psychiatric Day Treatment Group Therapy Program. Altogether, the future parking demand for the medical office component is expected to result in a net decrease of 28 spaces (i.e., 2 additional Psychiatric Day Care staff spaces and 30 less spaces for other medical office tenants to be vacated) during the weekday peak period.

Briefly, the highest peak hour demand during the three observation days occurred at 10:00 AM on Wednesday, when a total of 123 spaces were observed to be occupied (i.e., 77 on-site spaces and 46 off-site spaces). The weekend parking demand was observed to be much lower than the weekday demand, with on-site parking demand levels remaining below 30 percent during the weekend. Additionally, in order to account for the anticipated planned vacancies and future use of the medical office, the existing weekday peak parking demand was adjusted to 95 spaces (i.e., 123 spaces less 28 spaces).

2.10 Total Future Forecast Parking Demand

As mentioned previously, the proposed behavioral health building addition would displace a portion of the existing surface parking on-site such that the future on-site parking supply is reduced to 18 spaces (i.e., 12 standard spaces, 6 handicap accessible spaces) located primarily to the north of and behind the building. Thus, the overall future parking supply for the existing WCMC and the proposed project addition totals 150 spaces (i.e., 18 on-site spaces and 132 off-site spaces). It is expected that the future parking demand forecast for the project will total 37 spaces as shown previously in *Table 2-1*. Based on the use of these facilities and site-specific information provided, the parking supply ratios of staff vs. visitor parking is estimated to be allocated such that 80% of the total parking supply (i.e., 150 spaces x 0.80 = 120 spaces) is for staff/employees and the remaining 20% is for visitors (i.e., 150 spaces x 0.20 = 30 spaces).

When the existing adjusted peak parking demand of 95 spaces is utilized in combination with the forecast project parking demand of 37 spaces, it would result in a total future peak parking demand of 132 spaces (i.e., 88% occupancy of the total parking supply of 150 spaces) for the overall site during the peak weekday condition. Greater surpluses could be expected during other days/times of the weekday and weekend time periods. This total peak parking demand of 132 spaces for the overall site is conservative as it is recognized to be more than the forecast total peak parking demand of 73 spaces shown in *Table 2-1*, which was determined based on site-specific operational data for each of the user groups.

2.11 Project Trip Generation and Distribution

2.11.1 *Project Trip Generation*

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Traffic volumes expected to be generated by the proposed project were estimated for the weekday commuter AM and PM peak hours, as well as over a 24-hour daily period, using trip generation rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*[5]. The ITE document contains trip rates for a variety of land uses which have been derived based on traffic counts conducted at existing sites throughout California and the United States.

The trip generation rates and forecast of the vehicular trips anticipated to be generated by the proposed project are presented in ***Table 2-4***. ITE Land Use Code 610 (Hospital) trip generation average rates were used to forecast the traffic volumes expected to be generated by the proposed project. Traffic volumes expected to be generated by the proposed project were based upon rates per thousand square feet of gross floor area. Based on empirical site operations data provided by the Project Applicant representatives, the ITE trip generation forecast when determined based on the gross floor area (as opposed to the number of patient beds) is more representative of actual site operations since the patients arriving to the site will primarily be transported via ambulance/service vehicles. The project trip generation forecast was submitted for review and approval by City staff as part of the Memorandum of Understanding scoping process.

As summarized in *Table 2-4*, the proposed project is expected to generate 34 new vehicle trips (23 inbound trips and 11 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 36 new vehicle trips (13 inbound trips and 23 outbound trips). Over a 24-hour period, the proposed project is forecast to generate approximately 452 new daily trip ends (226 inbound trips and 226 outbound trips) during a typical weekday.

[5] Institute of Transportation Engineers *Trip Generation Manual*, 11th Edition, 2021.

Table 2-4
PROJECT TRIP GENERATION FORECAST

TRIP GENERATION RATES [1]									
	ITE LAND USE		WEEKDAY	WEEKDAY AM PEAK HOUR			WEEKDAY PM PEAK HOUR		
ITE LAND USE CATEGORY	CODE	VARIABLE	DAILY	IN (%)	OUT (%)	TOTAL	IN (%)	OUT (%)	TOTAL
Hospital [3]	610	Per 1,000 GSF	10.77	67%	33%	0.82	35%	65%	0.86

PROJECT TRIP GENERATION FORECAST									
	ITE LAND USE		DAILY TRIP ENDS [2]	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
LAND USE	CODE	SIZE	VOLUMES	IN	OUT	TOTAL	IN	OUT	TOTAL
Proposed Project									
Behavioral Health Building Addition [3]	610	42,000 GSF	452	23	11	34	13	23	36
Total Project Trips			**452**	**23**	**11**	**34**	**13**	**23**	**36**

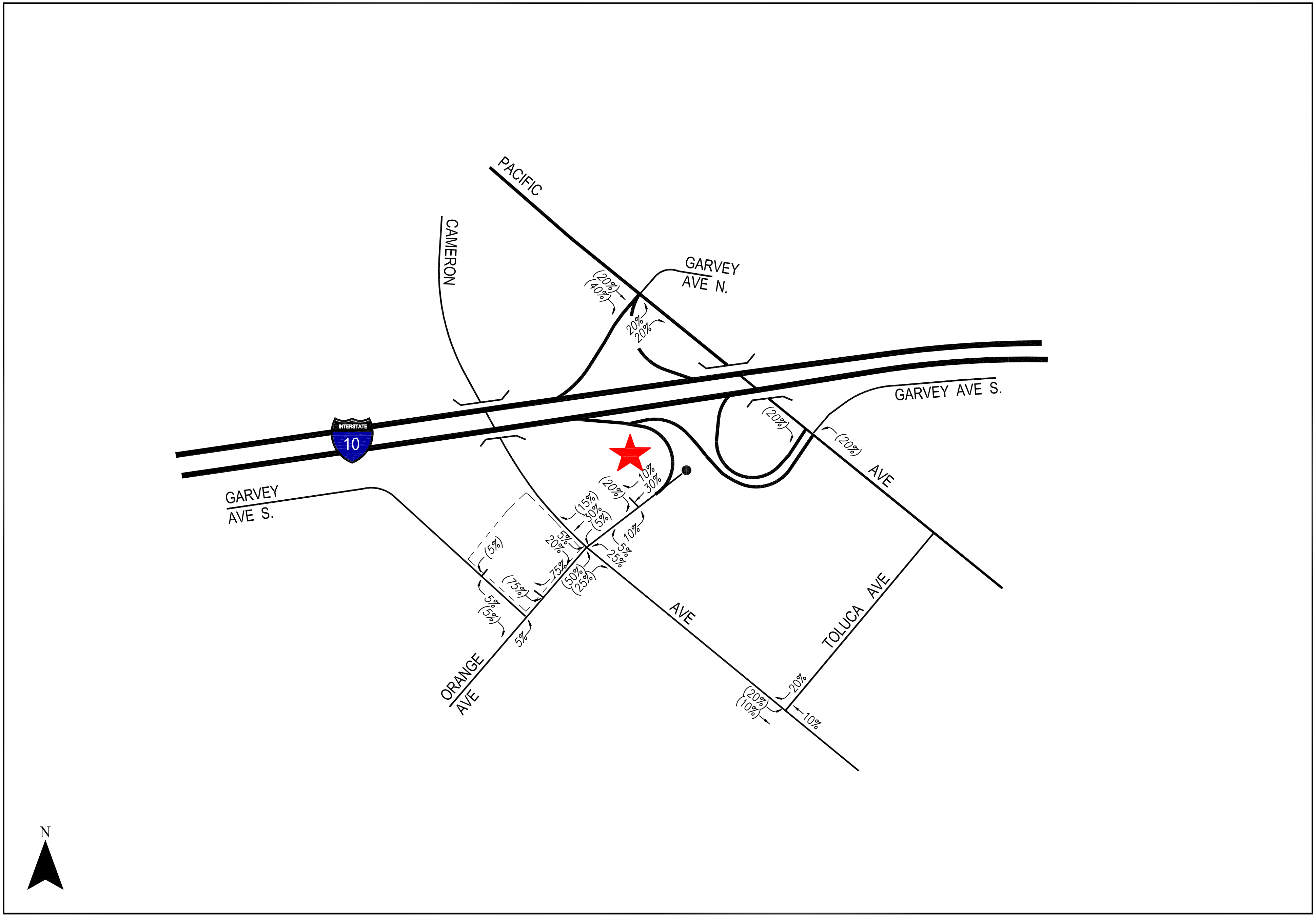
[1] Source: ITE "Trip Generation Manual", 11th Edition, 2021.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 610 (Hospital) trip generation average rates for General Urban/Suburban area.

2.11.2 *Project Trip Distribution and Assignment*

Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- The site's proximity to major traffic corridors (i.e., Orange Avenue, Cameron Avenue, and Pacific Avenue, I-10 Freeway, etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress scheme planned for the proposed project and the off-site parking lot;
- Nearby population and employment centers; and
- Input from City of West Covina Public Works Department staff.

The general, directional morning and afternoon traffic distribution patterns for the proposed project are presented in ***Figure 2-6***. The forecast new weekday AM and PM peak hour project traffic volumes at the study intersections associated with the proposed project are presented in ***Figures 2-7*** and ***2-8***, respectively. The traffic volume assignments presented in *Figures 2-7* and *2-8* reflect the traffic distribution characteristics shown in *Figure 2-6* and the project trip generation forecasts presented in *Table 2-4*.



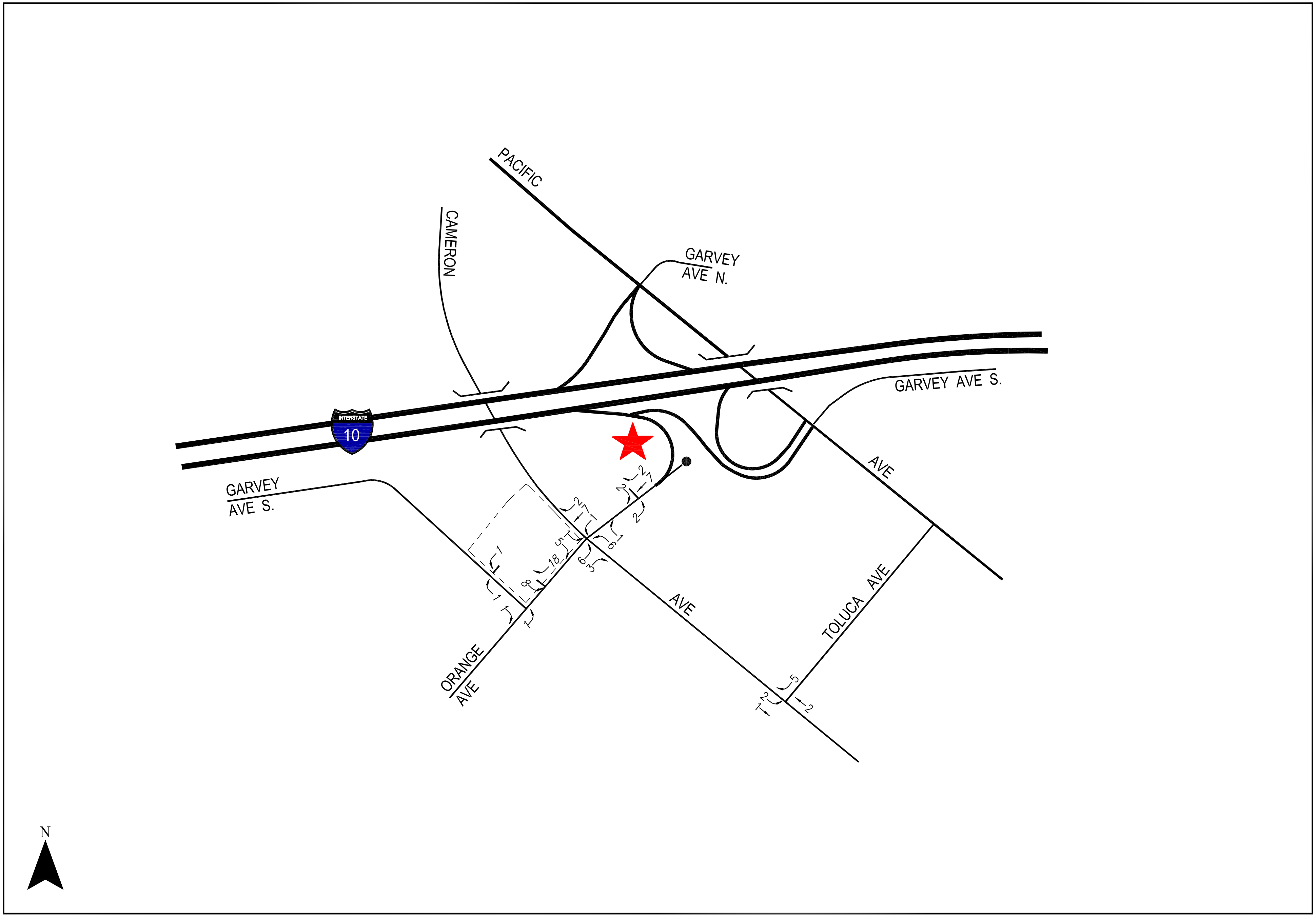
★ Project Site

XX = Inbound Percentage

(XX) = Outbound Percentage

Off-Site Parking Lot

Figure 2-6
Project Trip Distribution



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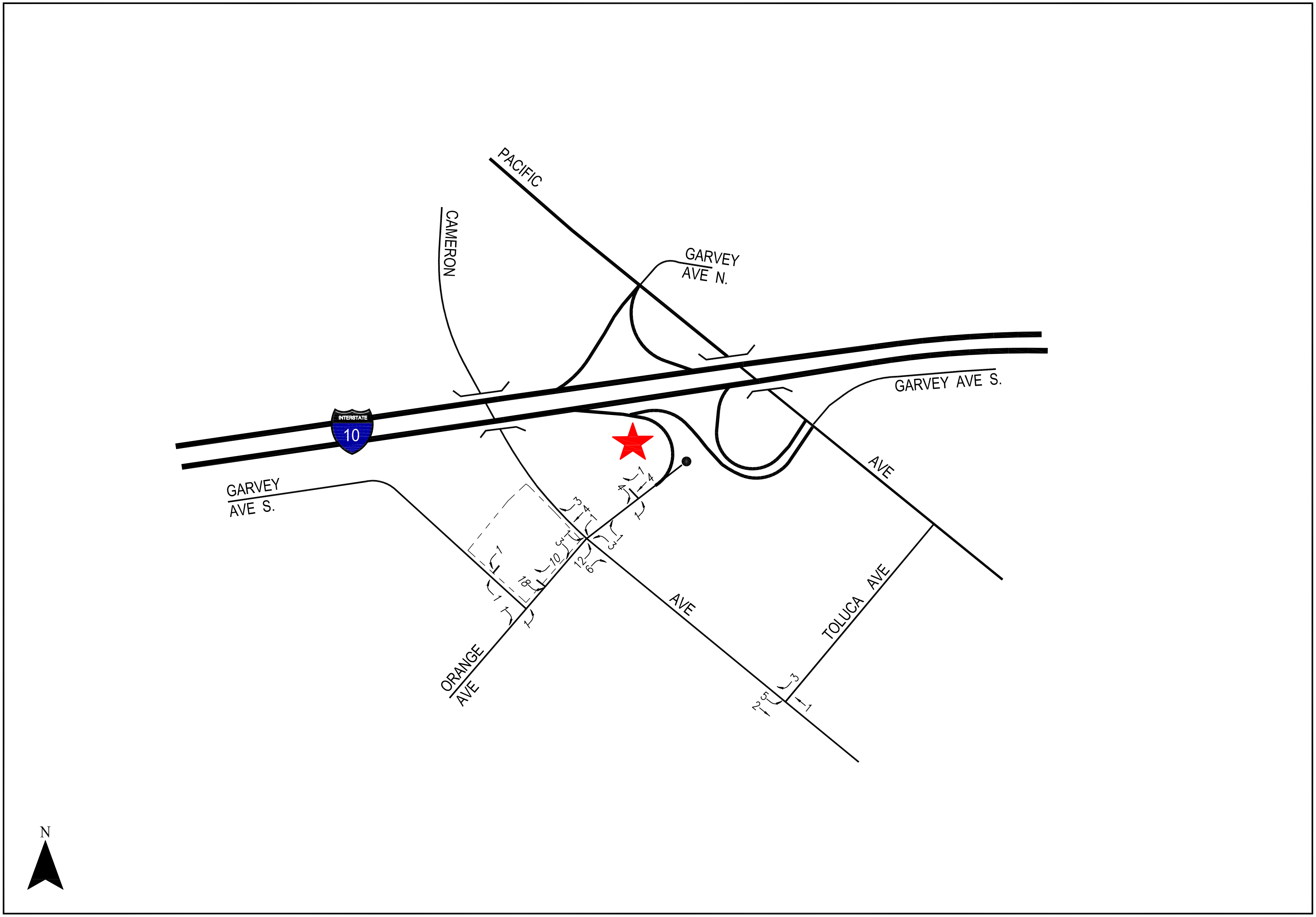
Project Site

Off-Site Parking Lot

Figure 2-7
Project Traffic Volumes
Weekday AM Peak Hour

West Covina Medical Center - Behavioral Health Addition Project



Project Site
Off-Site Parking Lot

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Figure 2-8
Project Traffic Volumes
Weekday PM Peak Hour

West Covina Medical Center - Behavioral Health Addition Project

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3.0 PROJECT SITE CONTEXT

The project site is located within a well-established multi-modal transportation network maintained by the City of West Covina. The following sections will provide an overview of the transportation infrastructure in the vicinity of the proposed project, including infrastructure which supports both motorized and non-motorized transportation modes.

3.1 Non-Vehicle Network

Non-vehicular transportation generally encompasses walking, biking, and other active transportation modes. Distinct facilities are often provided for these non-vehicular modes. Most prominently, paved sidewalks are typically provided to facilitate pedestrian travel outside of the roadway. In some cases, bicycle facilities such as painted bike lanes or separated bike paths are provided within the roadway in order to separate bike traffic from vehicular traffic. Roadways which are designed to prioritize non-vehicular transportation modes utilize complimentary non-vehicular infrastructure in order to promote comfortable, safe travel for both pedestrians and bicyclists. A review of the pedestrian and bicycle infrastructure provided in the vicinity of the project site is provided below.

3.1.1 *Pedestrian System*

Pedestrian infrastructure consists of facilities such as sidewalks, crosswalks, pedestrian signals, curb access ramps, Americans with Disabilities Act (ADA) compliant tactile warning strips, and curb extensions, among other things. These facilities are widely provided within the study area. Sidewalks are provided along the major corridors within the City, including Orange Avenue and Cameron Avenue. Marked crosswalks, pedestrian signals, and/or curb ramps are provided at the study intersections. Tactile warning strips consisting of blue truncated dome pads are provided for the curb ramps at the intersections of Orange Avenue/Cameron Avenue and Toluca Avenue/Cameron Avenue. As previously mentioned, it is recommended that the existing crosswalk at the Orange Avenue/Cameron Avenue intersection be converted to white continental crosswalks to provide greater visibility and safety to both pedestrians and motorists.

3.1.2 *Bicycle System*

Bicycle infrastructure consists of both facilities within the roadway as well as public bicycle parking spaces. The Federal and State transportation systems recognize three primary bikeway facilities: Bicycle Paths (Class I), Bicycle Lanes (Class II), and Bicycle Routes (Class III). Bicycle Paths (Class I) are exclusive car free facilities that are typically not located within a roadway area. Bicycle Lanes (Class II) are part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Bicycle Routes (Class III) are preferably located on collector and lower volume arterial streets.

The City of West Covina's Active Transportation Plan[6] indicates that there are minimal bicycle facilities within the City, all of which are located south of the I-10 Freeway. The nearest existing

[6] City of West Covina Active Transportation Plan, May 2018.

bike facility from the project site is an east-west bike route along Cameron Avenue and a north-south bike route along a section of Orange Avenue, between Cameron Avenue to Merced Avenue. Other bike lanes/bike routes are also located south of the project site along Sunset Avenue and north of the site along Puente Avenue. The existing bicycle infrastructure, transit, and common community destinations in the City of West Covina is illustrated in ***Figure 3-1***. The existing bicycle facilities in closest proximity to the proposed project site include bike lanes on sections of Sunset Avenue (approximately 0.8 miles south of the project site) and Lark Ellen Avenue (2.1 miles east of the project site).

3.2 Transit Network

Public bus and light rail transit services are provided within the project study area. Public bus service is provided in the City of West Covina by Foothill Transit and the City of West Covina operating as Go West. The Baldwin Park Transit Center (3825 Downing Avenue) and the Plaza West Covina Park and Ride serves the local public bus routes and Metrolink's San Bernardino Line. Several Foothill Transit lines and the West Covina Go West shuttle also run through the Plaza West Covina Park and Ride. The existing public transit routes in the vicinity of the project site are illustrated in ***Figure 3-2***. A summary of the existing transit service in the vicinity of the project site is presented in ***Table 3-1***.

As shown in *Figure 3-2*, public transit access to the project site is accommodated by Foothill Transit, which runs along Pacific Avenue at a frequency of 30 minutes during weekday peak service. The Go West Shuttle Blue Line also has one stop along the east side of Orange Avenue south of Cameron Avenue, which is located less than 200 feet south of the project site. Only signage and pole mounted trash receptacles are provided at the Go West Shuttle Blue Line stop.

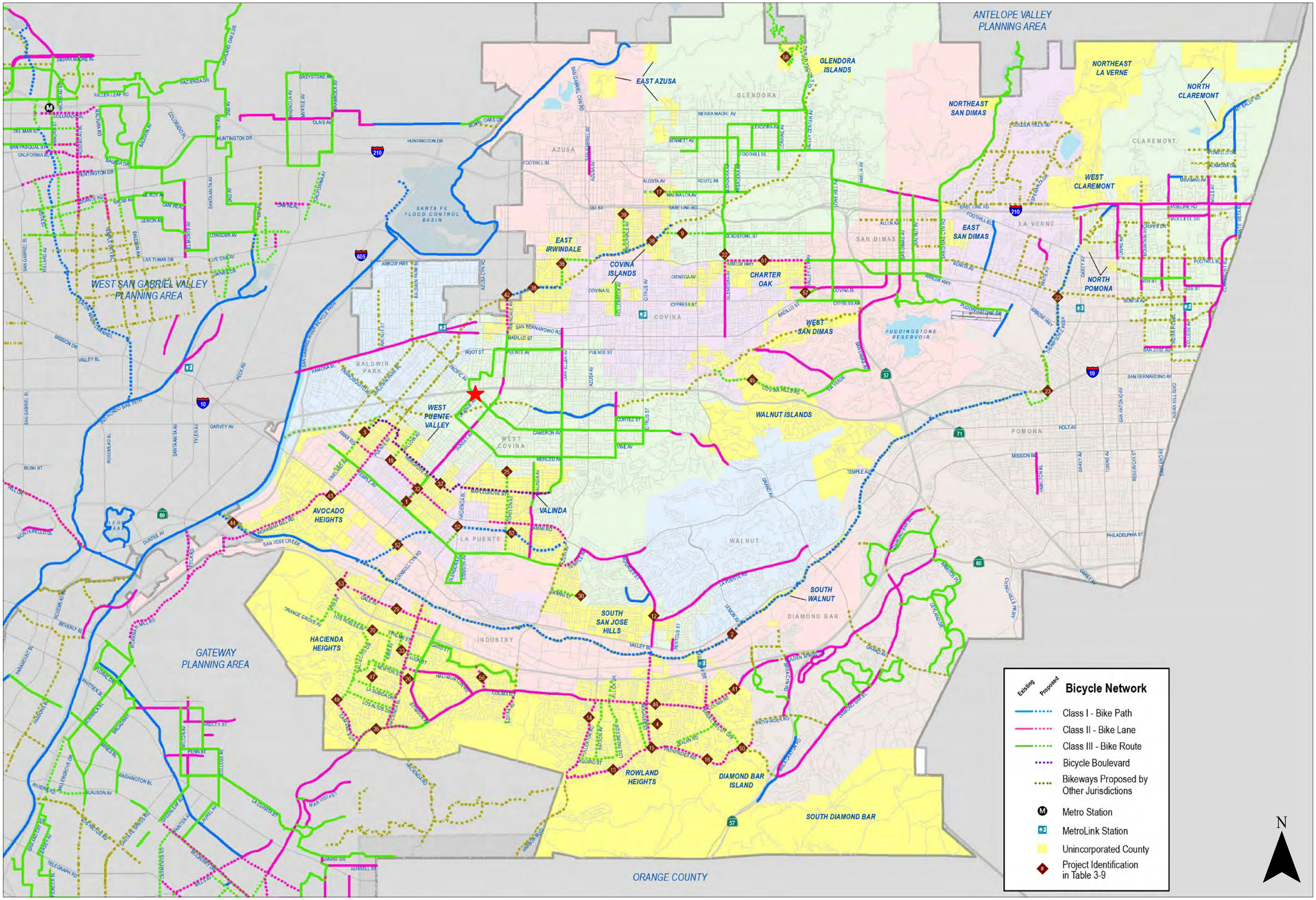
3.3 Vehicle Network

3.3.1 *Roadway Classifications*

The City of West Covina utilizes the roadway categories recognized by regional, state and federal transportation agencies. There are four categories in the roadway hierarchy, ranging from freeways with the highest capacity to two-lane undivided roadways with the lowest capacity. The roadway categories are summarized as follows:

- *Freeways* are limited-access and high speed travel ways included in the state and federal highway systems. Their purpose is to carry regional through-traffic. Access is provided by interchanges with typical spacing of one mile or greater. No local access is provided to adjacent land uses.

- *Arterial* roadways are major streets that primarily serve through-traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with two to six travel lanes and their major intersections are signalized. This roadway type is divided into two categories: principal and minor arterials. Principal arterials are typically four-or-more



MAP SOURCE: COUNTY OF LOS ANGELES BICYCLE MASTER PLAN - MARCH 2012

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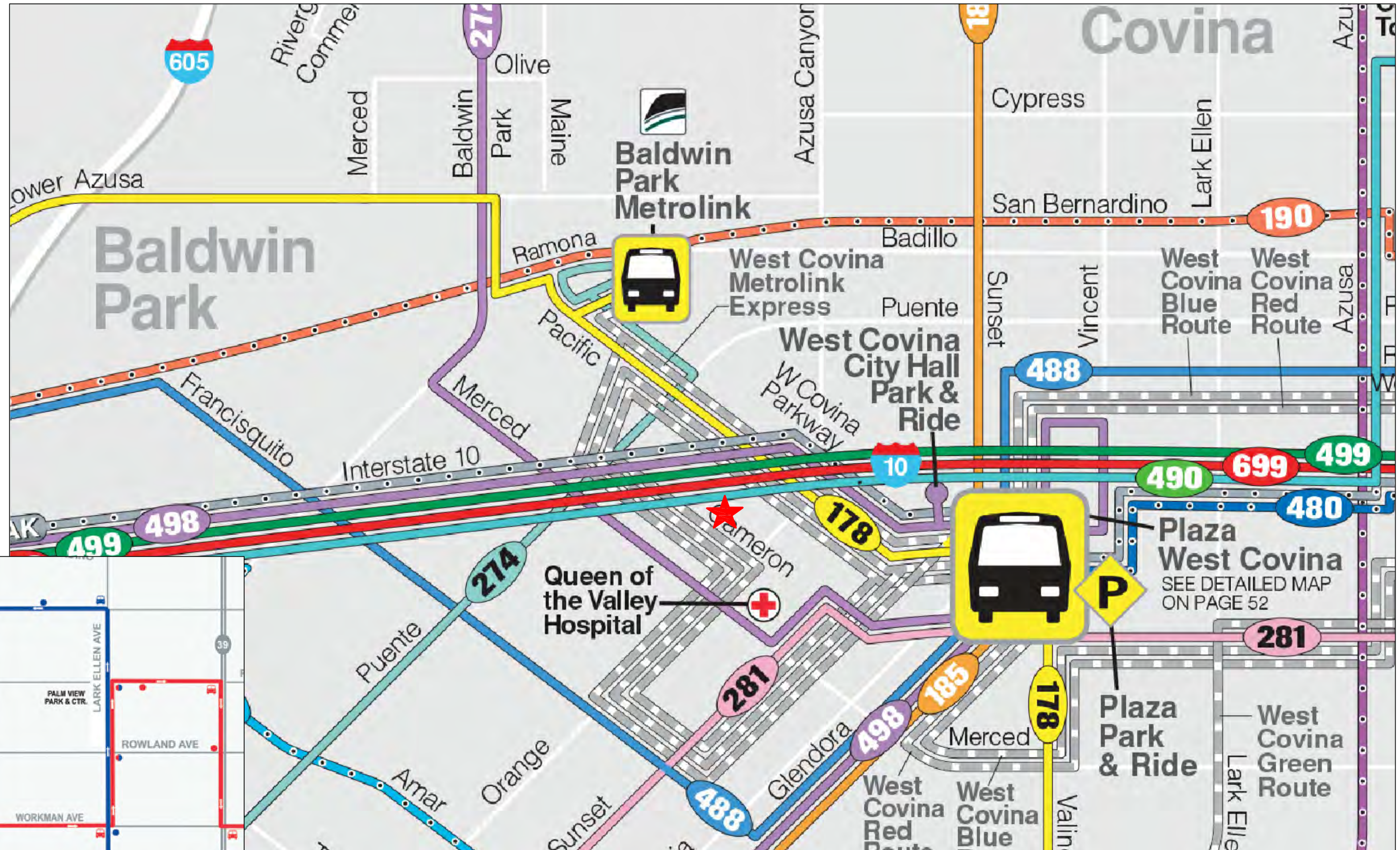
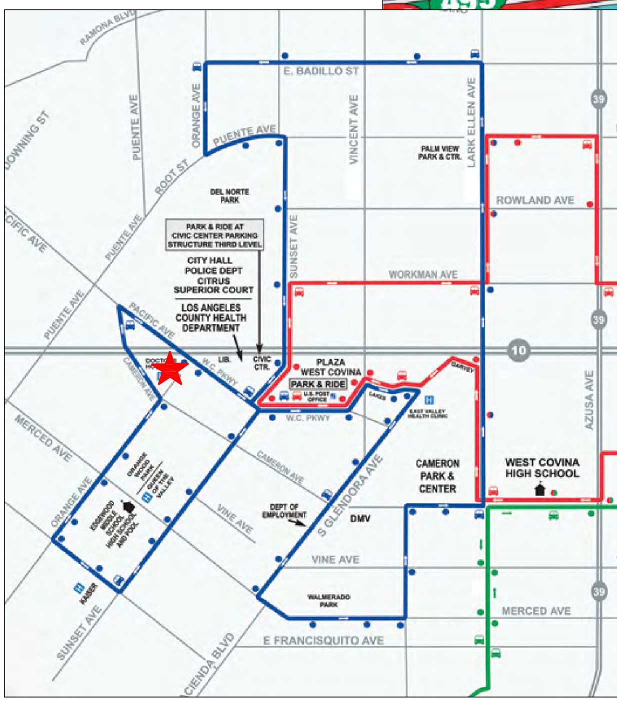
★ Project Site

Figure 3-1
Existing and Proposed Bikeways



Map Source: Foothill Transit



Map Source: West Covina Go West Shuttle

N

Project Site

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Figure 3-2
Existing Transit Routes

Table 3-1
EXISTING TRANSIT ROUTES [1]

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES/TRAINS DURING PEAK HOUR DIR	AM	PM
FT 178	Puente Hills Mall to El Monte Station via Walnut, La Puente, Valinda, West Covina, Baldwin Park	Pacific Avenue, Valinda Avenue	EB WB	2 2	2 2
GWS Blue Line	Plaza West Covina, Cameron Park & Center, Kaiser Sunset Avenue	Pacific Avenue, Orange Avenue, Cameron Avenue	EB WB	1 0	1 0
TOTAL				5	5

[1] Sources: Foothill Transit (FT) and Go West Shuttle (GWS) websites, 2023.

lane roadways and serve both local and regional through-traffic. Minor arterials are typically two-to-four lane streets that service local and commuter traffic.

- *Collector* roadways are streets that provide access and traffic circulation within residential and non-residential (e.g., commercial and industrial) areas. Collector roadways connect local streets to arterials and are typically designed with two through travel lanes (i.e., one through travel lane in each direction) that may accommodate on-street parking. They may also provide access to abutting properties.

- *Local* roadways distribute traffic within a neighborhood, or similar adjacent neighborhoods, and are not intended for use as a through-street or a link between higher capacity facilities such as collector or arterial roadways. Local streets are fronted by residential uses and do not typically serve commercial uses. Generally, travel lanes are not striped, and parking may be accommodated on one or both sides of the roadway.

3.3.2 *Regional Highway System*

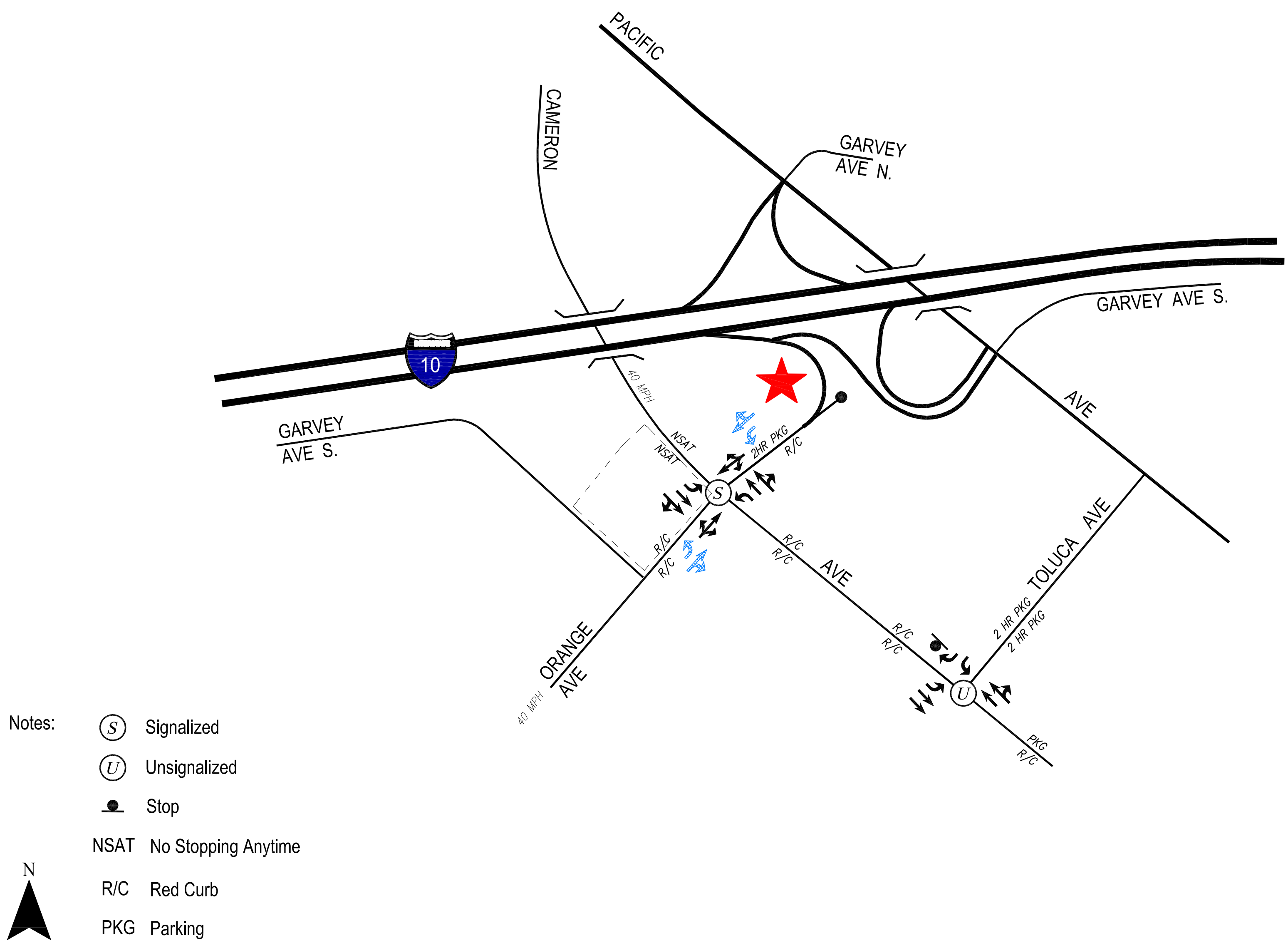
Primary regional access is provided by the San Bernardino (I-10) Freeway adjacent to the project site. The I-10 Freeway is a major east-west freeway connecting the City of Santa Monica with the City of Los Angeles and the municipalities of the San Gabriel Valley and San Bernardino County to the east. In the project vicinity, three to four mixed-flow freeway lanes are provided in each direction on the I-10 Freeway with auxiliary merge/weave lanes provided between some interchanges. Eastbound and westbound on/off-ramps are provided to and from the I-10 Freeway at West Covina Parkway, as well as an eastbound off-ramp provided on Orange Avenue adjacent to the project frontage.

3.3.3 *Roadway Descriptions*

The current lane configurations and traffic control measures at each study intersection are presented in ***Figure 3-3***. Descriptions of the roadways which comprise the study area are provided in ***Table 3-2***, including the roadway classification, number of lanes, median types, and speed limits designated by the City of West Covina.

3.4 Traffic Count Data

Manual counts of vehicular, pedestrian, and bicycle volumes were conducted at the two (2) study intersections during the weekday morning (AM) and afternoon (PM) commuter periods to determine the peak hour traffic volumes. The manual counts utilized in the analysis were conducted in April 2023 by an independent traffic count subconsultant (City Traffic Counters) at each of the study intersections from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM to determine the AM and PM peak commute hours, respectively. In conjunction with the manual turning movement vehicle counts, a count of bicycle and pedestrian volumes were collected during the peak periods. Summary data worksheets of the manual traffic counts of the two (2) study intersections as well as the pedestrian and bicycle counts are contained in ***Appendix B***.



Notes:

(S)	Signalized
(U)	Unsignalized
●	Stop
NSAT	No Stopping Anytime
R/C	Red Curb
PKG	Parking

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Project Site
Existing Conditions
Future Conditions
Off-Site Parking Lot

Figure 3-3
Existing and Future Lane Configurations

Table 3-2
EXISTING ROADWAY DESCRIPTIONS

ROADWAY	CLASSIFICATION [1]	TRAVEL LANES			MEDIAN	SPEED
		DIRECTION [2]	NO. LANES [3]		TYPES [4]	LIMIT
Orange Avenue						
-East of Cameron Avenue	Collector	NB-SB	2	[5][6]	N/A	25
-West of Cameron Avenue	Collector	NB-SB	2	[6]	N/A	40
Cameron Avenue	Minor Arterial	EB-WB	4	[6][7]	N/A	40
Toluca Avenue	Collector	NB-SB	4	[5]	N/A	30

Notes:
[1] Roadway classifications obtained from the *City of West Covina 2016 General Plan Update* .
[2] Direction of roadways in the project area: NB-SB = northbound and southbound; and EB-WB = eastbound and westbound.
[3] Number of lanes in both directions on the roadway. Variations in number of travel lanes due to time restricted on-street parallel parking are noted below.
[4] Median type of the road: RMI = Raised Median Island; 2WLT = 2-Way Left-Turn Lane; and N/A = Not Applicable.
[5] Two Hour Parking and No Parking 7:00 AM to 3:00 PM (Monday) Street Cleaning
[6] Red Curb
[7] No Stopping Anytime

The existing weekday AM and PM peak hour intersection traffic volumes by approach are summarized in ***Table 3-3***. The existing vehicular turning movements at the study intersections during the weekday AM and PM peak hours are shown in ***Figures 3-4*** and ***3-5***, respectively. For each study intersection, the highest one-hour total traffic volumes (i.e., four consecutive 15-minute time intervals) traversing through the intersection during the 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM time periods were selected so as to determine the respective weekday AM and PM peak hour traffic volumes for each study intersection. For purposes of the analysis, this common traffic engineering practice ensures that a more conservative (i.e., worst case) assessment of existing operating conditions be attained for each study intersection. Therefore, the traffic volumes shown in *Figures 3-4* and *3-5* for the study intersections do not necessarily reflect the same exact one-hour time period during the morning and/or afternoon peak commuter conditions (i.e., one intersection's peak hour may have occurred between 7:30 AM and 8:30 AM, while another intersection's peak hour may have occurred between 7:45 AM and 8:45 AM).

3.5 Cumulative Development Projects

The forecast of future pre-project conditions was prepared in accordance to procedures outlined in Section 15130 of the CEQA Guidelines. Specifically, the CEQA Guidelines provide two options for developing the future traffic volume forecast:

> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or
>
> (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency."

Although the CEQA Guidelines do not strictly apply to the local transportation assessment required by the City of West Covina, this traffic analysis provides a highly conservative estimate of future pre-project traffic volumes as it incorporates both the "A" and "B" options for purposes of developing the forecast.

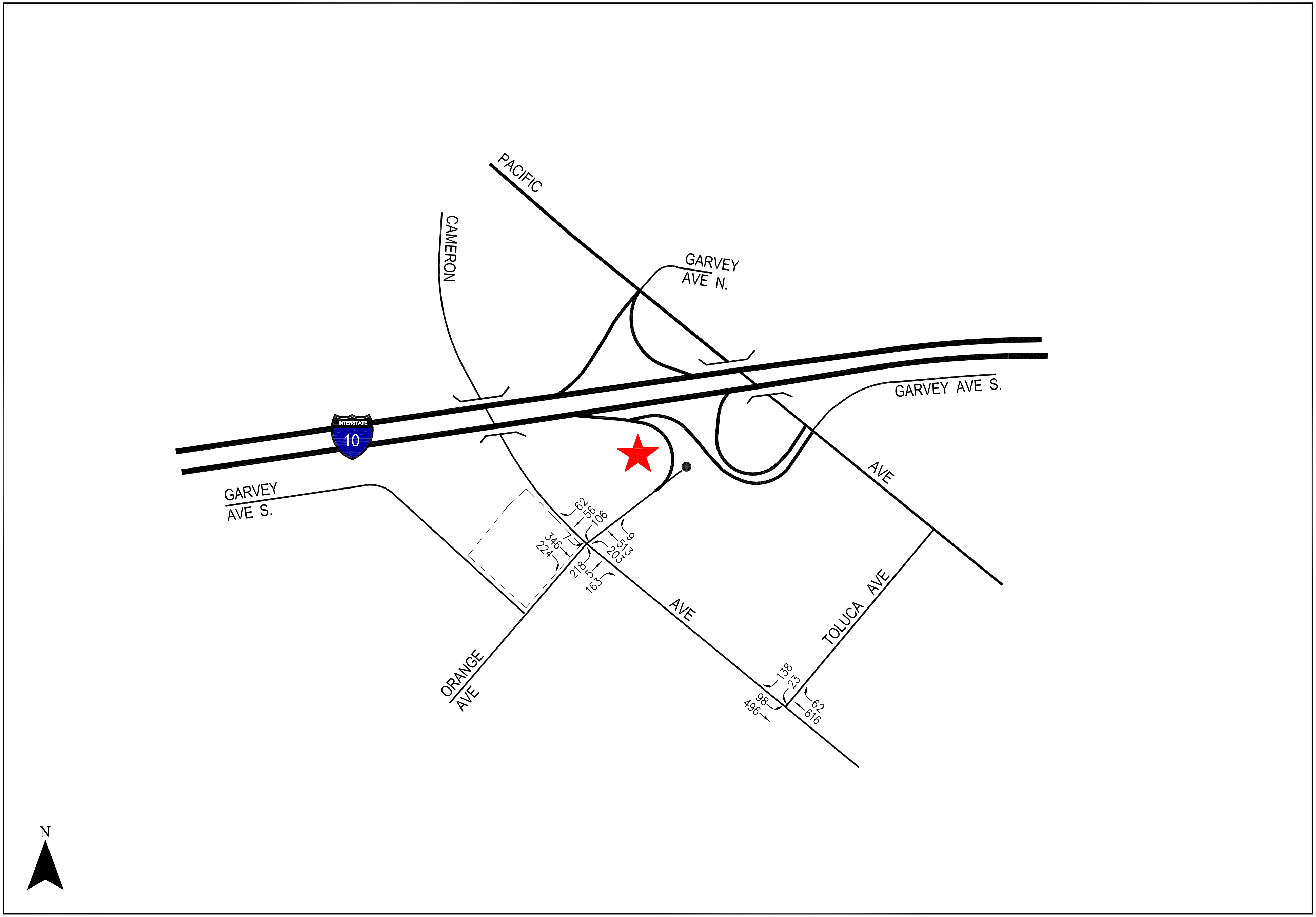
3.5.1 *Related Projects*

A forecast of on-street traffic conditions prior to occupancy of the proposed project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area (i.e., within an approximate one-mile radius from the project site). With this information,

Table 3-3
EXISTING TRAFFIC VOLUMES [1]
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	DATE	DIR	AM PEAK HOUR BEGAN	AM PEAK HOUR VOLUME	PM PEAK HOUR BEGAN	PM PEAK HOUR VOLUME
1	Orange Avenue/ Cameron Avenue	04/04/2023	NB	7:30 AM	386	4:45 PM	435
			SB		224		309
			EB		577		566
			WB		725		691
2	Toluca Avenue/ Cameron Avenue	04/04/2023	NB	7:30 AM	0	4:45 PM	0
			SB		161		233
			EB		594		816
			WB		678		570

[1] Counts conducted by City Traffic Counters.



Project Site

Off-Site Parking Lot

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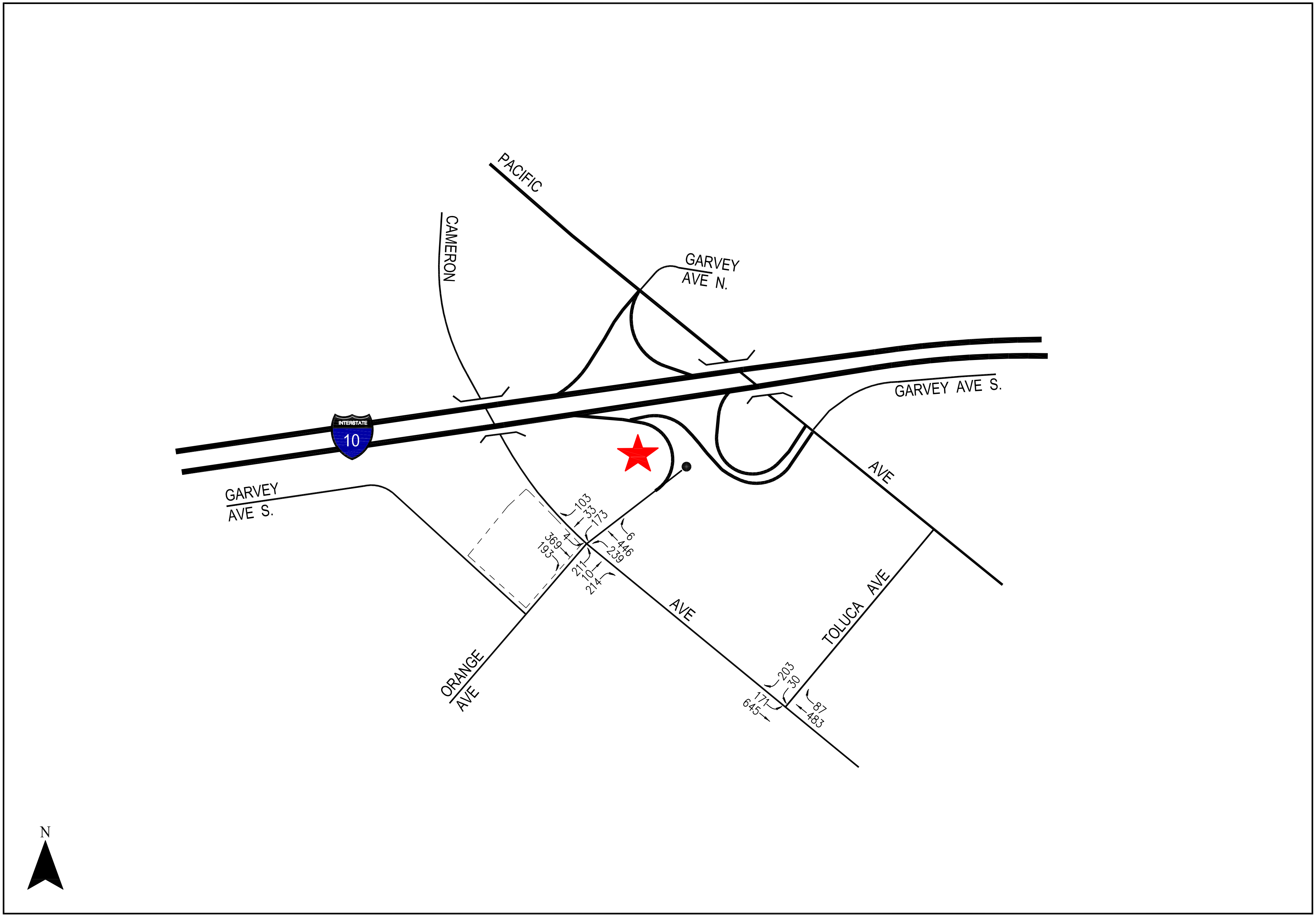
Figure 3-4
Existing Traffic Volumes
Weekday AM Peak Hour

West Covina Medical Center - Behavioral Health Addition Project



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Project Site

Off-Site Parking Lot

Figure 3-5
Existing Traffic Volumes
Weekday PM Peak Hour
West Covina Medical Center - Behavioral Health Addition Project

the potential impact of the proposed project can be evaluated within the context of the cumulative impacts of all ongoing development. The related projects research was based on information on file with the City of West Covina and City of Baldwin Park Community Development Departments. The list of related projects in the project study area is presented in ***Table 3-4***. The location of the related projects is shown in ***Figure 3-6***.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*[7], or were obtained from other traffic studies as sourced. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 3-4*. The related projects traffic volumes were distributed and assigned to the street system based on the projects' locations in relation to the study intersections, their proximity to major traffic corridors, proposed land uses, nearby population and employment centers, etc. The anticipated distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in ***Figures 3-7*** and ***3-8***, respectively.

3.5.2 *Ambient Traffic Growth Factor*

Horizon year background traffic growth estimates have been calculated using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown related projects in the study area as well as account for typical growth in traffic volumes due to the development of projects outside the study area. An annual growth rate of one percent (1.0%) per year was selected for this analysis in consultation with City of West Covina staff during the scoping process.

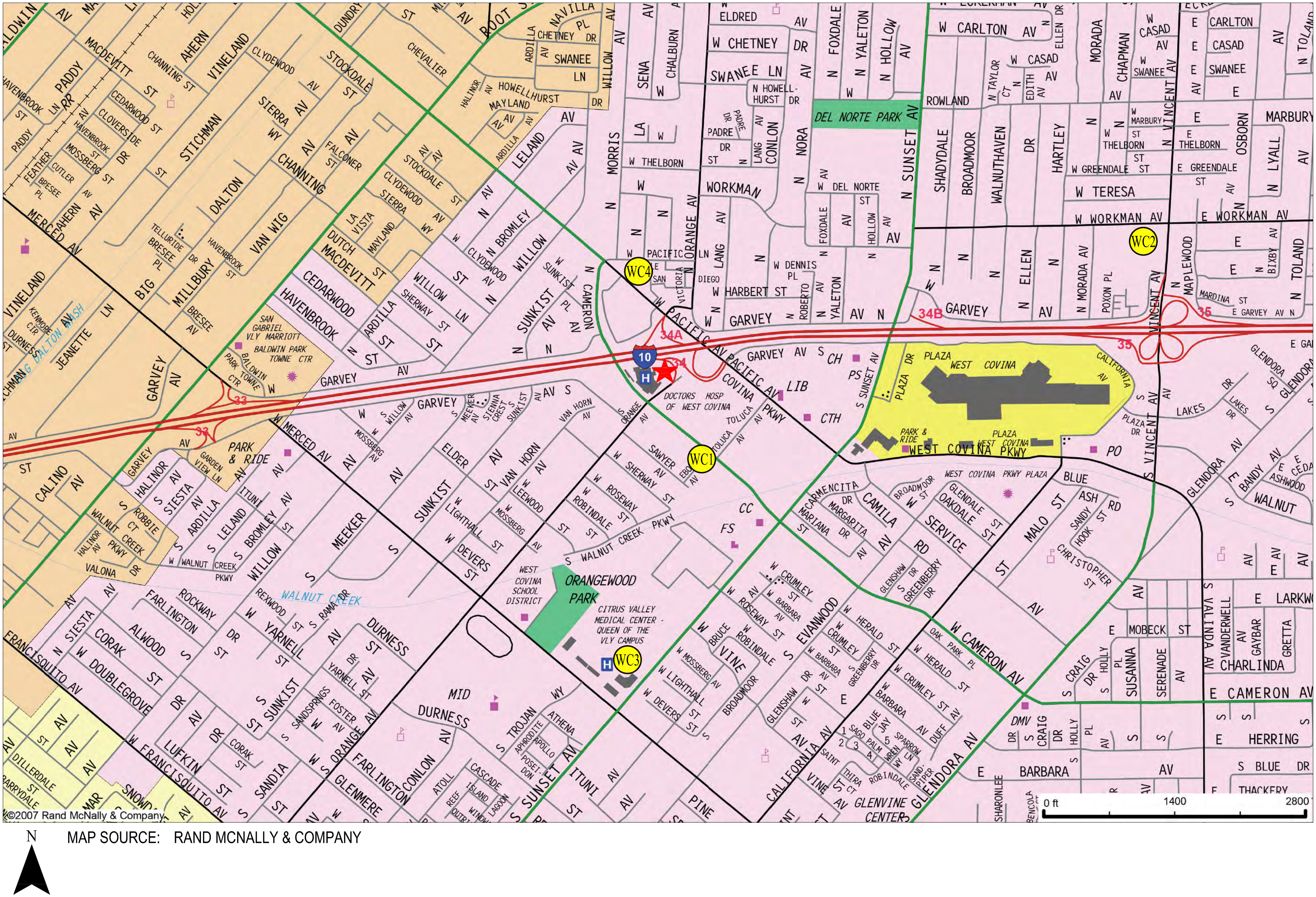
Therefore, application of this one percent (1.0%) ambient growth factor in addition to the forecast traffic generated by the related projects allows for a very conservative forecast of future traffic volumes in the project study area as incorporation of both (i.e., an ambient traffic growth rate and a detailed list of cumulative development projects) is expected to overstate potential future traffic volumes.

[7] Institute of Transportation Engineers *Trip Generation Manual*, 10th Edition, Washington, D.C., 2017.

Table 3-4
RELATED PROJECTS LIST AND TRIP GENERATION [1]

MAP NO.	PROJECT STATUS	PROJECT NAME/NUMBER ADDRESS/LOCATION	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			LAND-USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
WC1	Under Construction	1600 W. Cameron Avenue	Townhomes	84 DU	[3]	381	7	24	31	20	13	33
WC2	Under Construction	1024 W. Workman Avenue	Townhomes	119 DU	[3]	540	10	34	44	28	18	46
WC3	Under Construction	Queen of the Valley Expansion 1115 S. Sunset Avenue	Medical Office Building	108,361 GSF	[4]	2,579	158	50	208	72	179	251
WC4	Proposed	1920 Pacific Lane	Townhomes	7 DU	[5]	47	1	2	3	3	1	4
TOTAL						3,547	176	110	286	123	211	334

[1] Source: City of West Covina Community Development Department, except as noted below. The peak hour traffic volumes were forecast based on trip data provided in the ITE "Trip Generation", 11th Edition, 2021. It is noted that the City of Baldwin Park either did not have records of related projects within the project study or had related projects that were deemed nominal in trips.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 221 (Multifamily Housing (Mid-Rise) Not Close to Rail Transit) trip generation average rates.
[4] Source: "Environmental Impact Report Queen of the Valley Hospital Phases 1A and 1B", prepared by Psomas, December 2020.
[5] ITE Land Use Code 220 (Multifamily Housing [Low-Rise] Not Close to Rail Transit) trip generation average rates.



MAP SOURCE: RAND MCNALLY & COMPANY

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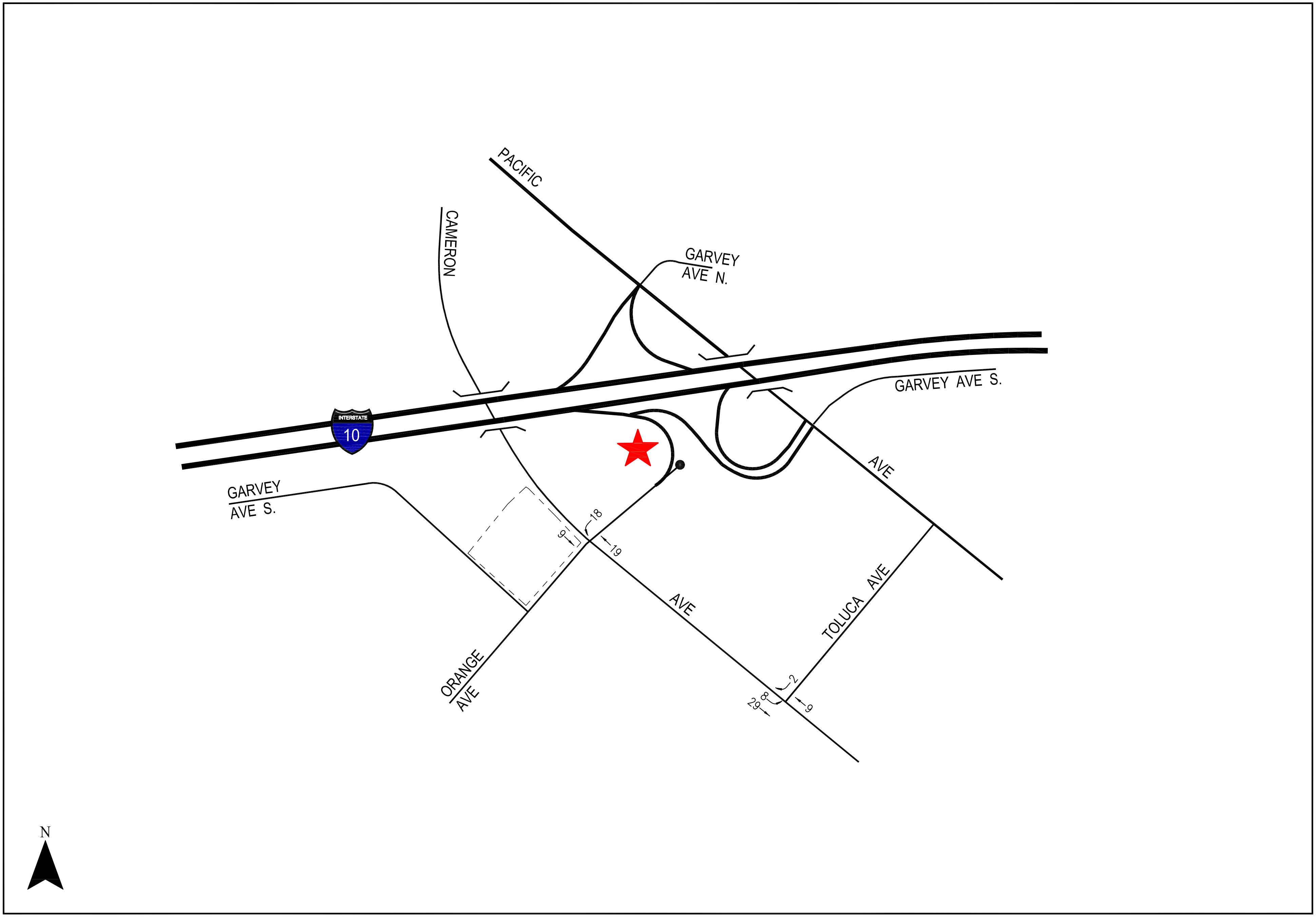
Project Site

XX Related Project

Figure 3-6
Location of Related Projects



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Project Site

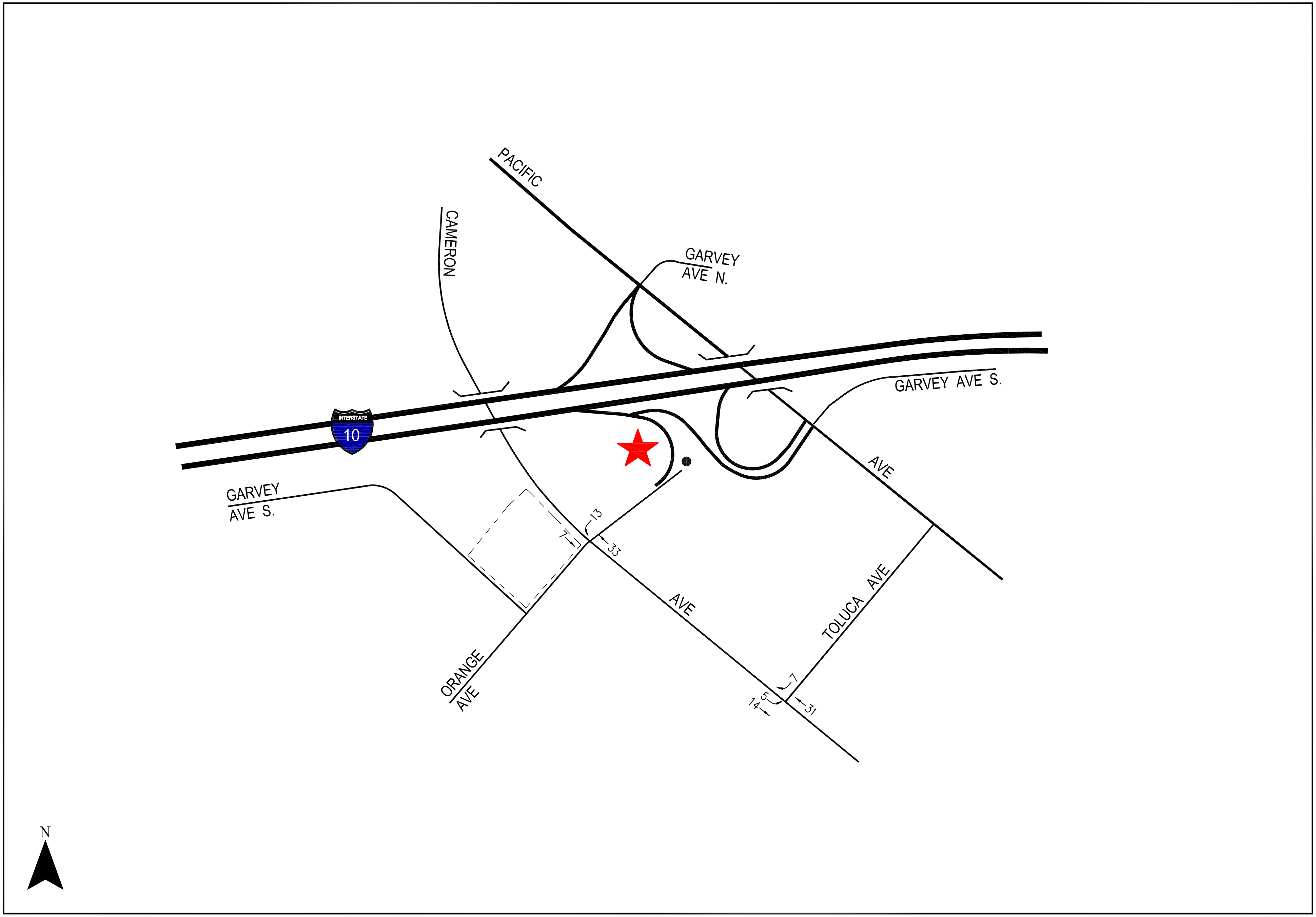
Off-Site Parking Lot

Figure 3-7

Related Projects Traffic Volumes

Weekday AM Peak Hour

West Covina Medical Center - Behavioral Health Addition Project



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Project Site

Off-Site Parking Lot

Figure 3-8
Related Projects Traffic Volumes
Weekday PM Peak Hour

4.0 CEQA TRANSPORTATION ASSESSMENT

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the CEQA Guidelines in November 2017 that amends the Appendix G question for transportation impacts to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the CEQA Guidelines asking if the project will result in a substantial increase in vehicle miles traveled (VMT). The California Natural Resources Agency certified and adopted the revisions to the CEQA Guidelines in December of 2018, and as of July 1, 2020 the provisions of the new section are in effect statewide. Concurrently, OPR developed the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), which provides non-binding recommendations on the implementation of VMT methodology which has significantly informed the way VMT analyses are conducted in the State. Accordingly, for the purpose of environmental review under CEQA, the City of West Covina has adopted significance criteria for transportation impacts based on VMT for land use projects and plans which is generally consistent with the recommendations provided by OPR in the *Technical Advisory*.

4.1 Vehicle Miles Traveled (VMT) Project Screening

Traditionally, public agencies have set certain thresholds to determine whether a project requires detailed transportation analysis or if it could be assumed to have less than significant environmental impacts without additional study. The City of West Covina has adopted three screening criteria which may be applied to screen proposed projects out of detailed VMT analysis. Proposed projects are not required to satisfy all of the screening criteria in order to screen out of further VMT analysis; satisfaction of one criterion is sufficient for screening purposes. The following sections provide a detailed explanation of each screening criteria as it relates to the proposed project.

4.1.1 *Transit Priority Area Screening*

CEQA Guidelines Section 15064.3(b)(1) states in part: "Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact." In keeping with the statutory presumption of less than significant impacts due to nearby high-quality transit, the City of West Covina has adopted a transit priority area[8] (TPA) screening criterion. Projects which are located within a TPA are presumed to have a less than significant impact, absent substantial evidence to the contrary. This presumption may not be appropriate if:

- The project has a floor area ratio (FAR) of less than 0.75.
- The project includes more parking for use by residents, customers, or employees of the project than required by the City.

[8] Public Resources Code Section 21099(a)(7): ""Transit priority area" means an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan."

- The project is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Southern California Association of Governments [SCAG]).
- The project replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The San Gabriel Valley COG Vehicle Miles Traveled Evaluation Tool ("VMT Evaluation Tool"), which was developed by Fehr & Peers as part of the SB 743 VMT Implementation Study effort, was utilized to conduct TPA screening in the City of West Covina.

As described in *Section 3.2*, public transit service is provided in the vicinity of the proposed project. The West Covina Go West Shuttle Blue Line and the Foothill Transit lines, which provide services in the immediate vicinity of the project site, do not meet the criteria for a high-quality transit corridor[9]. Based on a review of the existing transit service in the vicinity which is located more than one-half mile from the site, the proposed project is not expected to screen out of VMT analysis due to being located within a TPA even though the VMT Evaluation Tool concludes that the project meets the TPA screening criterion. Screening worksheets generated by the Tool for the proposed project are included in ***Appendix C***.

4.1.2 *Low VMT Area Screening*

It is assumed that projects which will be located within areas which currently exhibit low VMT, and that incorporate similar features pertaining to density, land use mix, and transit availability, will tend to exhibit similarly low VMT. In areas where the existing VMT generation already falls below the applicable thresholds, and where projects are likely to generate similar levels of VMT, projects may be screened out of preparing detailed VMT analysis. OPR notes that such screening is appropriate for residential and office projects.

The City of West Covina has adopted a low VMT area screening criterion which may apply to residential, office, or other employment-related and mixed-use land use types. The SCAG Travel Demand Forecasting Model was used to establish VMT performance for individual Traffic Analysis Zones (TAZ). The VMT values for each TAZ are then compared to the applicable City thresholds (i.e., VMT per capita, per employee, or per service population) to determine if the TAZ can be considered a low VMT area. Locations within the City of West Covina which qualify for the low VMT area screening are to be identified through the VMT Evaluation Tool.

As reported in the screening worksheets provided in *Appendix C*, the project is situated within TAZ 22296100, which currently exhibits 28.8 total VMT per service population. The threshold for office project types is noted as 29.56 total VMT per service population. Therefore, the TAZ currently

[9] Public Resources Code Section 21155(b): "For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours."

exhibits VMT below the applicable thresholds and could be considered a low VMT area. The proposed project site therefore satisfies the low VMT area screening criterion.

4.1.3 *Project Type Screening*

Consistent with the OPR's *Technical Advisory*, the City of West Covina has determined the following potential screening criteria for certain land development projects that may be presumed to result in a less than significant VMT impact as mentioned in the City's Transportation Study Guidelines:

- Local-serving retail less than 50,000 square feet, including gas stations, banks, restaurants, shopping center.
- Local-serving K-12 schools, local parks, daycare centers, etc.
- Local-serving hotels (e.g., non-destination hotels).
- Student housing projects or adjacent to college campuses.
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (public libraries, fire stations, local government)
- Affordable, supportive, or transitional housing
- Assisted living facilities, senior housing
- Projects generating less than 110 daily vehicle trips
- Public parking garages and public parking lots

As mentioned in the City's Resolution and OPR's *Technical Advisory*, local serving uses typically redistributes and reroutes local trips rather than create new trips. By adding local serving opportunities into the urban fabric and thereby improving destination proximity, local-serving projects tend to shorten trips and reduce VMT. It is also noted that lead agencies may presume such local-serving projects create a less than significant transportation impact. Similarly, the proposed behavioral health building addition will serve the local population and is considered a community institution, thereby shortening travel distances and reducing VMT. Thus, the proposed project can be presumed to result in a less than significant VMT impact based on State guidance because it would reduce VMT by shortening trip lengths, similar to local-serving retail developments and local-serving projects. The proposed project satisfies the criteria to be considered a local serving use and is screened out from further VMT analysis as it is presumed to cause less than significant transportation impacts.

4.1.4 *Summary of Screening Conclusions*

The City of West Covina has adopted three screening criteria which may be applied to screen proposed projects out of detailed VMT analysis. The project meets two criteria to be screened out of VMT analysis (i.e., based on its location within a low VMT-generating area and based on the project land use type as a local serving use). Therefore, the project is screened out of further VMT analysis.

4.2 VMT Impact Conclusions

As described in *Section 4.1.4*, the project meets two of the three screening criteria and is screened out of further VMT analysis. The screening criterion is based on the presumption that local serving projects will cause less than significant impacts. The project is also located within a low VMT-generating area. Therefore, through satisfaction of the screening criteria, the project is determined to result in a less than significant transportation impact.

4.3 Active Transportation and Public Transit Analysis

Pursuant to the City of West Covina Transportation Study Guidelines, a significant impact may also occur "if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities." The following section provides a brief review of the City's adopted policies, plans, and programs pertaining to active transportation and public transit analysis.

4.3.1 *Adopted Policies, Plans, or Programs*

The City's current accessibility community section of the General Plan sets forth actions and policies pertaining to accident and traffic safety, transit and public transportation, and bicycle routes and pedestrian facilities, among other things. Relevant adopted policies include:

- Policy 4.2: Accommodate multimodal mobility, accessibility and safety needs when planning, designing, and implementing transportation improvements, improving access and circulation for all users of City streets.
- Policy 4.3: Establish protection of human life and health as the highest transportation system priorities and seek to improve safety through the design and maintenance of streets, sidewalks, intersections and crosswalks.
- Policy 4.4: Allocate street space equitably among all modes.
- Policy 4.5: Work to eliminate barriers to pedestrian and bicycle travel.
- Policy 4.6: Work with transit providers to develop high-quality facilities for transit users, including access facilities.
- Policy 4.13: Synchronize traffic signals and develop operational enhancements at the I-10 Freeway interchanges to reduce traffic congestion.

The City's Active Transportation Plan also sets forth a number of objectives and goals to promote a balanced multi-modal transportation network that serves pedestrians, bicyclists, transit riders and motorists of all ages and abilities. The Active Transportation Plan includes objectives pertaining to programs that support bicycling, including programs that introduce and promote education, encouragement, and outreach, facilitate non-motorized travel to transit stations and stops, and encourage non-motorized travel to shops and restaurants. The Plan also provides specific recommendations for promoting walking and bicycling activities within the City, such as improving street crossings and lightings for pedestrians, implementing pedestrian safety measures in neighborhood streets, closing gaps to enhance crosstown connections for the bicycle network, enhancing bicycle facilities, and linking to other regional routes in adjacent cities. As shown in *Figure 3-1*, additional bicycle facilities are proposed within the City.

4.3.2 *Qualitative Impact Conclusions*

The proposed project is not expected to have a significant impact on active transportation or public transit in the vicinity of the project site. As described in *Section 2.3.3*, the project site is planned to accommodate pedestrian and bicycle access via exclusive walkways which connect the proposed site to the public sidewalks and bike routes. The walkways minimize the extent of pedestrian and bicycle interaction with vehicles at the site and provide a comfortable, convenient, and safe environment which in turn can encourage use of active transportation modes. The proposed project is therefore found to be in alignment with the City's General Plan and the City's Active Transportation Plan goals to promote pedestrian and bicycle safety and provide appropriate and supportive active transportation infrastructure.

The proposed project is located adjacent to Orange Avenue, which is currently served by public transit service provided by the City of West Covina Go West Shuttle. As noted in *Section 3.2*, the project site is within easy walking distance from an existing bus stop located along Orange Avenue. The proposed project is not expected to affect access or safety at the existing bus stop, nor is it expected to hinder public transit service along Orange Avenue. The proposed project is not expected to preclude the City from constructing bicycle facilities or pursuing bicycle network improvements along local roadways within the study area. Development of the proposed project will not prevent the City from completing any proposed transit, bicycle, or pedestrian facilities.

Since the proposed project is not found to result in conflicts with adopted policies, plans, or programs, nor is it expected to negatively affect the performance or safety of existing or planned pedestrian, bicycle, or transit facilities, it is determined that the proposed project will have a less than significant impact on active transportation and public transit in the vicinity of the project site.

5.0 NON-CEQA ANALYSIS

The City of West Covina's Transportation Study Guidelines note that the City has established vehicle Level of Service (LOS) standards which local infrastructure will strive to maintain. The LOS standards apply to discretionary approvals of new land use projects. The following section presents the operational (i.e., Level of Service) analysis prepared for the proposed project pursuant to this requirement.

5.1 Analysis Methodology

In order to estimate the proposed project's effect on intersection operations, a multi-step process has been utilized. The first step is trip generation, which estimates the total arriving and departing traffic volumes on a peak hour and daily basis. The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound project traffic volumes. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area. The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area. The proposed project's forecast trip generation, distribution, and assignment is presented in *Section 2.10* herein. With the forecasting process complete and project traffic assignments developed, the effect of the proposed project is isolated by comparing operational conditions at the selected study intersections using existing and expected future traffic volumes without and with forecast project traffic.

The signalized study intersection is evaluated using the Intersection Capacity Utilization (ICU) method of analysis. The ICU method determines the Volume-to-Capacity (*v/c*) ratios on a critical lane basis (i.e., based on the individual *v/c* ratios for key conflicting traffic movements). The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing. The overall intersection *v/c* ratio is subsequently assigned a LOS value to describe intersection operations. Level of Service varies from LOS A (free flow conditions) to LOS F (jammed condition). A detailed description of the ICU method and corresponding Levels of Service is provided in ***Appendix D***. Consistent with the City's Transportation Study Guidelines, the ICU analysis prepared for the signalized intersection assumes a minimum clearance interval of 0.10, a lane capacity of 1,800 vehicles per hour (vph) for through and turn lanes, and 3,240 vph for dual left-turn lanes.

Unsignalized intersections such as two-way stop-controlled (TWSC) and all-way stop-controlled (AWSC) intersections are analyzed using the Highway Capacity Manual (HCM) method of analysis. The HCM methodology determines the average control delay (expressed in seconds per vehicle) at the intersection. Average control delay for any particular movement is a function of the capacity of the approach and the degree of saturation. The average control delay includes delay due to deceleration to a stop at the back of the queue from free-flow speed, move-up time within the queue, stopped delay at the front of the queue, and delay due to acceleration back to free-flow speed. It should be noted that the TWSC methodology estimates the average control delay for each minor-street movement (or shared movement) as well as major-street left-turns and determines the LOS for each constrained movement. A detailed description of the HCM method and corresponding Level of Service is also provided in *Appendix D*.

5.2 Criteria for Non-CEQA Analysis

The relative effect of the added project traffic volumes to be generated by the proposed project during the weekday AM and PM peak hours was evaluated based on analysis of existing and future operating conditions at the study intersections, without and with the proposed project. The previously discussed capacity analysis procedures were utilized to evaluate the future *v/c* or delay relationships and service level characteristics at each study intersection. The effect of project-generated traffic at each study intersection was compared to the City of West Covina's intersection LOS standards as presented below. The acceptable operating condition for intersections in the City is LOS E or better as established in the Final EIR for the City's General Plan. Any intersection which is operating at LOS F is considered deficient.

Signalized intersections may require improvements or other strategies to reduce the *v/c* ratio to acceptable levels if the following condition is met:

- The addition of project traffic results in the increase in volume-to-capacity (*v/c*) equal to or greater than 0.020 at an intersection that degrades from acceptable operations (LOS E or better) to unacceptable operations (LOS F).

Unsignalized intersections may require improvements or other strategies to reduce the LOS to acceptable levels if both of the following conditions are met:

- The addition of project traffic to an intersection results in the degradation of overall intersection operations from acceptable operations (LOS E or better) to unacceptable operations (LOS F), and

- The project-related increase in traffic contributes 10 percent or more to the total peak hour volume at an intersection that is already operating at LOS F.

5.3 Analysis Scenarios

Pursuant to the City's Transportation Study Guidelines and in coordination with City staff, LOS calculations have been prepared for the following scenarios:

[a] Existing conditions.

[b] Existing with project conditions.

[c] Condition [a] plus one percent (1.0%) per year annual ambient traffic growth through year 2026 and with completion and occupancy of the related projects (i.e., future without project conditions).

[d] Condition [c] with completion and occupancy of the proposed project.

[e] Condition [d] with implementation of intersection improvement measures, if necessary.

The weekday AM and PM peak hour LOS analysis prepared for the study intersections using the ICU and HCM methodologies is summarized in ***Table 5-1***. The ICU and HCM data worksheets for the analyzed intersections are provided in *Appendix D*.

5.4 Existing Conditions

5.4.1 *Existing Conditions*

As indicated in column [1] of *Table 5-1*, both study intersections are presently operating at LOS C or better during the weekday AM and PM peak hours under existing conditions. The existing traffic volumes at the study intersections during the weekday AM and PM peak hours was previously displayed in *Figures 3-4* and *3-5*, respectively.

5.4.2 *Existing With Project Conditions*

As shown in column [2] of *Table 5-1,* the study intersections are expected to continue operating at LOS C or better during the weekday AM and PM peak hours under the existing with project conditions. The *v/c* ratios and delays at both of the study intersections incrementally increase with the addition of project-generated traffic. The proposed project is not expected to cause any of the study intersections to operate at a deficient LOS, therefore no project-specific intersection improvements or project-specific transportation demand management measures are proposed or required. ***Figures 5-1*** and ***5-2*** illustrate the existing with project traffic volumes at the study intersections during the weekday AM and PM peak hours, respectively.

5.5 Future Year 2026 Cumulative Conditions

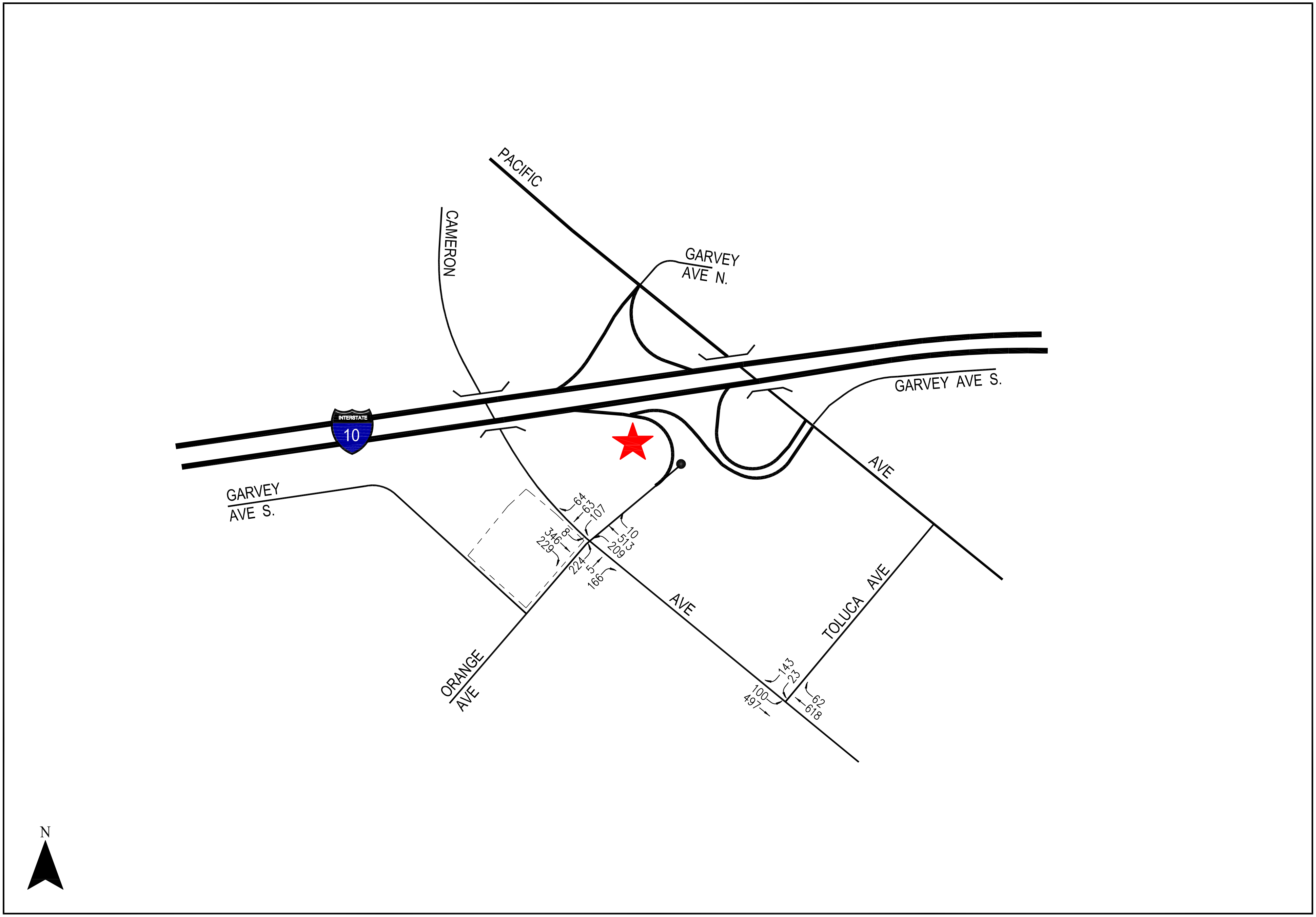
5.5.1 *Future Year 2026 Cumulative Without Project Conditions*

The future cumulative baseline conditions were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth). The *v/c* ratios and delay at the study intersections account for the addition of ambient traffic and traffic generated by the related projects listed in *Table 3-4*, as well as the projected intersection improvements for Study Intersection No. 1: Orange Avenue/Cameron Avenue. As presented in column [3] of *Table 5-1*, both study intersections are expected to operate at LOS B or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related projects traffic under the future without project conditions.

Table 5-1
SUMMARY OF VOLUME-TO-CAPACITY RATIOS/DELAYS AND LEVELS OF SERVICE
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	TRAFFIC CONTROL	PEAK HOUR	[1] EXISTING V/C or DELAY	[1] EXISTING LOS [a]	[2] EXISTING W/ PROJECT V/C or DELAY	[2] EXISTING W/ PROJECT LOS [a]	CHANGE IN DELAY [(2)-(1)]	[3] YEAR 2026 FUTURE PRE-PROJECT V/C or DELAY	[3] YEAR 2026 FUTURE PRE-PROJECT LOS [a]	[4] YEAR 2026 FUTURE W/ PROJECT V/C or DELAY	[4] YEAR 2026 FUTURE W/ PROJECT LOS [a]	CHANGE IN DELAY [(4)-(3)]
1	Orange Avenue/ Cameron Avenue	Signalized	AM PM	0.644 0.727	B C	0.655 0.740	B C	0.011 0.013	0.574 0.633	A B	0.588 0.640	A B	0.014 0.007
2	Toluca Avenue/ Cameron Avenue [b]	Unsignalized	AM PM	13.4 13.8	B B	13.5 13.9	B B	0.1 0.1	13.9 14.7	B B	14.0 14.7	B B	0.1 0.0

[a] Level of Service (LOS) is based on the volume-to-capacity ratios or reported delays for the intersections.
[b] Two-Way Stop-Controlled Intersection. Reported values represent the delays associated with the most constrained approach of the intersection.
[c] According to the City of West Covina Traffic Study Guidelines, September 2020, an intersection is considered deficient and may require improvements if the following criteria are met:
The acceptable LOS for intersections in the City of West Covina is LOS E or better.
Signalized intersections:
- The project-related increase in v/c is equal to or greater than 0.020 at an intersection that degrades from acceptable operations (LOS E or better) to LOS F.
Unsignalized intersections are considered deficient if both conditions are met:
- The addition of project traffic to an intersection results in the degradation of the overall intersection operations from acceptable (LOS E or better) to LOS F.
- The project-related increase in traffic contributes 10 percent or more to the total peak hour volume at an intersection already operating at LOS F.



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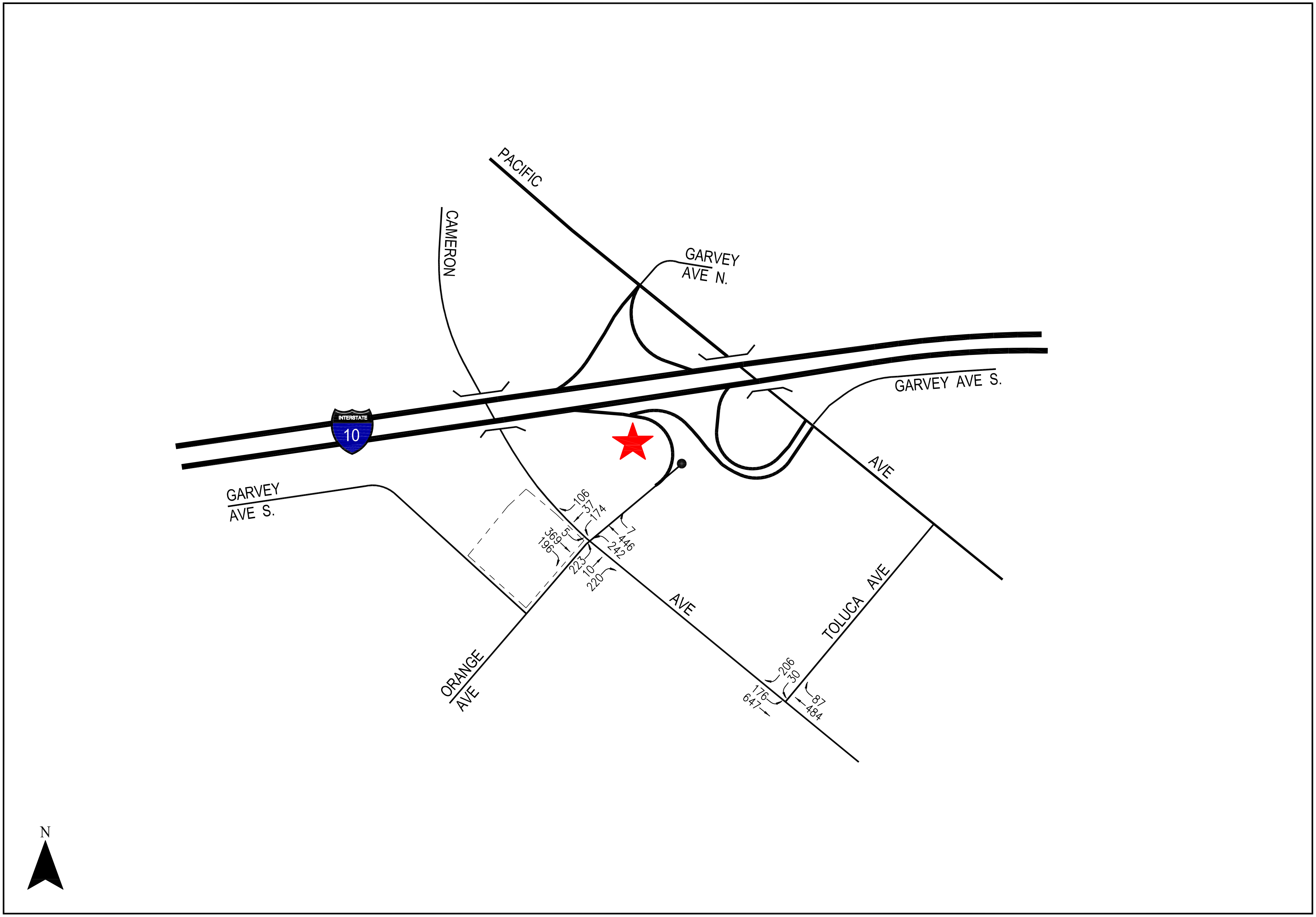
Project Site

Off-Site Parking Lot

Figure 5-1
Existing With Project Traffic Volumes
Weekday AM Peak Hour
West Covina Medical Center - Behavioral Health Addition Project



★ Project Site

Off-Site Parking Lot

Figure 5-2
Existing With Project Traffic Volumes
Weekday PM Peak Hour

West Covina Medical Center - Behavioral Health Addition Project

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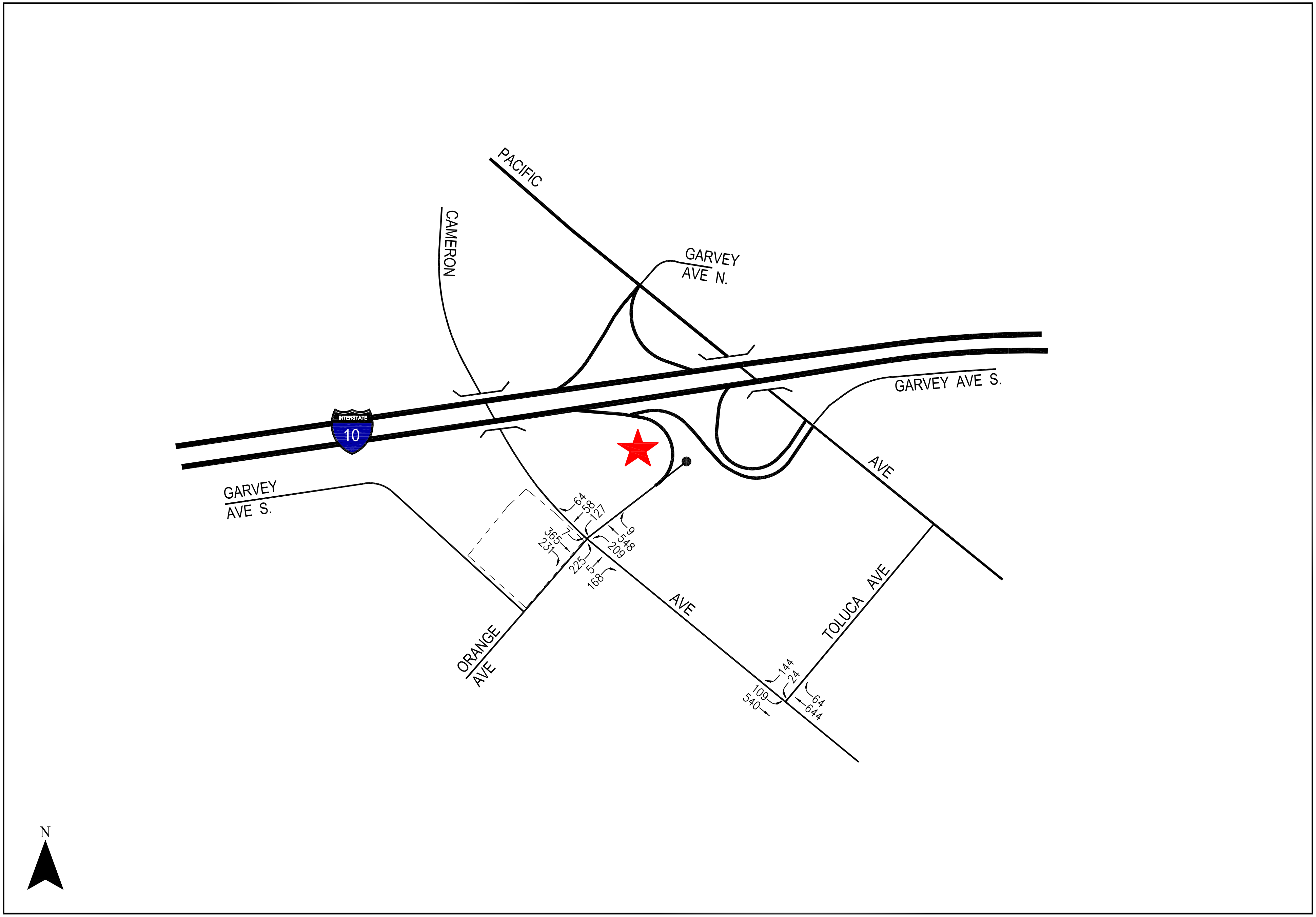
The future without project (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 5-3*** and ***5-4***, respectively.

5.5.2 *Future Year 2026 Cumulative With Project Conditions*

As shown in column [4] of *Table 5-1,* both study intersections are expected to continue operating at LOS B or better under the future with project conditions. The *v/c* ratios and delays at the study intersections incrementally increase with the addition of project-generated traffic and projected intersection improvements as previously shown in *Figure 3-3*. The incremental increases in *v/c* ratio at the two study intersections forecast to operate at LOS B or better do not exceed the City's criteria, therefore no project-specific intersection improvements or project-specific transportation demand management measures are proposed or required. The future with project (existing, ambient growth, related projects and project) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 5-5*** and ***5-6***, respectively.



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Project Site

Off-Site Parking Lot

Figure 5-3

Future Without Project Traffic Volumes

Weekday AM Peak Hour

West Covina Medical Center - Behavioral Health Addition Project

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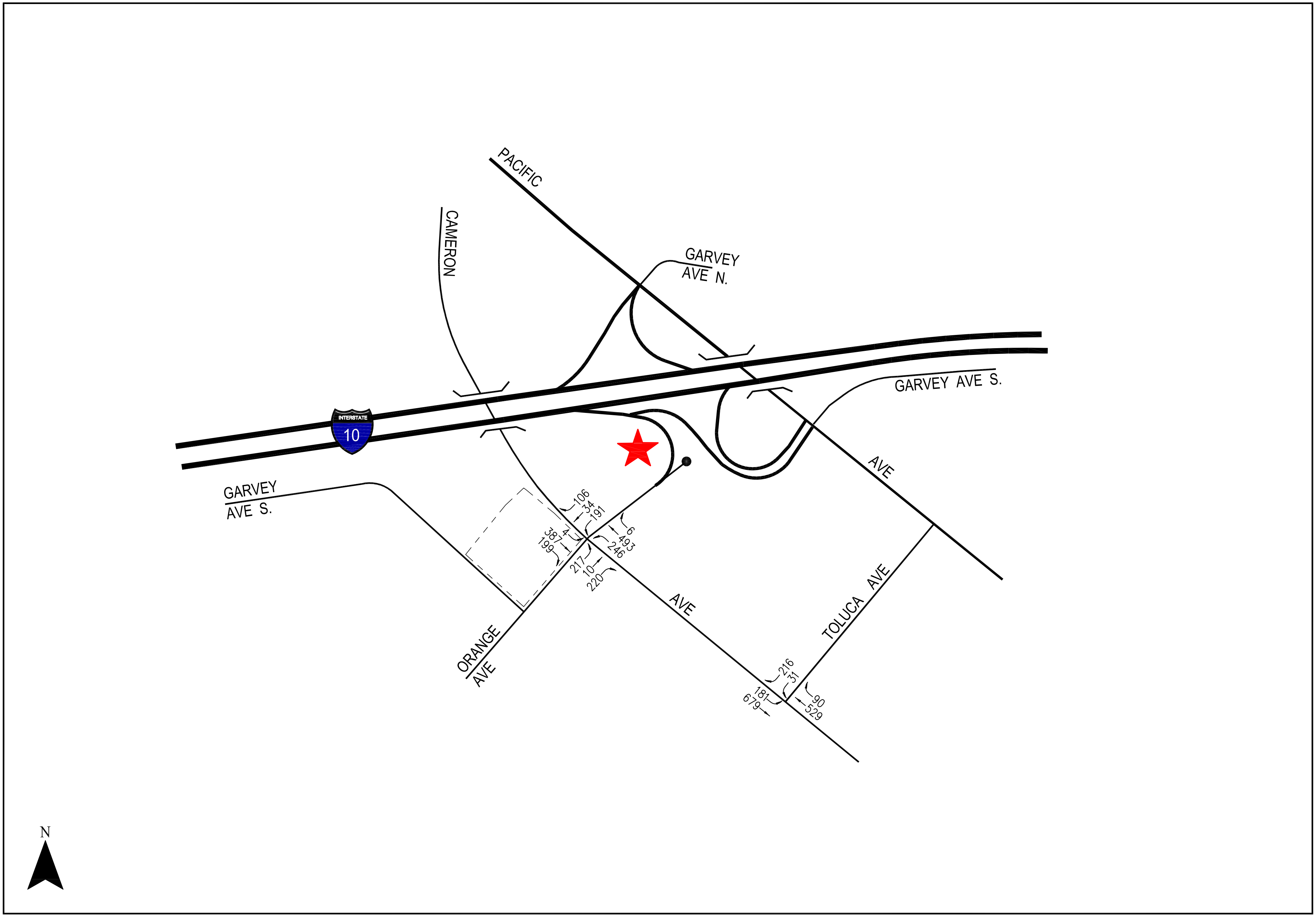

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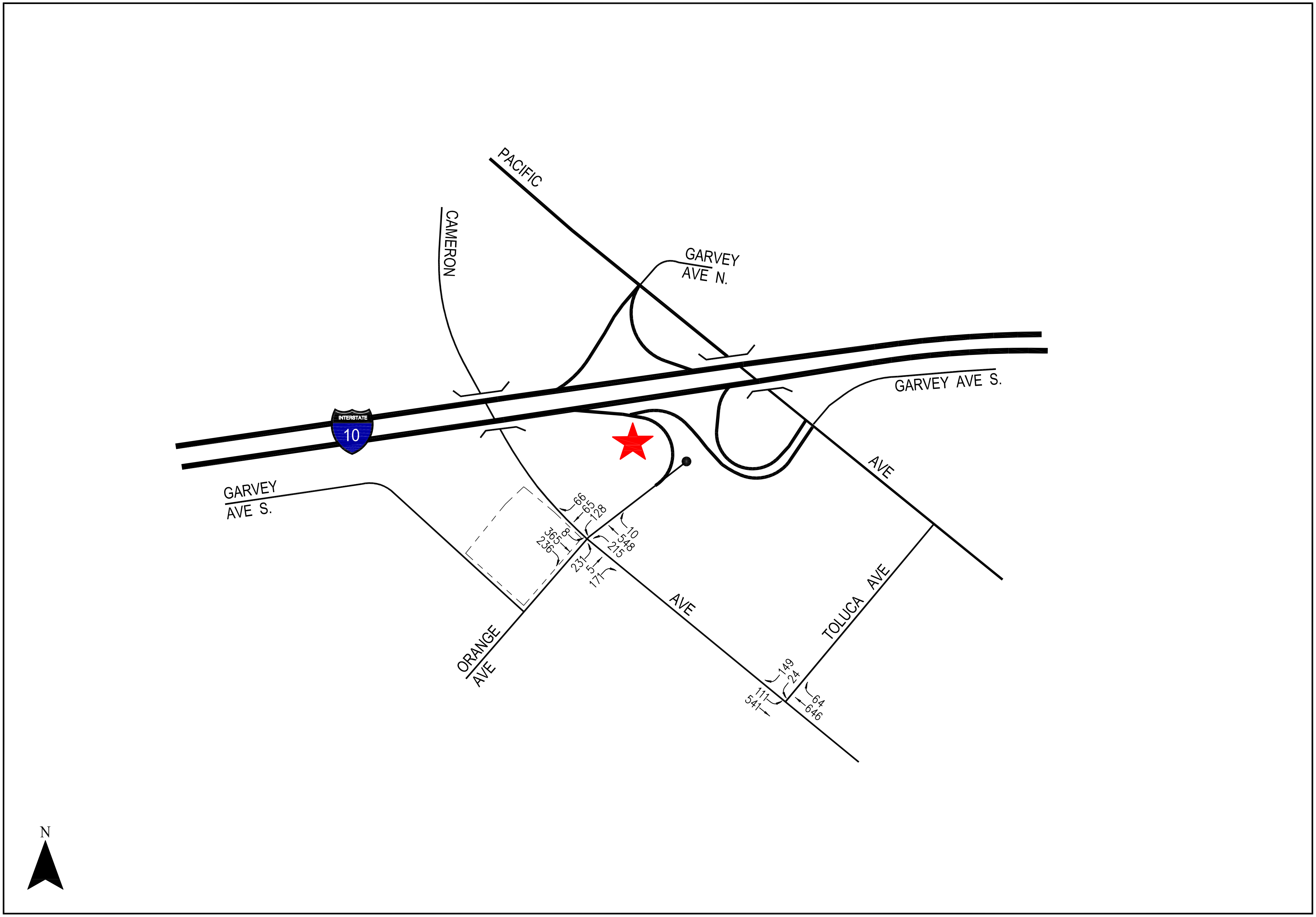
Project Site

Off-Site Parking Lot

Figure 5-4
Future Without Project Traffic Volumes
Weekday PM Peak Hour
West Covina Medical Center - Behavioral Health Addition Project



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Project Site

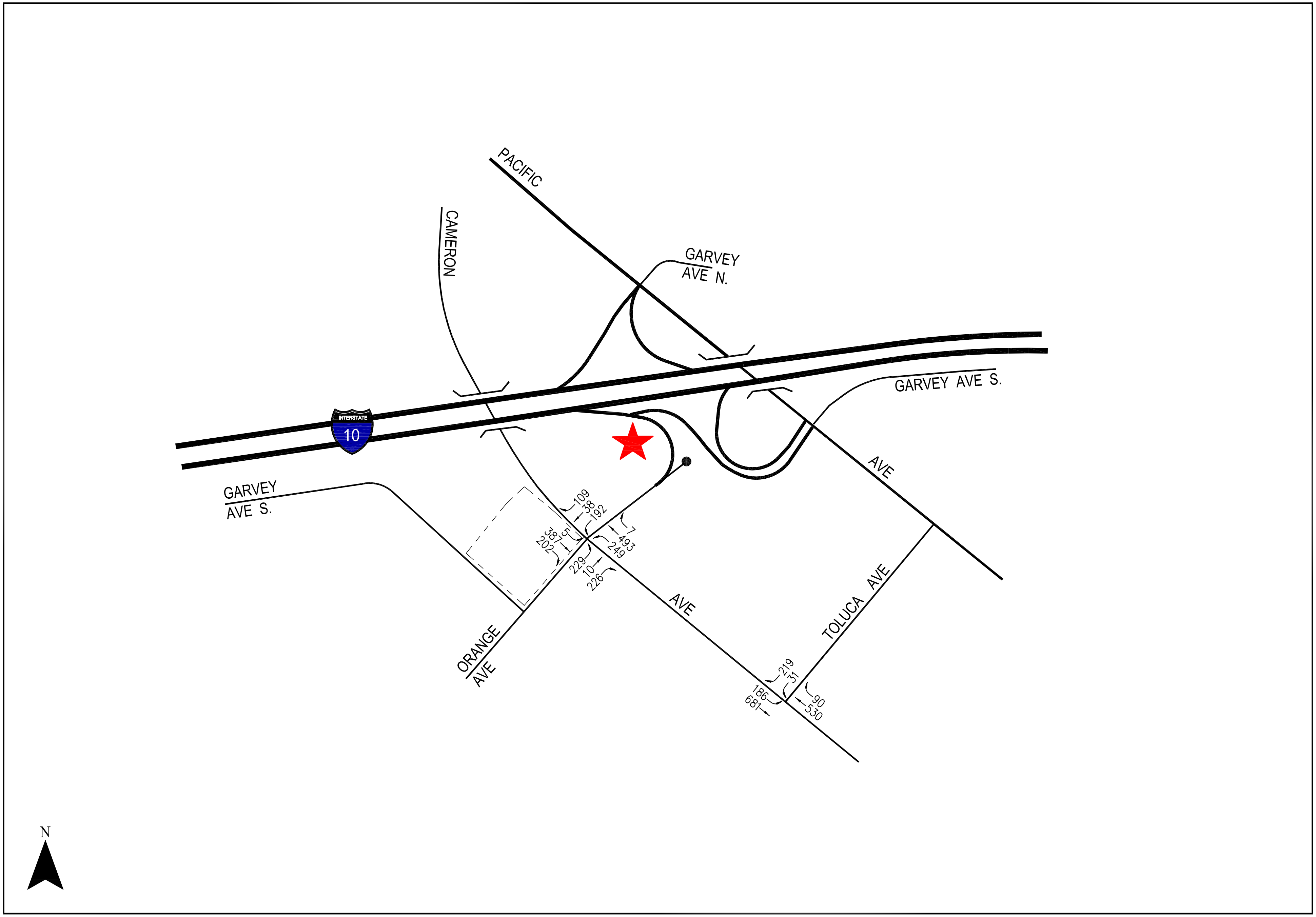
Off-Site Parking Lot

Figure 5-5

Future With Project Traffic Volumes

Weekday AM Peak Hour

West Covina Medical Center - Behavioral Health Addition Project



Project Site

Off-Site Parking Lot

Figure 5-6
Future With Project Traffic Volumes
Weekday PM Peak Hour

West Covina Medical Center - Behavioral Health Addition Project

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6.0 CALIFORNIA DEPARTMENT OF TRANSPORTATION ANALYSIS

Consistent with the previously described statutory changes to the CEQA Guidelines, the California Department of Transportation (Caltrans) has also formally adopted VMT as the metric for reviewing the transportation impacts of a land use development project. Caltrans has released the *Transportation Impact Study Guide* (TISG) and the *Interim LD-IGR Safety Review Practitioners Guidance* in order to provide guidance on Caltrans' review of land use projects.

6.1 Vehicle Miles Traveled Analysis

Caltrans' TISG references the December 2018 *Technical Advisory* prepared by OPR as the basis for its guidance on VMT assessment. For the purpose of this transportation assessment, it is understood that the City of West Covina's adopted VMT methodology and screening criteria are substantially consistent with the recommendations provided in the *Technical Advisory* and thus satisfy Caltrans' VMT analysis requirements as well. Therefore, no separate VMT analysis has been prepared for Caltrans' review of the proposed project.

6.2 Off-Ramp Vehicle Queuing Analysis

The *Interim LD-IGR Safety Review Practitioners Guidance* provides direction on a simplified safety analysis approach that reduces the risk to all road users and that focuses on multi-modal conflict analysis as well as access management issues. District traffic safety staff are encouraged to consider the proposed project's potential influence on safety on state roadways, including the following factors:

- Increased presence of pedestrians and bicyclists
- Degradation of the walking and bicycling environment and experience
- New pedestrian and bicyclist connection desires
- Multimodal conflict points, especially at intersections and project access locations
- Change in traffic mix such as an increase in bicyclists or pedestrians where features such as shoulders or sidewalks may not exist or are inconsistent with facility design (sidewalks, bike and multi-user paths, multimodal roadways, etc.)
- Increased vehicular speeds
- Transition between free flow and metered flow
- Increased traffic volumes
- Queuing at off-ramps resulting in slow or stopped traffic on the mainline or speed differentials between adjacent lanes
- Queuing exceeding turn pocket length that impedes through-traffic

The proposed project takes direct access from a State facility; therefore, the project has been reviewed for factors pertaining to site access or local roadways. The proposed project is expected to generate new project trips at the following intersections that are nearest to the I-10 Freeway off-ramps and project site: 1) I-10 Freeway Eastbound Off-Ramp-Orange Avenue/Cameron Avenue, and 2) I-10 Freeway Westbound Off-Ramp-Garvey Avenue North/West Covina Parkway. Therefore, an analysis of the project's effect on off-ramp queuing was prepared in order to determine if the project would cause, or contribute towards, slowing or stopped traffic on mainline travel lanes resulting in unsafe speed differentials between adjacent lanes.

Pursuant to prior direction from Caltrans staff, off-ramp queuing was analyzed using the current Highway Capacity Manual (HCM) method for the subject intersections. The off-ramp queuing calculations were prepared using the *Synchro 11* software package which implements the HCM operational methodology. A *Synchro* network was created based on existing conditions field reviews at the above ramp intersections. In addition, specifics such as traffic volume data, lane configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing, etc., were coded to complete the existing network. The corresponding weekday AM peak hour and PM peak hour peak hour HCM worksheets for purposes of determining the 95th percentile vehicle queues are contained in ***Appendix E***.

The queuing analysis was prepared for the existing, existing with project, future without project and future cumulative with project conditions. Each of the freeway off-ramp intersection approaches were reviewed in terms of expected maximum vehicle queues (i.e., 95th percentile queues) which represent the maximum back of vehicle queues with 95th percentile traffic volumes. The corresponding maximum vehicle queue lengths were then compared with 85 percent of the ramp storage lengths (i.e., the available storage length as measured from the applicable freeway/frontage road gore areas to the respective off-ramp approach limit lines/merge points). The total queuing for the off-ramp was determined based on the sum of the maximum vehicle queues for each off-ramp lane. The total ramp storage lengths were determined based on 85 percent of the sum of the striped storage for all lanes provided at the off-ramp location.

As presented in ***Table 6-1***, adequate storage areas are provided to accommodate the forecast 95th percentile queues under existing, existing with project, future without project and future cumulative with project conditions. The proposed project is not expected to cause or contribute towards vehicle queuing which extends back into the I-10 Freeway mainline travel lanes resulting in unsafe speed differentials between adjacent lanes. Therefore, the proposed project is not anticipated to negatively influence safety on the State Highway System.

Table 6-1
SUMMARY OF OFF-RAMP VEHICLE QUEUING ANALYSIS [1]
WEEKDAY AM AND PM PEAK HOURS

NO.	INTERSECTION	PEAK HOUR	85th PERCENTILE AVAILABLE OFF-RAMP STORAGE [2] (FEET)	EXISTING 95th %-ILE QUEUE [3] (FEET)	EXISTING EXCEEDS 85th %-ILE STORAGE? (YES/NO)	EXISTING WITH PROJECT 95th %-ILE QUEUE [3] (FEET)	EXISTING WITH PROJECT EXCEEDS 85th %-ILE STORAGE? (YES/NO)	FUTURE YEAR 2026 WITHOUT PROJECT 95th %-ILE QUEUE [3] (FEET)	FUTURE YEAR 2026 WITHOUT PROJECT EXCEEDS 85th %-ILE STORAGE? (YES/NO)	FUTURE YEAR 2026 WITH PROJECT 95th %-ILE QUEUE [3] (FEET)	FUTURE YEAR 2026 WITH PROJECT EXCEEDS 85th %-ILE STORAGE? (YES/NO)
1	I-10 Freeway EB Off-Ramp-Orange Avenue/	AM	1,570	183	No	188	No	223	No	230	No
	Cameron Avenue	PM	1,570	268	No	273	No	308	No	315	No
2	I-10 Freeway WB Off-Ramp-Garvey Ave. N./	AM	890	370	No	370	No	130	No	133	No
	West Covina Parkway	PM	890	150	No	153	No	158	No	160	No

[1] Refer to calculation worksheets in *Appendix E.*

[2] Available storage represents 85 percent (85%) of total storage space, as measured via Google Earth (2022) aerial imagery. The total storage represents the sum of all formally striped lanes on the off-ramp.

[3] The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The reported queue represents the sum of the 95th percentile vehicle queues for all lanes of the off-ramp (refer to Appendix Table E-1). An average vehicle length of 25 feet (including vehicle separation) was assumed for analysis purposes.

7.0 CONSTRUCTION TRAFFIC ANALYSIS

Based on coordination with and preliminary information provided by the Project Applicant team, it has been determined that construction of the project is planned to be implemented in ten (10) general phases of construction activities. This analysis assumes a construction schedule totaling approximately 22 months in duration. While these general construction phases could overlap, it is anticipated that any overlapping construction activities between these phases would be minimal. In order to provide a conservative analysis, it is assumed that some overlap does occur between each of the construction activities/phases.

The general construction activities are as follows in sequential order:

- Phase 1: Demolition and Removal of Existing Asphalt/Curb & Gutter
- Phase 2: Clear Existing Landscaping/Irrigation/Utilities
- Phase 3: Grading and Excavation for Underground Utilities and Foundations
- Phase 4: Install Concrete Foundations and Underground Utilities
- Phase 5: New Steel/Metal Deck Erection
- Phase 6: New Exterior Skin System/Windows
- Phase 7: Building Interior MEP
- Phase 8: Building Finishes
- Phase 9: Landscaping/Irrigation/Concrete Curb & Gutter
- Phase 10: Clean-up/Final Paving/Start-up/Testing

The estimated construction workforce is not anticipated to exceed 120 workers during any given phase of construction activity. ***Table 7-1*** summarizes the construction traffic generation for the weekday daily, AM, and PM peak hours during the peak phase of construction activities. Temporary lane closures are not expected to be necessary throughout the course of the project construction. Should any temporary lane closures be necessary, it would occur outside of the weekday AM and PM commute peak hours, so as to maintain roadway capacity when the street system is typically most heavily constrained.

7.1 Construction Assumptions

It is assumed that the equipment staging area during the initial phases of construction grading would occur on, within, and adjacent to the project site. The site would be cleared and after completion of the first three phases of construction activities, building and foundation construction would commence. Construction worker parking is expected to occur at the off-site surface parking lot or in designated allowable parking in the site vicinity to be determined in coordination and agreement

Table 7-1
CONSTRUCTION PEAK HOUR TRIP GENERATION [1]
DURING PEAK PHASE

LAND USE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
		IN	OUT	TOTAL	IN	OUT	TOTAL
[A] Construction Workers [3]	212	--	--	--	0	53	53
[B] Dump/Trailer Truck Trips (unadjusted) [4]	10	2	2	4	2	2	4
[C] Miscellaneous Truck Trips (unadjusted) [5]	10	1	1	2	1	1	2
[D] PCE Adjusted Dump/Trailer Truck Trips [6]	30	6	6	12	6	6	12
[E] PCE Adjusted Miscellaneous Truck Trips [7]	20	2	2	4	2	2	4
Total Trips in PCEs ([A]+[D]+[E])	**262**	**8**	**8**	**16**	**8**	**61**	**69**

[1] Project construction information provided by Project Applicant representatives.
[2] Trips are one-way traffic movements, entering or leaving.
[3] During the peak construction activities phase, a total of 120 construction workers are expected to be on-site.
Workers are assumed to arrive at the site prior to 7:00 AM and it is assumed that 50 percent (50%) of the workers would depart during the PM peak hour of adjacent street traffic. An average vehicle ridership factor of 1.135 passengers/vehicle was applied to determine the worker vehicle trips.
Daily construction worker trips = 120 workers/(1.135 passengers/vehicle) = 106 inbound vehicle trips + 106 outbound vehicle trips = 212 total daily vehicle trips
[4] Assumed 5 trucks per day = 10 one-way dump/trailer truck trips per day (i.e., 5 inbound trips and 5 outbound trips)
[5] Miscellaneous truck trips are expected during the peak phase of construction activities, where 5 round-trip miscellaneous truck trips per day is assumed.
Based on an eight-hour workday, one round-trip miscellaneous truck trip per hour is anticipated.
5 inbound miscellaneous trucks + 5 outbound miscellaneous trucks = 10 one-way miscellaneous truck trips per day (assumed for peak day)
[6] A passenger car equivalency (PCE) factor of 3.0 was employed for analysis purposes. This accounts for the assumption that these dump trucks and box trailer trucks have the same overall effect on intersection traffic operations as 3.0 passenger cars.
[7] A PCE factor of 2.0 was employed for miscellaneous trucks. This accounts for the assumption that a miscellaneous truck has the same overall effect on intersection traffic operations as 2.0 passenger cars.

with adjacent businesses (i.e., Floor & Decor). Although construction would primarily occur at the eastern portion of the project site, the existing on-site parking areas and drive aisles to the north and west of the hospital building would be repaved as part of the project. Once the re-paving is installed, the entire lot would be available for construction worker parking.

To the extent feasible, construction-related activities would be scheduled to occur during daylight hours. The construction hours will be limited to Mondays through Fridays to no earlier than 7:00 AM and no later than 5:00 PM. It is important to note that although the construction workday would commence at 7:00 AM and typically end at 3:00 PM, it is assumed that workers would generally begin to depart the site between 2:30 to 3:30 PM. Later departures would occur only when overtime is necessary to maintain the schedule.

It is assumed that heavy construction equipment would be located on-site during the construction activities and would not travel to and from the project site on a daily basis. However, haul truck trips would be generated during the grading and corresponding export activities in order to remove materials from the project site. Trucks are expected to carry the export material to a receptor site. Based on information provided by the Project Applicant team, it is anticipated that the demolition and associated export of construction debris/excavation material will be transported via the regional freeway system to the arterial roadways to the Materials Recovery Facility (City of Industry) and/or the Victorville Sanitary Landfill. Depending on the direction of travel, the designated truck routes would be utilized as part of the haul route which would require review and approval by the City of West Covina.

7.2 Peak Construction Traffic Trip Generation

As described above, it has been determined that the most intensive period of overall construction activity and construction traffic generation during the weekday AM and PM peak hours is expected to occur with the following assumptions for construction workforce and construction trucks.

7.2.1 *Construction Workforce*

Activities related to the peak construction activities are expected to generate one of the highest numbers of construction worker vehicle trips as compared to the other construction activities. During the peak phase, the maximum number of construction workers is expected to total 120 workers. As noted above, construction workers are expected to arrive to the project site before 7:00 AM. Assuming the typical workday ends at 3:00 PM, twenty-five percent (25%) of the workers are assumed to leave the site between 2:30 PM and 3:00 PM, twenty-five percent (25%) between 3:00 PM and 3:30 PM, twenty-five percent (25%) between 3:30 PM and 4:00 PM and the remaining twenty-five percent (25%) after 4:00 PM (including supervisors). Thus, while the majority of these construction worker trips would generally occur outside of the commute peak hours of adjacent street traffic, it was assumed that percent (50%) of the workforce (i.e., roughly 60 workers) departure would overlap with the weekday commute PM peak hour (i.e., after 4:00 PM) in order to provide a conservative forecast of construction traffic generation.

It is anticipated that construction workers would primarily remain on-site throughout the day. The number of construction worker vehicles is estimated using an average vehicle ridership (AVR) of 1.135 persons per vehicle (as provided in the South Coast Air Quality Management District in its CEQA Air Quality Handbook). Therefore, it is estimated that approximately 212 vehicle trips (i.e., 120 workers/1.135 persons per vehicle = 106 inbound trips and 106 outbound trips) on a daily basis would be generated to/from the site by the construction workers during the overlap of these activities. With 50% of the workers conservatively assumed to overlap with the weekday PM peak hour, this would result in a maximum of 53 outbound construction worker vehicle trips (i.e., 120 workers x 50% = 60 workers/1.135 persons per vehicle = 53 outbound worker vehicle trips) during the weekday PM peak hour.

It is generally anticipated that construction worker-related traffic would be largely freeway-oriented. Construction workers would likely arrive and depart via the on- and off-ramps serving the I-10 Freeway. The most commonly used freeway ramps would be nearest the project site on Pacific Avenue and West Covina Parkway. The construction workforce would likely be generated from all parts of the Los Angeles region and therefore are assumed to arrive from all directions.

7.2.2 *Construction Trucks*

In addition to construction worker vehicles, additional trips may be generated by construction vehicles including construction trucks (i.e., dump trucks, box trailer trucks, etc.) traveling to and from the project site. These trucks may consist of trucks delivering equipment and/or construction materials to the project site. As no specific information was provided for construction trucks at this time, it is estimated that during the peak phase, a maximum daily haul truck trip of 10 truck trips per day (i.e., 5 inbound truck trips and 5 outbound truck trips) would be generated to and from the site. When accounting for the application of a PCE (passenger car equivalent) factor of 3.0, it is estimated that the haul trucks would generate approximately 30 daily PCE vehicle trips (i.e., 15 inbound trips and 15 outbound trips). It is also estimated that no more than 12 PCE vehicle trips (6 inbound trips and 6 outbound trips) would occur during both the weekday AM and PM peak hours.

7.2.3 *Miscellaneous Trucks*

Additional trips may be generated by miscellaneous trucks traveling to and from the project site. These trucks may consist of smaller pick-up trucks or four-wheel drive vehicles used by construction supervisors and/or City inspectors who are expected to be generated to and from the site. During the peak construction activities, five (5) miscellaneous trucks are anticipated. It is estimated that if these trips all occur during a single day of that phase, up to 10 truck trips per day (i.e., 5 inbound truck trips and 5 outbound truck trips) would be generated to and from the site by miscellaneous/delivery trucks. When accounting for the application of a PCE factor of 2.0, it is estimated that the miscellaneous trucks would generate approximately 20 daily PCE vehicle trips (i.e., 10 inbound trips and 10 outbound trips). It is also estimated that no more than 4 PCE vehicle trips (2 inbound trips and 2 outbound trips) would occur during both the weekday AM and PM peak hours.

7.2.4 *Total Construction Traffic Generation*

As shown in *Table 7-1*, taken together, the construction worker vehicles, construction trucks and miscellaneous trucks are forecast to generate up to 16 AM peak hour PCE vehicle trips (i.e., 8 inbound trips and 8 outbound trips) and 69 PM peak hour PCE vehicles trips (i.e.,8 inbound trips and 61 outbound trips). Over a 24-hour period during the peak phase of construction activities, 262 daily PCE trip ends (131 inbound trips and 131 outbound trips) during a typical weekday are forecast.

7.3 Cumulative Impacts During Concurrent Construction Activities

As noted previously in Section 3.5.1, while there are several related projects that fall within a one-mile radius of the project site, only a couple related projects are located within about a two-block radius of the project, which is the distance that would typically be expected to result in potential concurrent construction traffic effects. It is possible that the construction of some of these related projects could overlap with the project's construction phase. However, similar to the proposed project and pursuant to current City policies, those projects would be required to prepare and implement a Construction Staging and Traffic Management Plan (CSTMP) to address any anticipated temporary lane closures or re-routing of vehicle and bicycle traffic, sidewalk closures or pedestrian re-routing.

Thus, the cumulative impacts during concurrent construction activities are forecast to be less than significant. Also, as discussed previously, while the project's peak hour construction traffic generation would be more than the project's overall peak hour operational traffic generation, the daily construction traffic generation would be less than the project's overall daily operational traffic generation and would not be expected to result in any deficiencies in the intersection Levels of Service (LOS). Therefore, project impacts would not be cumulatively considerable.

7.4 Emergency Access During Concurrent Construction Activities

The potential traffic impacts during project construction have been analyzed as summarized above. Having stated this, emergency vehicle access throughout the study area must be maintained during the concurrent construction activities associated with several development projects. It is important to note that as required by the State of California Vehicle Code (i.e., specifically Section 21806, Authorized Emergency Vehicles), "upon the immediate approach of an authorized emergency vehicle which is sounding a siren and which has at least one lighted lamp exhibiting red light that is visible, under normal atmospheric conditions, from a distance of 1,000 feet in front of a vehicle, the surrounding traffic shall, except as otherwise directed by a traffic officer, do the following:

(a) (1) Except as required under paragraph (2), the driver of every other vehicle shall yield the right-of-way and shall immediately drive to the right-hand edge or curb of the highway, clear of any intersection, and thereupon shall stop and remain stopped until the authorized emergency vehicle has passed.

(2) A person driving a vehicle in an exclusive or preferential use lane shall exit that lane immediately upon determining that the exit can be accomplished with reasonable safety.

(b) The operator of every street car shall immediately stop the street car, clear of any intersection, and remain stopped until the authorized emergency vehicle has passed.

(c) All pedestrians upon the highway shall proceed to the nearest curb or place of safety and remain there until the authorized emergency vehicle has passed."[10]

During any concurrent construction of several development projects, including the proposed project, it is expected that emergency vehicles will continue to utilize the surrounding street system even though some travel lanes along certain portions of some roadways may be temporarily used for construction staging and/or material delivery. If required, drivers of emergency vehicles are also trained to utilize center turn lanes, or travel in opposing through lanes to pass through crowded intersections or streets. Thus, the respect entitled to emergency vehicles and driver training allow emergency vehicles to negotiate typical street conditions in urban areas including areas near any temporary travel lane closure(s).

7.5 Construction Management and Haul Route Approval

Approvals required by the City of West Covina and the State of California Department of Transportation (Caltrans) for implementation of the proposed project include a Truck Haul Route program approved by City and an encroachment permit obtained by Caltrans. With regard to other construction traffic-related issues, construction equipment would be stored within the perimeter fence of the construction site.

As a general contractor has not yet been selected, the exact extent of the construction work site boundary cannot be determined at this time. However, during certain portions of the construction schedule it is possible that one or more sidewalks may need to be temporarily closed. Should that be determined to be necessary, appropriate pedestrian detours will be required to be established along with the appropriate advance warning signage directing pedestrians to other available sidewalks and crosswalks/crossings. Should any such pedestrian detours or temporary travel lane closures be proposed, traffic control/management plans will be prepared for the required review and approval by the City of West Covina Department of Public Works. In addition, a Construction Staging and Traffic Management Plan (CSTMP) will also be required for review and approval by the City outlining all of the above details.

With the required haul route approval and other construction management practices, construction activity impacts are forecast to be less than significant on a cumulative and temporary basis. Potential construction traffic impacts can be further reduced with the implementation of the following design features as part of the CSTMP:

- Maintain existing access for the adjacent site uses and parking facilities;

[10] Source: State of California Department of Motor Vehicles website; https://www.dmv.ca.gov/portal/dmv; Amended Sec. 68, Ch. 1154, Stats 1996 Effective September 30, 1996.

- Limit any potential roadway lane closures to off-peak travel periods;
- Schedule receipt of construction materials to non-peak travel periods to the extent possible;
- Coordinate deliveries to reduce the potential of trucks waiting to unload for protracted periods of times; and
- Prohibit parking by construction workers on adjacent streets and direct the construction workers to available/designated parking areas within the project site or nearby off-site parking lots.

8.0 SUMMARY AND CONCLUSIONS

- ***Project Description*** – The project site is located at 725 South Orange Avenue, adjacent to the I-10 Freeway eastbound off-ramp to Orange Avenue, in the City of West Covina. The proposed project consists of expanding the existing West Covina Medical Center to include an approximate 42,000 square-foot four-story behavioral health transition facility to the northeast side of the existing building. The proposed building addition would remove a portion of the existing surface parking lot currently located at the northeast corner of the site. The expansion would feature three levels of nursing units over an at-grade arrival lobby and include an additional 71 licensed beds. All patients are expected to be transported via emergency service vehicles from another facility to this transitional facility for treatment. The project build-out and occupancy year is anticipated by the year 2026.

- ***Project Site Access*** – Vehicular access to the project site is planned to be accommodated by an existing driveway on Orange Avenue, north of Cameron Avenue, as well as two driveways for the off-site surface parking lot. Access to the off-site parking lot is provided by an existing driveway on Orange Avenue and an existing driveway on Garvey Avenue South. An accessible pedestrian path of travel is provided from the off-site parking lot to the entrance of the proposed project building by utilizing the existing crosswalk at the Orange Avenue/Cameron Avenue intersection and the existing sidewalk on Orange Avenue and then connecting to planned walkways onsite. It is recommended that white continental crosswalks be installed at the Orange Avenue/Cameron Avenue intersection.

- ***Project Parking*** **–** The proposed behavioral health building addition would displace a portion of the existing surface parking on-site such that the future on-site parking supply is reduced to 18 spaces (i.e., 12 standard spaces, 6 handicap accessible spaces) located to the north of and behind the building. The overall future parking supply for the existing WCMC and the proposed project addition totals 150 spaces (i.e., 18 on-site spaces and 132 off-site spaces). It is expected that the future parking demand forecast for the project will total 37 spaces. Thus, the existing adjusted peak parking demand of 95 spaces and the forecast project parking demand of 37 spaces would result in a total future peak parking demand of 132 spaces (i.e., 88% occupancy of the total parking supply of 150 spaces) for the overall site during the peak weekday condition.

- ***Project Trip Generation*** – The proposed project is expected to generate 34 new vehicle trips (23 inbound trips and 11 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 36 new vehicle trips (13 inbound trips and 23 outbound trips). Over a 24-hour period, the proposed project is forecast to generate approximately 452 new daily trip ends (226 inbound trips and 226 outbound trips) during a typical weekday.

- ***CEQA Vehicle Miles Traveled Assessment*** – Consistent with the requirements of CEQA Guidelines Section 15064.3, the City of West Covina has adopted significance criteria for transportation impacts based on vehicle miles traveled for land use development projects. The

City has also adopted three criteria for screening projects out of detailed VMT analysis. The project meets two of the three criteria to be screened out of VMT analysis (i.e., based on its location within a low VMT-generating area and based on the project land use type as a local serving use). Therefore, the project is screened out of further VMT analysis. Therefore, through satisfaction of the screening criteria, the proposed project is determined to have a less than significant transportation impact.

- ***CEQA Active Transportation and Public Transit Assessment*** – A significant impact may also occur "if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities". The proposed project is found to be in alignment with the City's General Plan and the Active Transportation Plan goals to promote pedestrian and bicycle safety and provide appropriate and supportive active transportation infrastructure. Further, development of the proposed project will not prevent the City from completing any proposed transit, bicycle, or pedestrian facilities. It is therefore determined that the proposed project will result in a less than significant impact on active transportation and public transit in the vicinity of the project site.

- ***Non-CEQA Analysis*** – Two study intersections were reviewed for consistency with the City of West Covina's adopted Level of Service (LOS) standards. The study intersections were evaluated using the City-approved Intersection Capacity Utilization (ICU) and Highway Capacity Manual (HCM) methodologies to determine the LOS under existing, existing with project, and future without and with project conditions. Based on application of the City's LOS standards, the proposed project is not required to identify or construct intersection improvements at any of the study intersections.

- ***Caltrans Analysis*** – It is understood that the City of West Covina's adopted VMT methodology and screening criteria are substantially consistent with the recommendations provided in the *Technical Advisory* prepared by OPR and thus satisfy Caltrans' VMT analysis requirements as well. Therefore, no separate VMT analysis has been prepared for Caltrans' review of the proposed project. Pursuant to the direction provided in the *Interim LD-IGR Safety Review Practitioners Guidance*, an analysis of the project's effect on off-ramp queuing determined that the proposed project is not expected to cause or contribute towards vehicle queuing which extends back into the I-10 Freeway mainline travel lanes resulting in unsafe speed differentials between adjacent lanes.

APPENDIX A

COLLISION HISTORY DATA

Appendix Table A-1
COLLISION HISTORY [1]
Orange Avenue/Cameron Avenue

NO.	DATE OF COLLISION	TIME OF DAY	DAY OF WEEK	DISTANCE FROM INTERSECTION	WEATHER CONDITIONS	ROADWAY SURFACE	LIGHTING	MOVEMENT PRECEDING COLLISION		PRIMARY COLLISION FACTOR	VEHICLE CODE VIOLATION SUBSECTION	TYPE OF COLLISION	VEHICLE INVOLVED WITH	COLLISION SEVERITY	NUMBER KILLED	NUMBER INJURED
								AT FAULT PARTY	OTHER PARTY							
1	01/16/2023	4:29 PM	Monday	219' North	Clear	Dry	Daylight	Eastbound Proceeding Straight	Northbound Proceeding Straight	Automobile Right of Way	21804A	Broadside	Other Motor Vehicle	Injury (Other Visible)	0	1
2	12/18/2022	12:52 PM	Sunday	In Intersection	Clear	Dry	Daylight	Southbound Proceeding Straight	Northbound Making Left Turn	Traffic Signals & Signs	21453A	Broadside	Other Motor Vehicle	PDO	0	0
3	11/30/2022	11:28 AM	Wednesday	In Intersection	Clear	Dry	Dark - Street Lights	Eastbound Proceeding Straight	Northbound Making Left Turn	Traffic Signals & Signs	21453A	Broadside	Other Motor Vehicle	Injury (Complaint of Pain)	0	1
4	02/21/2022	8:45 AM	Monday	120' North	Clear	Dry	Daylight	Southbound Proceeding Straight	Southbound Parked	Unsafe Speed	22350	Rear End	Parked Motor Vehicle	PDO	0	0
5	02/16/2022	3:50 PM	Wednesday	32' North	Clear	Dry	Daylight	Eastbound Backing	Eastbound Parked	Other Improper Driving	Not Stated	Broadside	Parked Motor Vehicle	PDO	0	0
6	10/13/2021	7:45 PM	Wednesday	20' South	Clear	Dry	Dark - Street Lights	Northbound Proceeding Straight	Northbound Slowing/Stopped	Unsafe Speed	22350	Rear End	Other Motor Vehicle	PDO	0	0
7	07/27/2021	10:32 AM	Tuesday	In Intersection	Clear	Dry	Daylight	Not Stated	Eastbound Stopped	Improper Turning	22107	Sideswipe	Other Motor Vehicle	PDO	0	0
8	05/02/2021	1:03 AM	Sunday	7' North	Clear	Dry	Dark - Street Lights	Westbound Making Left Turn	-	Under the Influence of Alcohol	23152A	Hit Object	Fixed Object	PDO	0	0
9	02/17/2020	10:11 AM	Monday	In Intersection	Clear	Dry	Daylight	Northbound Making Left Turn	Southbound Proceeding Straight	Automobile Right of Way	21801A	Broadside	Other Motor Vehicle	PDO	0	0
10	01/18/2020	11:13 AM	Saturday	170' South	Clear	Dry	Daylight	Northbound Making Left Turn	Northbound Proceeding Straight	Unknown	22100D	Sideswipe	Other Motor Vehicle	PDO	0	0

[1] Collision data were requested from the California Highway Patrol's (CHP) online Statewide Integrated Traffic Records System (SWITRS) database on April 10, 2023. Records were requested for the most recent three year period. According to the SWITRS website, data from seven months prior to the date of request should be considered incomplete due to a collision records processing backlog. Therefore, the most recent five year period is assumed to include September 1, 2019 through April 10, 2023. Collisions which occurred from September 1, 2022 to April 10, 2023 have been included for informational purposes.

APPENDIX B

TRAFFIC, PEDESTRIAN, AND BICYCLE COUNT DATA

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

File Name : CameronAve_OrangeAve
Site Code : 00000000
Start Date : 4/4/2023
Page No : 1

Groups Printed- Vehicles

	Cameron Avenue ~~Southbound~~ EB			Orange Avenue ~~Westbound~~ SB			Cameron Avenue ~~Northbound~~ WB			Orange Avenue ~~Eastbound~~ NB			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	59	20	13	7	6	24	103	3	42	0	16	293
07:15 AM	0	62	37	30	10	11	35	134	1	40	0	17	377
07:30 AM	2	75	36	21	15	15	55	138	3	47	0	39	446
07:45 AM	0	85	68	29	14	18	70	142	1	50	1	39	517
Total	2	281	161	93	46	50	184	517	8	179	1	111	1633
08:00 AM	1	107	54	25	16	14	42	114	3	62	1	37	476
08:15 AM	4	79	66	31	11	15	36	119	2	59	3	48	473
08:30 AM	1	82	32	32	11	23	40	97	4	53	3	32	410
08:45 AM	3	84	30	32	17	13	29	81	6	36	0	30	361
Total	9	352	182	120	55	65	147	411	15	210	7	147	1720
04:00 PM	0	88	36	23	10	17	50	90	1	60	2	64	441
04:15 PM	0	95	42	31	7	23	58	99	3	71	1	54	484
04:30 PM	1	73	52	36	13	25	50	87	3	44	1	67	452
04:45 PM	0	92	51	35	9	25	45	112	1	45	2	53	470
Total	1	348	181	125	39	90	203	388	8	220	6	238	1847
05:00 PM	3	94	50	45	11	26	72	112	1	62	5	57	538
05:15 PM	0	96	50	40	4	22	69	107	1	52	1	53	495
05:30 PM	1	87	42	53	9	30	53	115	3	52	2	51	498
05:45 PM	2	67	37	34	7	33	66	93	1	59	0	52	451
Total	6	344	179	172	31	111	260	427	6	225	8	213	1982
Grand Total	18	1325	703	510	171	316	794	1743	37	834	22	709	7182
Apprch %	0.9	64.8	34.4	51.2	17.2	31.7	30.8	67.7	1.4	53.3	1.4	45.3	
Total %	0.3	18.4	9.8	7.1	2.4	4.4	11.1	24.3	0.5	11.6	0.3	9.9	

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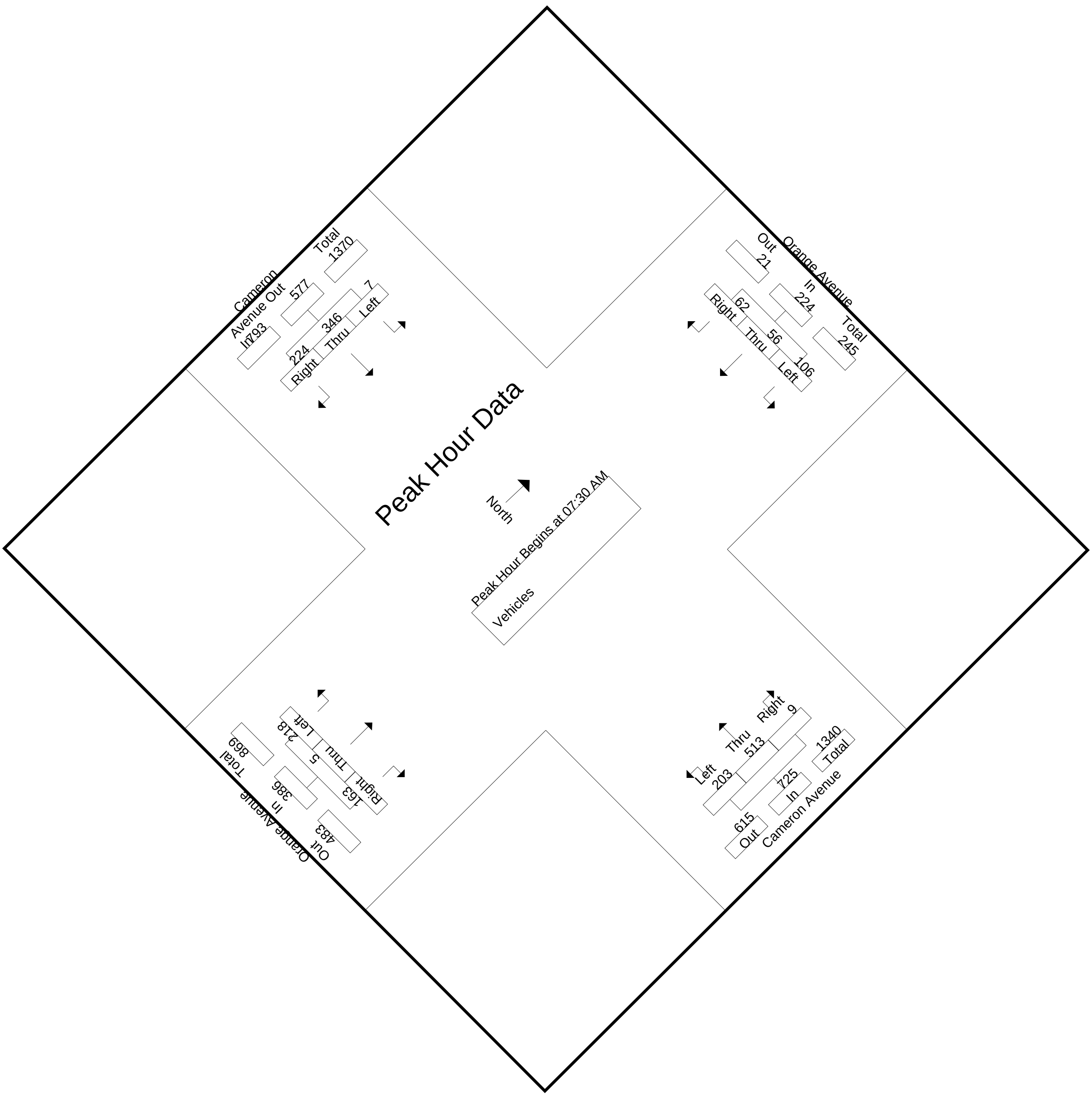
	Cameron Avenue ~~Southbound~~ EB				Orange Avenue ~~Westbound~~ SB				Cameron Avenue ~~Northbound~~ WB				Orange Avenue ~~Eastbound~~ NB				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	75	36	113	21	15	15	51	55	138	**3**	196	47	0	39	86	446
07:45 AM	0	85	**68**	153	29	14	**18**	**61**	**70**	**142**	1	**213**	50	1	39	90	**517**
08:00 AM	1	**107**	54	**162**	25	**16**	14	55	42	114	3	159	**62**	1	37	100	476
08:15 AM	**4**	79	66	149	**31**	11	15	57	36	119	2	157	59	**3**	**48**	**110**	473
Total Volume	7	346	224	577	106	56	62	224	203	513	9	725	218	5	163	386	1912
% App. Total	1.2	60	38.8		47.3	25	27.7		28	70.8	1.2		56.5	1.3	42.2		
PHF	.438	.808	.824	.890	.855	.875	.861	.918	.725	.903	.750	.851	.879	.417	.849	.877	.925



File Name : CameronAve_OrangeAve
Site Code : 00000000
Start Date : 4/4/2023
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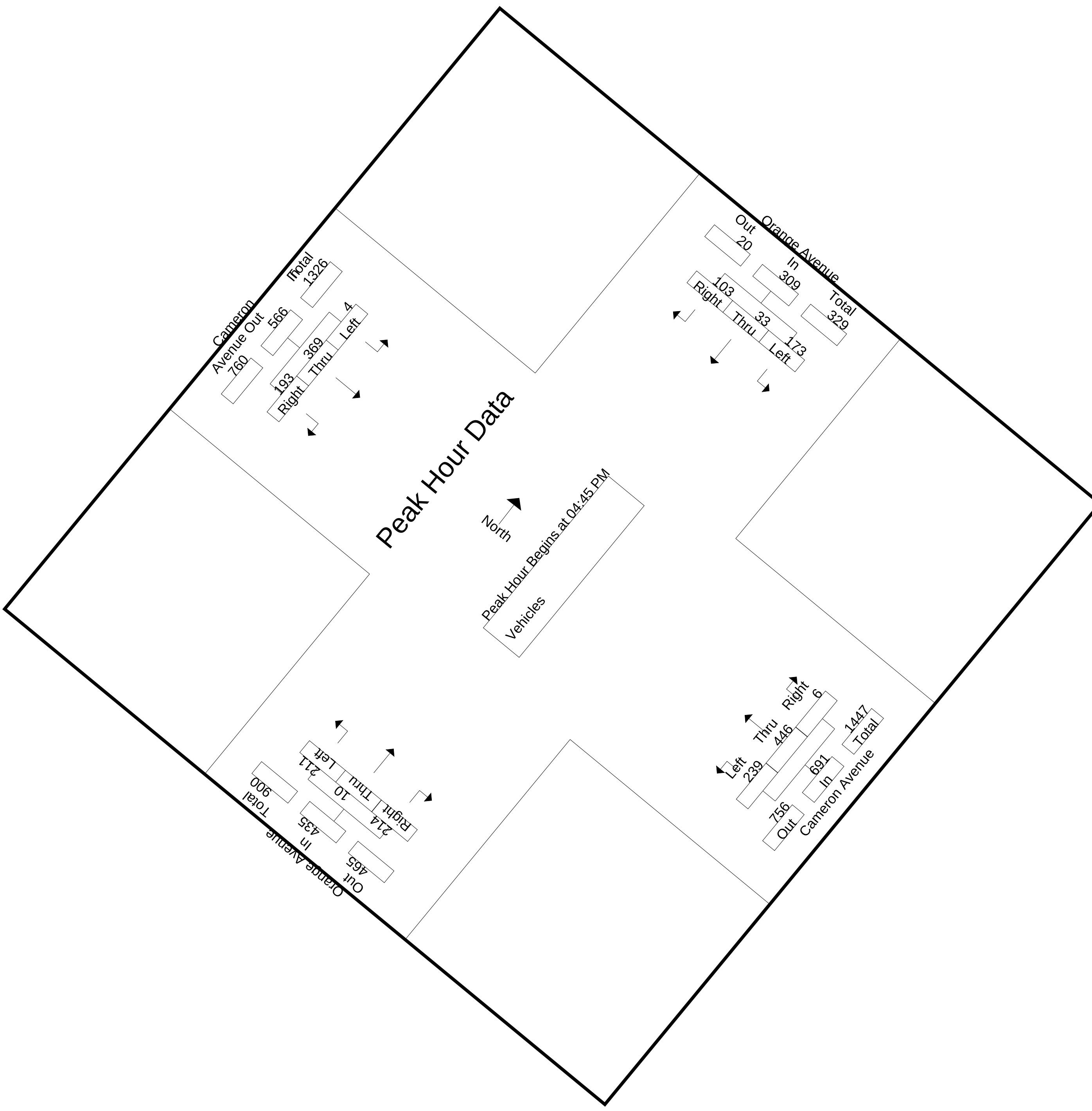
	Cameron Avenue ~~Southbound~~ EB				Orange Avenue ~~Westbound~~ SB				Cameron Avenue ~~Northbound~~ WB				Orange Avenue ~~Eastbound~~ NB				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	92	**51**	143	35	9	25	69	45	112	1	158	45	2	53	100	470
05:00 PM	**3**	94	50	**147**	45	**11**	26	82	**72**	112	1	**185**	**62**	**5**	**57**	**124**	**538**
05:15 PM	0	**96**	50	146	40	4	22	66	69	107	1	177	52	1	53	106	495
05:30 PM	1	87	42	130	**53**	9	**30**	**92**	53	**115**	**3**	171	52	2	51	105	498
Total Volume	4	369	193	566	173	33	103	309	239	446	6	691	211	10	214	435	2001
% App. Total	0.7	65.2	34.1		56	10.7	33.3		34.6	64.5	0.9		48.5	2.3	49.2		
PHF	.333	.961	.946	.963	.816	.750	.858	.840	.830	.970	.500	.934	.851	.500	.939	.877	.930



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File Name : CameronAve_OrangeAve_BP
Site Code : 00000000
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Groups Printed- Pedestrians and Bikes

	Cameron Avenue East ~~South~~ Leg		Orange Avenue South ~~West~~ Leg		Cameron Avenue West ~~North~~ Leg		Orange Avenue North ~~East~~ Leg		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:30 AM	0	1	0	0	0	0	0	0	1
Total	0	1	0	0	0	0	0	0	1
08:00 AM	0	1	0	2	1	0	0	0	4
08:15 AM	1	0	1	1	0	0	0	2	5
08:30 AM	0	0	1	0	0	0	0	0	1
08:45 AM	0	0	0	1	0	0	1	0	2
Total	1	1	2	4	1	0	1	2	12
04:00 PM	0	2	0	2	0	0	0	0	4
04:15 PM	0	2	0	1	0	1	0	1	5
04:30 PM	0	2	2	0	0	0	0	2	6
04:45 PM	0	0	0	1	0	1	0	1	3
Total	0	6	2	4	0	2	0	4	18
05:15 PM	0	0	0	0	1	0	0	0	1
05:30 PM	0	2	0	0	0	0	0	0	2
05:45 PM	1	0	0	0	0	0	1	0	2
Total	1	2	0	0	1	0	1	0	5
Grand Total	2	10	4	8	2	2	2	6	36
Apprch %	16.7	83.3	33.3	66.7	50	50	25	75	
Total %	5.6	27.8	11.1	22.2	5.6	5.6	5.6	16.7	

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	Cameron Avenue East ~~South~~ Leg			Orange Avenue South ~~West~~ Leg			Cameron Avenue West ~~North~~ Leg			Orange Avenue North ~~East~~ Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	0	**1**	**1**	0	**2**	**2**	**1**	0	**1**	0	0	0	4
08:15 AM	**1**	0	1	**1**	1	2	0	0	0	0	**2**	**2**	**5**
08:30 AM	0	0	0	1	0	1	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	1	1	0	0	0	**1**	0	1	2
Total Volume	1	1	2	2	4	6	1	0	1	1	2	3	12
% App. Total	50	50		33.3	66.7		100	0		33.3	66.7		
PHF	.250	.250	.500	.500	.500	.750	.250	.000	.250	.250	.250	.375	.600

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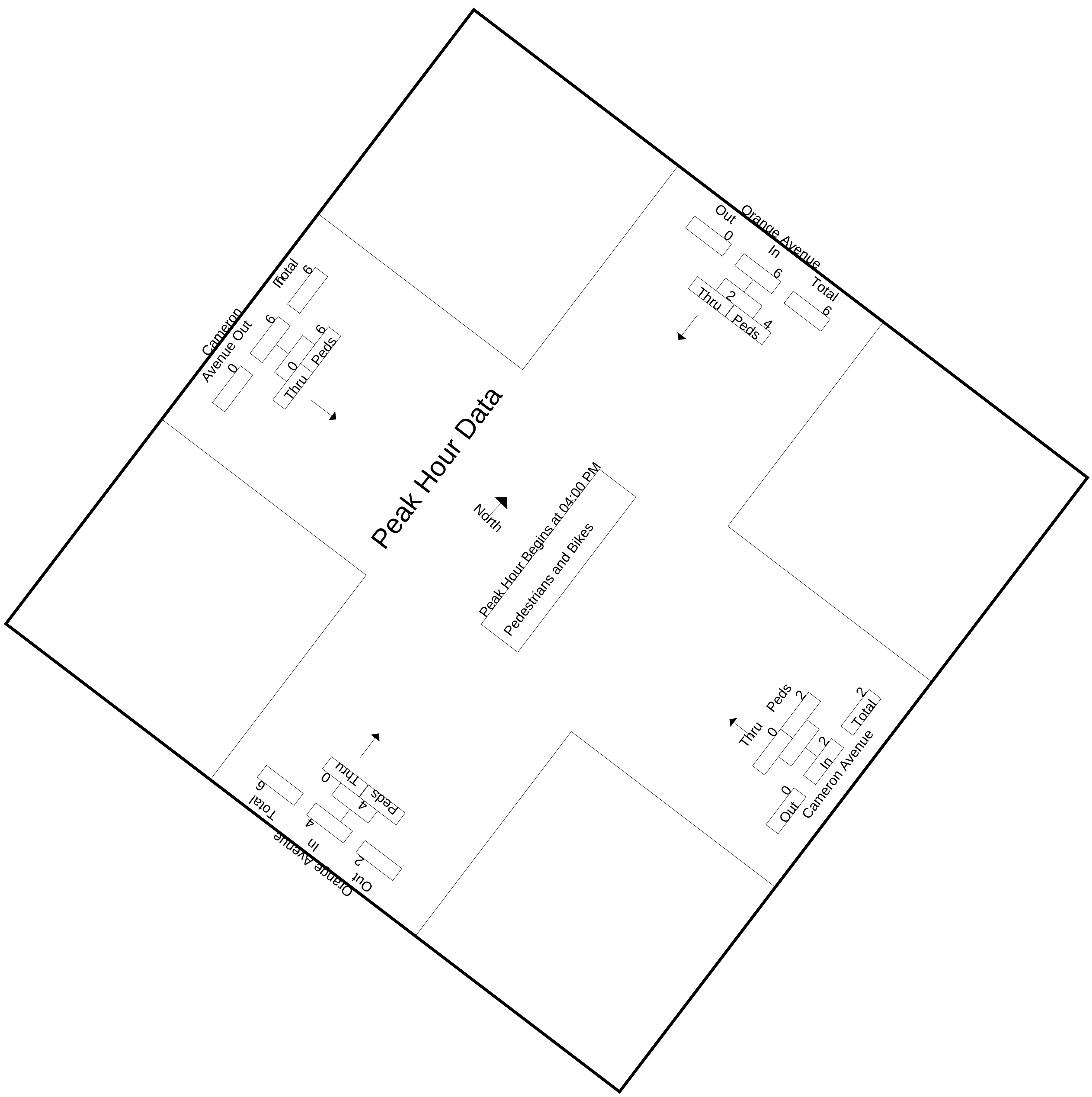
	East **Cameron Avenue ~~South~~ Leg**			South **Orange Avenue ~~West~~ Leg**			West **Cameron Avenue ~~North~~ Leg**			North **Orange Avenue ~~East~~ Leg**			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	0	**2**	**2**	0	**2**	**2**	0	0	0	0	0	0	4
04:15 PM	0	2	2	0	1	1	0	**1**	**1**	0	1	1	5
04:30 PM	0	2	2	**2**	0	2	0	0	0	0	**2**	**2**	**6**
04:45 PM	0	0	0	0	1	1	0	1	1	0	1	1	3
Total Volume	0	6	6	2	4	6	0	2	2	0	4	4	18
% App. Total	0	100		33.3	66.7		0	100		0	100		
PHF	.000	.750	.750	.250	.500	.750	.000	.500	.500	.000	.500	.500	.750



CITY TRAFFIC COUNTERS
WWW.CTCOUNTERS.COM

File Name : CameronAve_TolucaAve
Site Code : 00000000
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Groups Printed- Vehicles

	EB Cameron Avenue ~~Southbound~~			SB Toluca Avenue ~~Westbound~~			WB Cameron Avenue ~~Northbound~~			~~Eastbound~~			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	15	73	0	4	0	20	0	124	8	0	0	0	244
07:15 AM	16	83	0	2	0	21	0	162	15	0	0	0	299
07:30 AM	19	115	0	7	0	38	0	154	15	0	0	0	348
07:45 AM	26	117	0	3	0	42	0	177	16	0	0	0	381
Total	76	388	0	16	0	121	0	617	54	0	0	0	1272
08:00 AM	19	140	0	9	0	30	0	145	17	0	0	0	360
08:15 AM	34	124	0	4	0	28	0	140	14	0	0	0	344
08:30 AM	21	110	0	6	0	28	0	131	14	0	0	0	310
08:45 AM	20	118	0	5	0	28	0	97	11	0	0	0	279
Total	94	492	0	24	0	114	0	513	56	0	0	0	1293
04:00 PM	53	140	0	7	0	42	0	98	9	0	0	0	349
04:15 PM	37	150	0	20	0	48	0	101	11	0	0	0	367
04:30 PM	47	133	0	8	0	35	0	92	26	0	0	0	341
04:45 PM	53	141	0	10	0	32	0	120	26	0	0	0	382
Total	190	564	0	45	0	157	0	411	72	0	0	0	1439
05:00 PM	30	188	0	10	0	67	0	110	18	0	0	0	423
05:15 PM	38	156	0	7	0	58	0	118	25	0	0	0	402
05:30 PM	50	160	0	3	0	46	0	135	18	0	0	0	412
05:45 PM	34	127	0	10	0	55	0	103	14	0	0	0	343
Total	152	631	0	30	0	226	0	466	75	0	0	0	1580
Grand Total	512	2075	0	115	0	618	0	2007	257	0	0	0	5584
Apprch %	19.8	80.2	0	15.7	0	84.3	0	88.6	11.4	0	0	0	
Total %	9.2	37.2	0	2.1	0	11.1	0	35.9	4.6	0	0	0	

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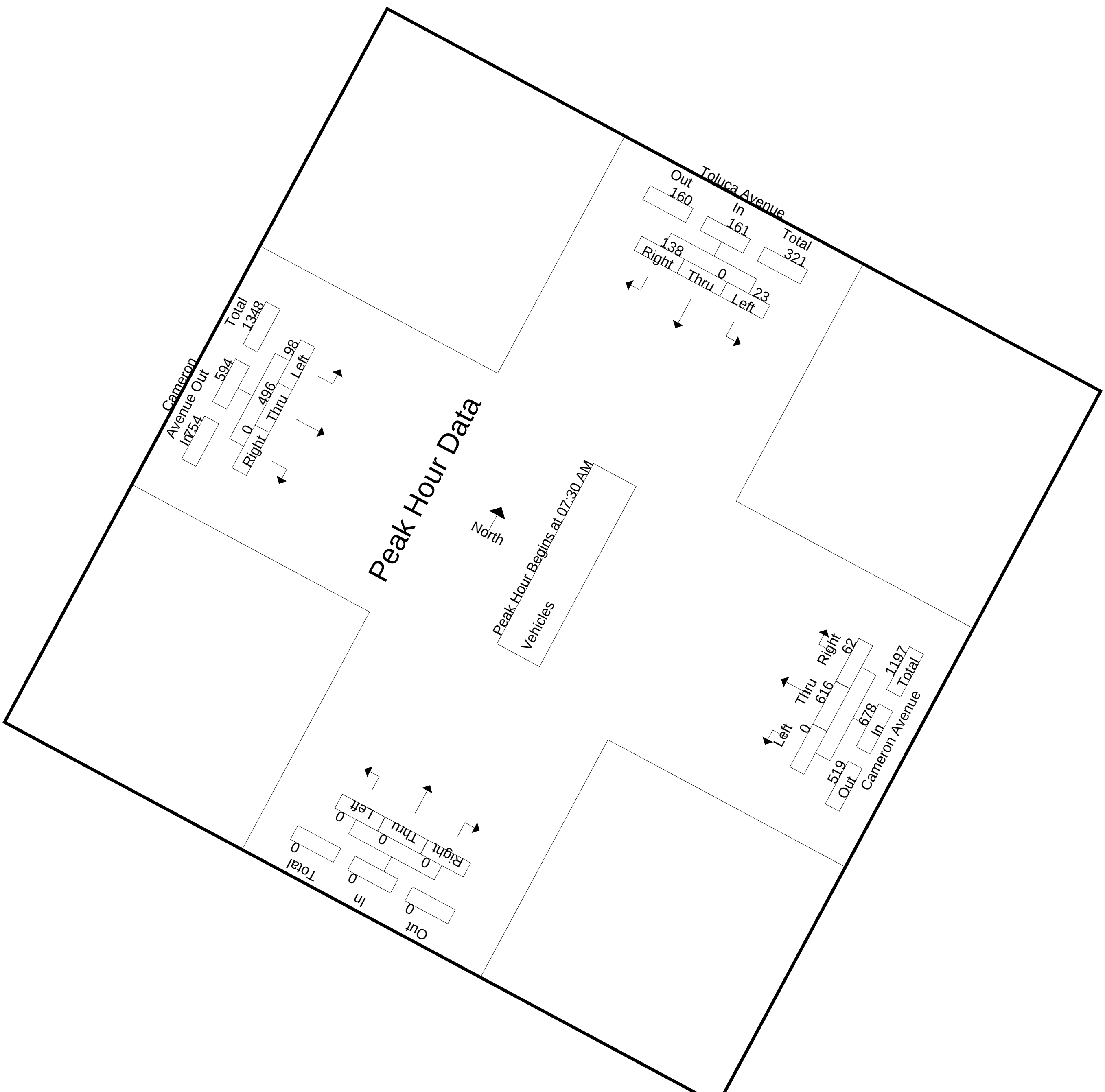
	EB Cameron Avenue ~~Southbound~~				SB Toluca Avenue ~~Westbound~~				WB Cameron Avenue ~~Northbound~~				~~Eastbound~~				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	19	115	0	134	7	0	38	**45**	0	154	15	169	0	0	0	0	348
07:45 AM	26	117	0	143	3	0	**42**	45	0	**177**	16	**193**	0	0	0	0	**381**
08:00 AM	19	**140**	0	**159**	**9**	0	30	39	0	145	**17**	162	0	0	0	0	360
08:15 AM	**34**	124	0	158	4	0	28	32	0	140	14	154	0	0	0	0	344
Total Volume	98	496	0	594	23	0	138	161	0	616	62	678	0	0	0	0	1433
% App. Total	16.5	83.5	0		14.3	0	85.7		0	90.9	9.1		0	0	0		
PHF	.721	.886	.000	.934	.639	.000	.821	.894	.000	.870	.912	.878	.000	.000	.000	.000	.940



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	EB Cameron Avenue ~~Southbound~~				SB Toluca Avenue ~~Westbound~~				WB Cameron Avenue ~~Northbound~~				~~Eastbound~~				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**53**	141	0	194	**10**	0	32	42	0	120	**26**	146	0	0	0	0	382
05:00 PM	30	**188**	0	**218**	10	0	**67**	**77**	0	110	18	128	0	0	0	0	**423**
05:15 PM	38	156	0	194	7	0	58	65	0	118	25	143	0	0	0	0	402
05:30 PM	50	160	0	210	3	0	46	49	0	**135**	18	**153**	0	0	0	0	412
Total Volume	171	645	0	816	30	0	203	233	0	483	87	570	0	0	0	0	1619
% App. Total	21	79	0		12.9	0	87.1		0	84.7	15.3		0	0	0		
PHF	.807	.858	.000	.936	.750	.000	.757	.756	.000	.894	.837	.931	.000	.000	.000	.000	.957

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Groups Printed- Pedestrians and Bikes

	East **Cameron Avenue ~~South~~ Leg**		South **Toluca Avenue ~~West~~ Leg**		West **Cameron Avenue ~~North~~ Leg**		**~~East Leg~~**		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:45 AM	0	0	0	0	0	0	1	0	1
Total	0	0	0	0	0	0	1	0	1
08:00 AM	0	1	0	0	0	0	0	0	1
08:15 AM	0	1	0	0	0	0	0	0	1
08:45 AM	1	0	0	0	1	0	0	0	2
Total	1	2	0	0	1	0	0	0	4
04:30 PM	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	1	0	0	1
Total	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	1	0	1
05:45 PM	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	1	1	2	4
Grand Total	1	2	0	0	1	2	2	3	11
Apprch %	33.3	66.7	0	0	33.3	66.7	40	60	
Total %	9.1	18.2	0	0	9.1	18.2	18.2	27.3	

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	Cameron Avenue East ~~South~~ Leg			Toluca Avenue South ~~West~~ Leg			Cameron Avenue West ~~North~~ Leg			~~East Leg~~			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	0	**1**	**1**	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	1	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	**1**	0	1	0	0	0	**1**	0	**1**	0	0	0	**2**
Total Volume	1	2	3	0	0	0	1	0	1	0	0	0	4
% App. Total	33.3	66.7		0	0		100	0		0	0		
PHF	.250	.500	.750	.000	.000	.000	.250	.000	.250	.000	.000	.000	.500

File Name : CameronAve_TolucaAve_BP
Site Code : 00000000
Start Date : 4/4/2023
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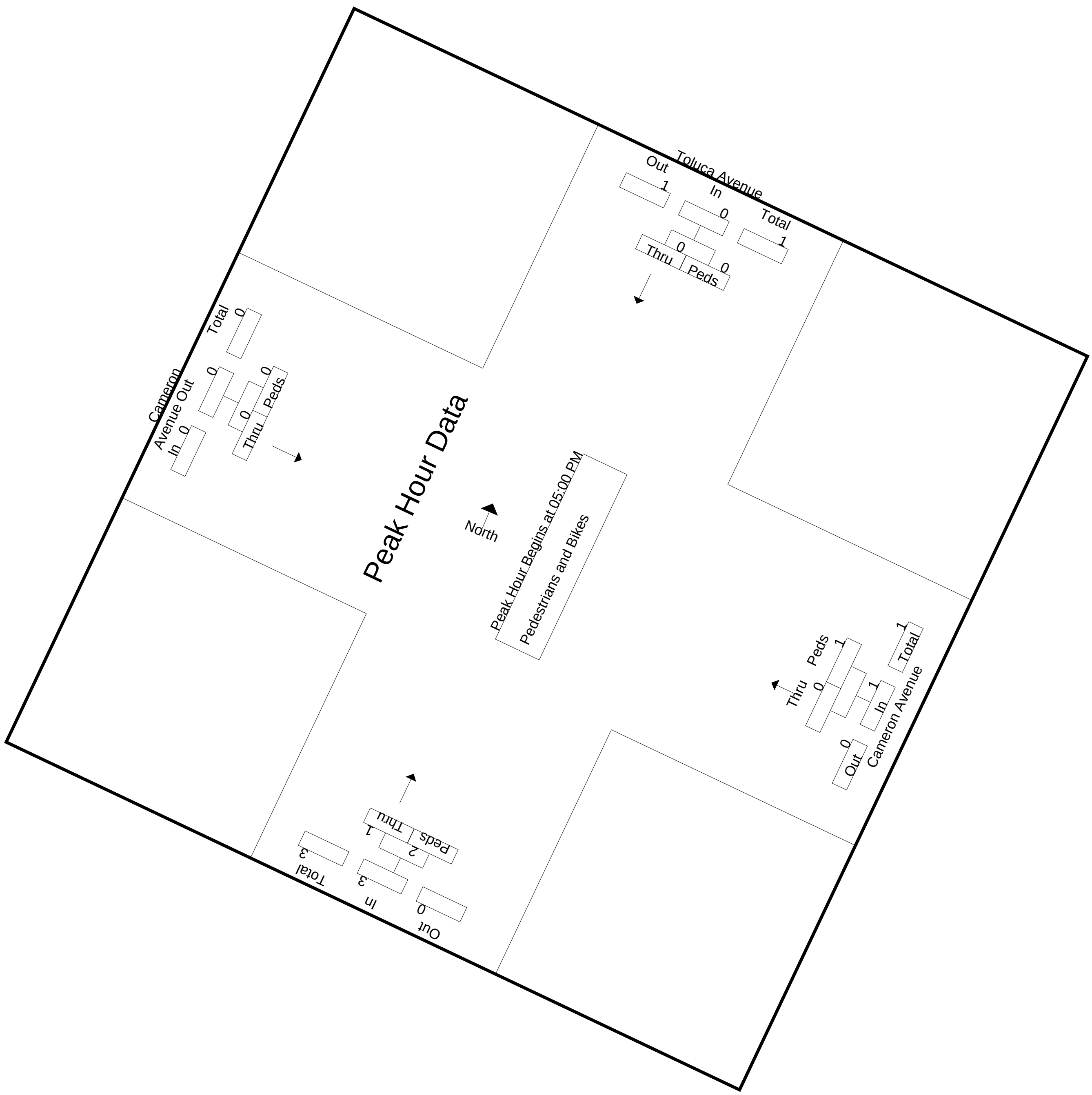
	East Cameron Avenue ~~South~~ Leg			South Toluca Avenue ~~West~~ Leg			West Cameron Avenue ~~North~~ Leg			~~East Leg~~			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 05:00 PM													
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	**1**	**1**	1
05:30 PM	0	0	0	0	0	0	0	0	0	**1**	0	1	1
05:45 PM	0	0	0	0	0	0	0	**1**	**1**	0	1	1	**2**
Total Volume	0	0	0	0	0	0	0	1	1	1	2	3	4
% App. Total	0	0		0	0		0	100		33.3	66.7		
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250	.500	.750	.500



CITY TRAFFIC COUNTERS
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File Name : WestCovinaPkwy-PacificAve_I-10FrwyWBRamps-W.GarveyAveN.
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Groups Printed- Vehicles

	Pacific Avenue Southbound			**W Garvey Avenue North Westbound**			**West Covina Parkway Northbound**			**I-10 Freeway Westbount On/Off Ramps Eastbound**			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	2	104	30	14	26	11	38	22	13	48	2	24	334
07:15 AM	0	99	24	18	40	27	35	26	23	71	1	27	391
07:30 AM	2	160	23	30	46	26	40	41	15	65	1	42	491
07:45 AM	3	136	30	26	36	24	27	35	26	55	1	44	443
Total	7	499	107	88	148	88	140	124	77	239	5	137	1659
08:00 AM	0	133	30	27	35	8	38	33	21	29	2	36	392
08:15 AM	4	120	23	30	30	12	25	27	22	45	2	38	378
08:30 AM	2	119	16	20	17	6	27	34	25	61	2	47	376
08:45 AM	4	110	18	17	22	3	42	23	25	37	0	30	331
Total	10	482	87	94	104	29	132	117	93	172	6	151	1477
04:00 PM	3	140	24	31	25	5	67	57	24	43	2	36	457
04:15 PM	6	139	46	28	29	4	78	51	23	66	0	44	514
04:30 PM	8	136	22	25	24	9	72	64	30	63	5	30	488
04:45 PM	2	140	31	22	37	7	68	65	39	59	4	24	498
Total	19	555	123	106	115	25	285	237	116	231	11	134	1957
05:00 PM	3	100	26	26	44	7	74	60	26	69	3	32	470
05:15 PM	2	137	32	21	22	17	68	58	28	79	4	35	503
05:30 PM	2	122	33	18	23	15	74	59	31	79	4	48	508
05:45 PM	5	137	23	18	26	11	53	57	21	88	6	46	491
Total	12	496	114	83	115	50	269	234	106	315	17	161	1972
Grand Total	48	2032	431	371	482	192	826	712	392	957	39	583	7065
Apprch %	1.9	80.9	17.2	35.5	46.1	18.4	42.8	36.9	20.3	60.6	2.5	36.9	
Total %	0.7	28.8	6.1	5.3	6.8	2.7	11.7	10.1	5.5	13.5	0.6	8.3	

CITY TRAFFIC COUNTERS
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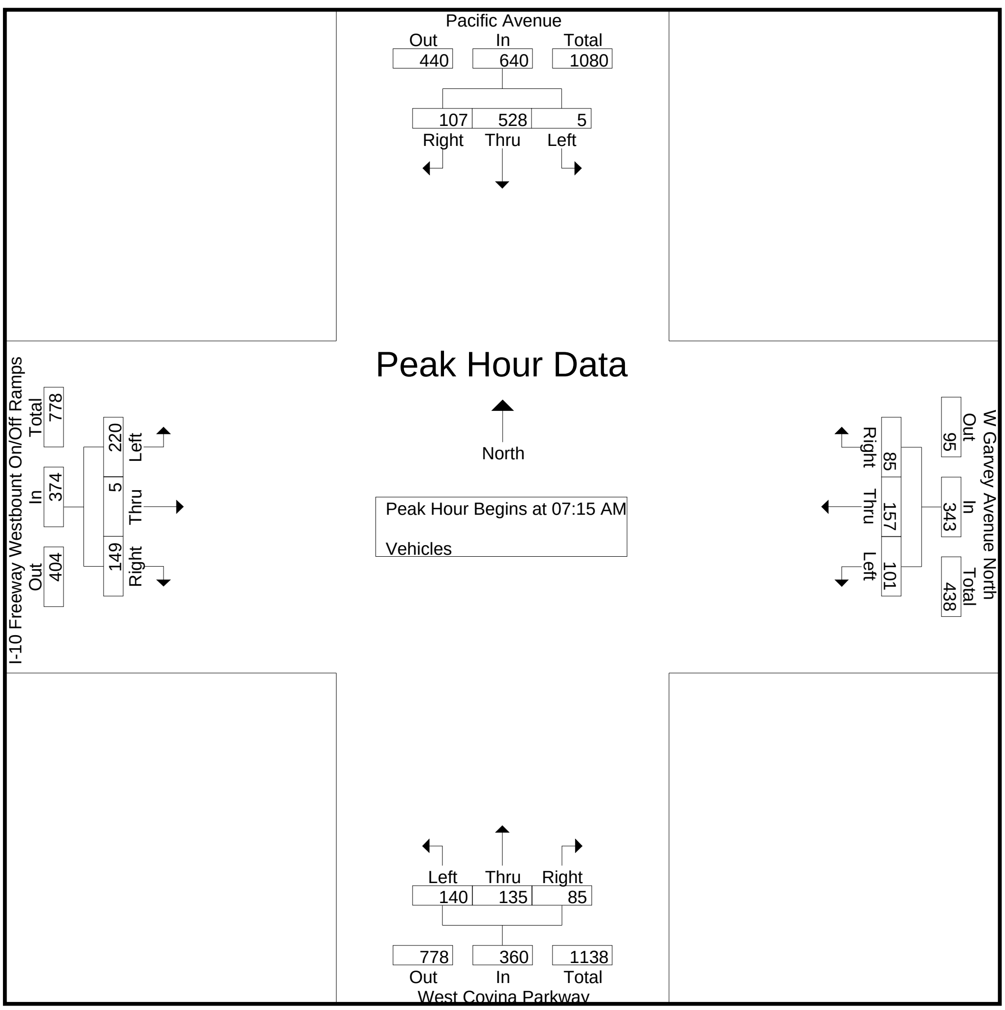
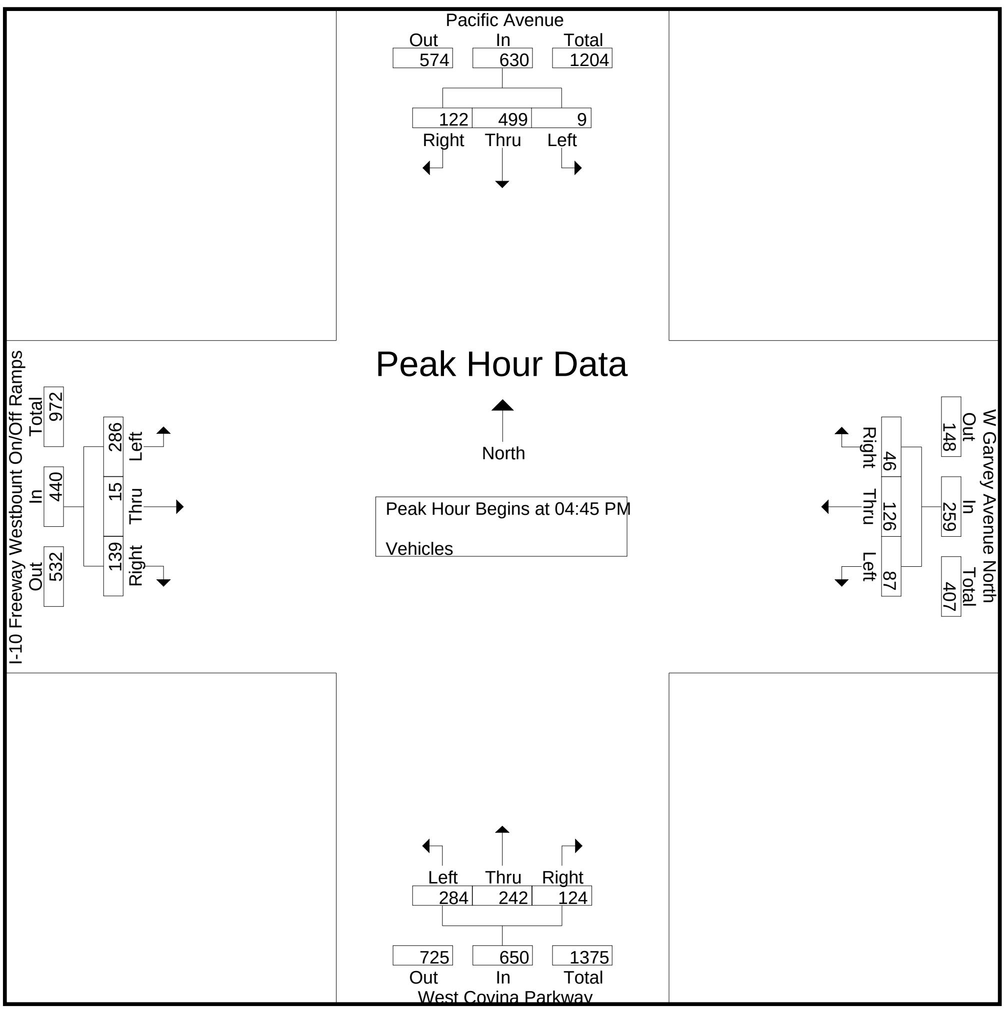
	Pacific Avenue Southbound				**W Garvey Avenue North Westbound**				**West Covina Parkway Northbound**				**I-10 Freeway Westbount On/Off Ramps Eastbound**				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	99	24	123	18	40	**27**	85	35	26	23	84	**71**	1	27	99	391
07:30 AM	2	**160**	23	**185**	**30**	**46**	26	**102**	**40**	**41**	15	**96**	65	1	42	**108**	**491**
07:45 AM	**3**	136	**30**	169	26	36	24	86	27	35	**26**	88	55	1	**44**	100	443
08:00 AM	0	133	30	163	27	35	8	70	38	33	21	92	29	**2**	36	67	392
Total Volume	5	528	107	640	101	157	85	343	140	135	85	360	220	5	149	374	1717
% App. Total	0.8	82.5	16.7		29.4	45.8	24.8		38.9	37.5	23.6		58.8	1.3	39.8		
PHF	.417	.825	.892	.865	.842	.853	.787	.841	.875	.823	.817	.938	.775	.625	.847	.866	.874



CITY TRAFFIC COUNTERS
WWW.CTCOUNTERS.COM

File Name : WestCovinaPkwy-PacificAve_I-10FrwyWBRamps-W.GarveyAveN.
Site Code : 00000000
Start Date : 4/4/2023
Page No : 3

	Pacific Avenue Southbound				W Garvey Avenue North Westbound				West Covina Parkway Northbound				I-10 Freeway Westbount On/Off Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	**140**	31	**173**	22	37	7	66	68	**65**	**39**	**172**	59	**4**	24	87	498
05:00 PM	**3**	100	26	129	**26**	**44**	7	**77**	**74**	60	26	160	69	3	32	104	470
05:15 PM	2	137	32	171	21	22	**17**	60	68	58	28	154	**79**	4	35	118	503
05:30 PM	2	122	**33**	157	18	23	15	56	74	59	31	164	79	4	**48**	**131**	**508**
Total Volume	9	499	122	630	87	126	46	259	284	242	124	650	286	15	139	440	1979
% App. Total	1.4	79.2	19.4		33.6	48.6	17.8		43.7	37.2	19.1		65	3.4	31.6		
PHF	.750	.891	.924	.910	.837	.716	.676	.841	.959	.931	.795	.945	.905	.938	.724	.840	.974



CITY TRAFFIC COUNTERS
WWW.CTCOUNTERS.COM

File Name : WestCovinaPkwy-PacificAve_I-10FrwyWBRamps-W.GarveyAveN_BP
Site Code : 00000000
Start Date : 4/4/2023
Page No : 1

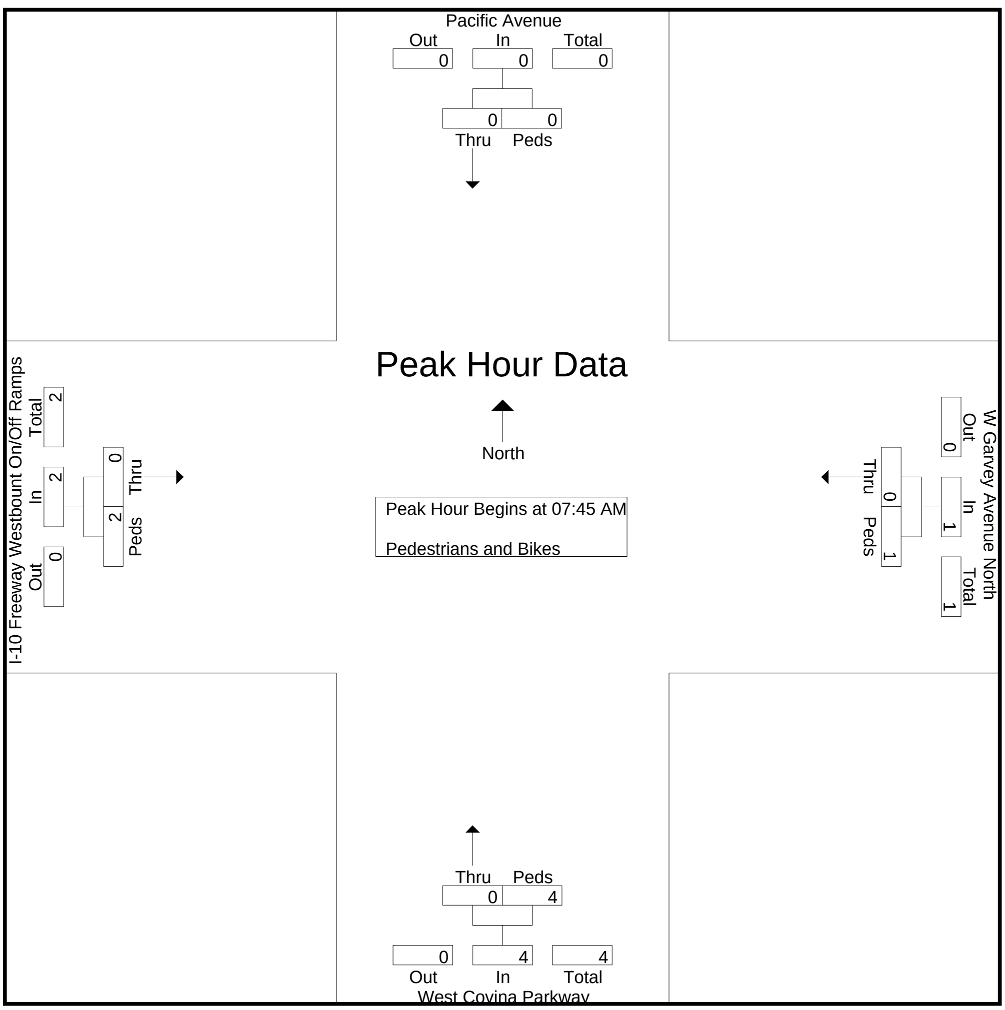
Groups Printed- Pedestrians and Bikes

	Pacific Avenue South Leg		**W Garvey Avenue North West Leg**		**West Covina Parkway North Leg**		**I-10 Freeway Westbount On/Off Ramps East Leg**		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:45 AM	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	1	0	1	2
08:00 AM	0	0	0	0	0	3	0	0	3
08:30 AM	0	0	0	1	0	0	0	1	2
Total	0	0	0	1	0	3	0	1	5
04:00 PM	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	1	0	0	0	0	1
04:30 PM	0	0	0	1	0	0	2	0	3
04:45 PM	0	0	0	0	0	0	0	2	2
Total	0	0	0	2	0	0	2	3	7
05:30 PM	0	0	0	0	0	1	1	2	4
05:45 PM	0	0	0	0	0	0	2	0	2
Total	0	0	0	0	0	1	3	2	6
Grand Total	0	0	0	3	0	5	5	7	20
Apprch %	0	0	0	100	0	100	41.7	58.3	
Total %	0	0	0	15	0	25	25	35	

CITY TRAFFIC COUNTERS
WWW.CTCOUNTERS.COM

File Name : WestCovinaPkwy-PacificAve_I-10FrwyWBRamps-W.GarveyAveN_BP
Site Code : 00000000
Start Date : 4/4/2023
Page No : 2

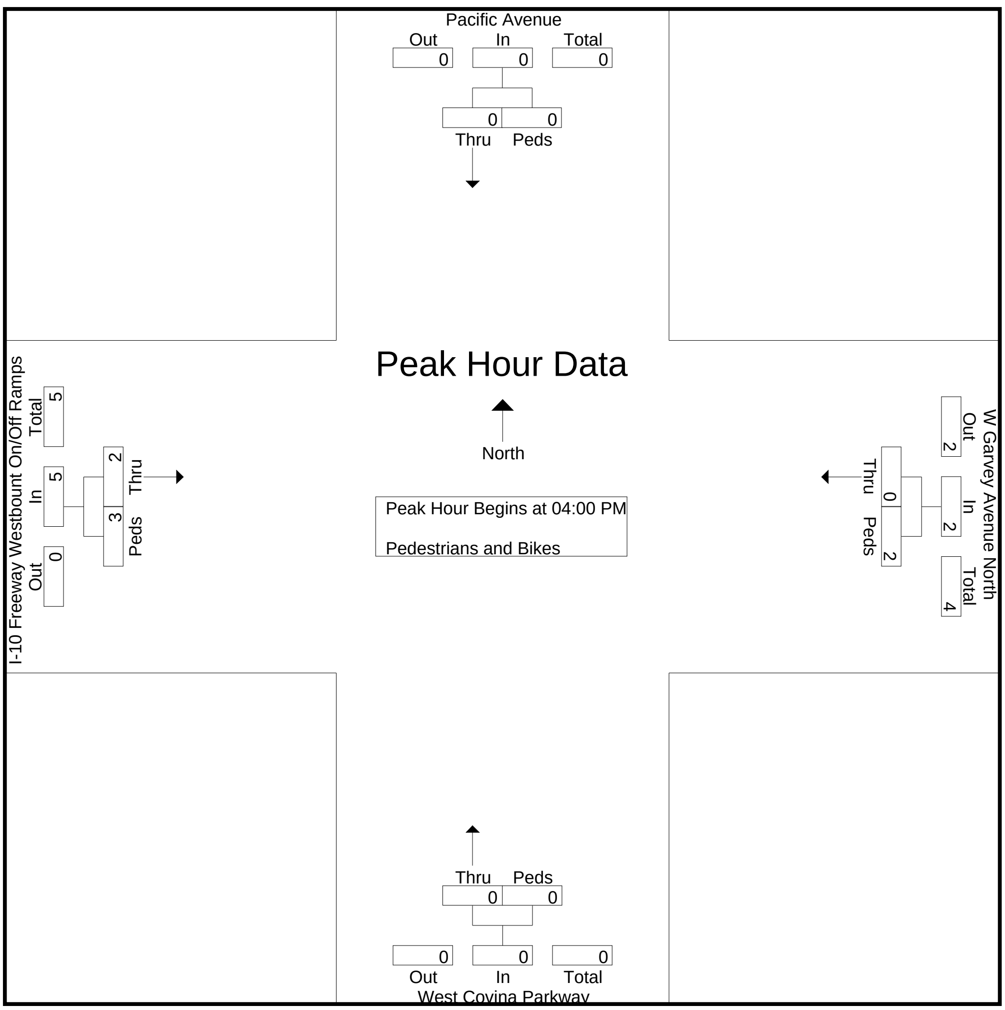
	Pacific Avenue South Leg			**W Garvey Avenue North West Leg**			**West Covina Parkway North Leg**			**I-10 Freeway Westbount On/Off Ramps East Leg**			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	0	0	0	0	0	0	0	1	1	0	**1**	**1**	2
08:00 AM	0	0	0	0	0	0	0	**3**	**3**	0	0	0	**3**
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	**1**	**1**	0	0	0	0	1	1	2
Total Volume	0	0	0	0	1	1	0	4	4	0	2	2	7
% App. Total	0	0		0	100		0	100		0	100		
PHF	.000	.000	.000	.000	.250	.250	.000	.333	.333	.000	.500	.500	.583



CITY TRAFFIC COUNTERS
WWW.CTCOUNTERS.COM

File Name : WestCovinaPkwy-PacificAve_I-10FrwyWBRamps-W.GarveyAveN_BP
Site Code : 00000000
Start Date : 4/4/2023
Page No : 3

	Pacific Avenue South Leg			**W Garvey Avenue North West Leg**			**West Covina Parkway North Leg**			**I-10 Freeway Westbount On/Off Ramps East Leg**			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	1
04:15 PM	0	0	0	0	**1**	**1**	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	1	1	0	0	0	**2**	0	**2**	**3**
04:45 PM	0	0	0	0	0	0	0	0	0	0	**2**	2	2
Total Volume	0	0	0	0	2	2	0	0	0	2	3	5	7
% App. Total	0	0		0	100		0	0		40	60		
PHF	.000	.000	.000	.000	.500	.500	.000	.000	.000	.250	.375	.625	.583



APPENDIX C

SAN GABRIEL VALLEY COG
VEHICLE MILES TRAVELED EVALUATION TOOL
SCREENING WORKSHEETS

Project Details

Timestamp of Analysis: January 30, 2024, 10:15:02 PM

Project Name: West Covina Medical Center Behavioral Health Addition Project

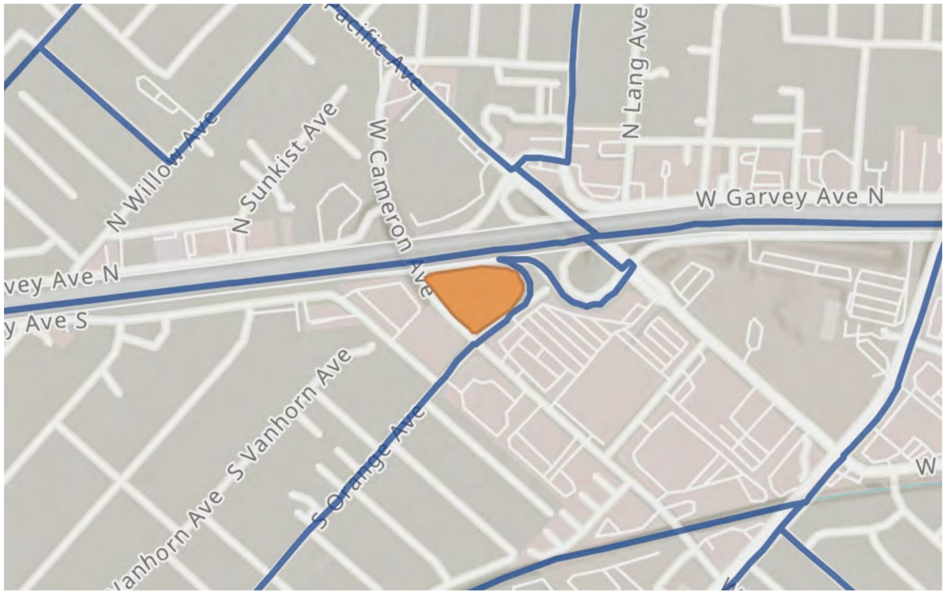
Project Description: Proposed new four-story 42,000 sf psychiatric in-patient facility (WCMC Behavioral Health Addition) to the east side of the existing facility.

Project Location

jurisdiction:
West Covina

apn	TAZ
8474-001-022	22296100

Inside a TPA?
Yes (Pass)



Analysis Details

Data Version: SCAG Regional Travel Demand Model 2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2023

Project Land Use

Residential:

Single Family DU:

Multifamily DU:

Total DUs: 0

Non-Residential:

Office KSF:

Local Serving Retail KSF:

Industrial KSF:

Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 0 %

Parking:

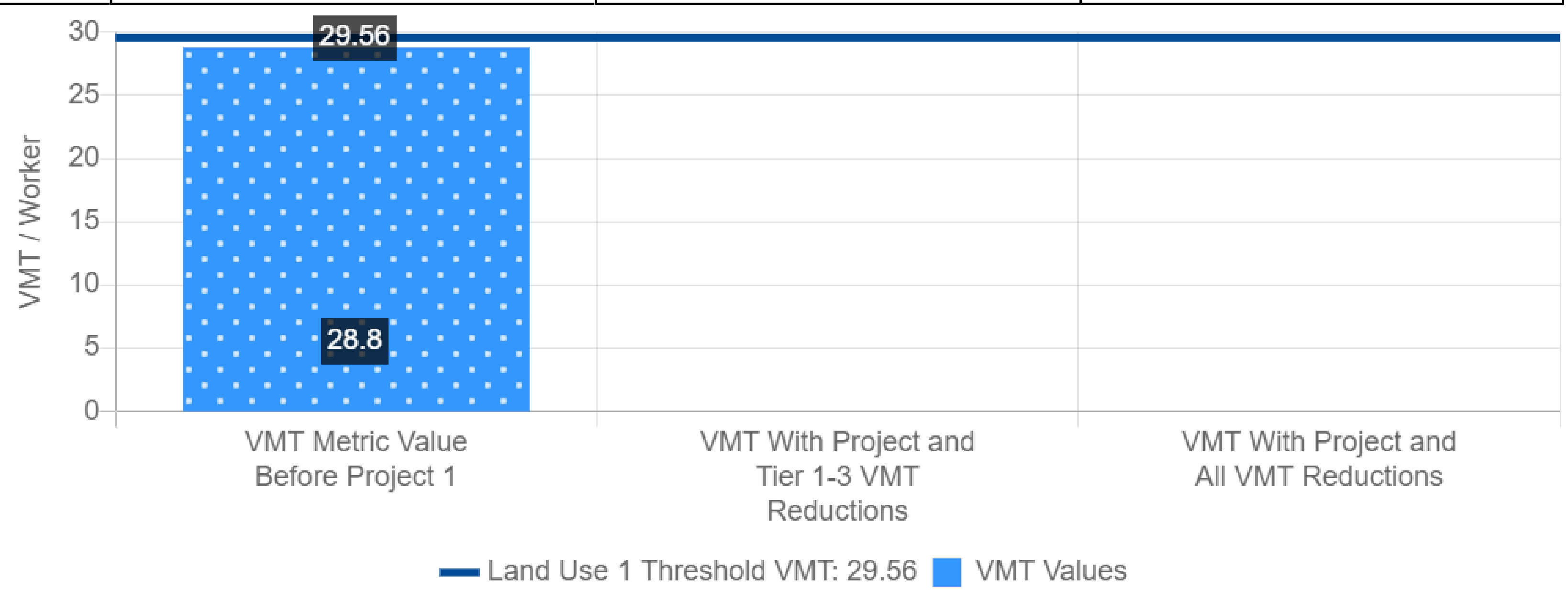
Motor Vehicle Parking:

Bicycle Parking:

Office Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Office
VMT Without Project 1:	Total VMT per Service Population
VMT Baseline Description 1:	SGVCOG Average
VMT Baseline Value 1:	34.78
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	28.8	null	null
Low VMT Screening Analysis	Yes (Pass)	null	null



Appendix D

ICU/HCM and Levels of Service Explanation
ICU/HCM Data Worksheets -
Weekday AM and PM Peak Hours

INTERSECTION CAPACITY UTILIZATION (ICU) DESCRIPTION

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Levels of Service concept denotes any one of a number of differing combinations of operating conditions which may occur as a roadway is accommodating various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the 1965 *Highway Capacity Manual*, published by the Transportation Research Board. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

The Intersection Capacity Utilization (ICU) method of intersection capacity analysis has been used in our studies. It directly relates traffic demand and available capacity for key intersection movements, regardless of present signal timing, The capacity per hour of green time for each approach is calculated based on the methods of the *Highway Capacity Manual*. The proportion of total signal time needed by each key movement is determined and compared to the total time available (100 percent of the hour). The result of summing the requirements of the conflicting key movements plus an allowance for clearance times is expressed as a decimal fraction. Conflicting key traffic movements are those opposing movements whose combined green time requirements are greatest.

The resulting ICU represents the proportion of the total hour required to accommodate intersection demand volumes if the key conflicting traffic movements are operating at capacity. Other movements may be operating near capacity, or may be operating at significantly better levels. The ICU may be translated to a Level of Service as tabulated below.

The Levels of Service (abbreviated from the *Highway Capacity Manual*) are listed here with their corresponding ICU and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e. when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

Intersection Capacity Utilization Characteristics

Level of Service	Load Factor	Equivalent ICU
A	0.0	0.00 - 0.60
B	0.0 - 0.1	0.61 - 0.70
C	0.1 - 0.3	0.71 - 0.80
D	0.3 - 0.7	0.81 - 0.90
E	0.7 - 1.0	0.91 - 1.00
F	Not Applicable	Not Applicable

SERVICE LEVEL A
There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

SERVICE LEVEL B
This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

SERVICE LEVEL C
At this level stable operation continues. Loading is still intermittent but more frequent than at Level B. Occasionally drivers may have to wait through more than one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

SERVICE LEVEL D
This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

SERVICE LEVEL E
This represents near capacity and capacity operation. At capacity (ICU = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

SERVICE LEVEL F
Jammed conditions. Traffic backed up from a downstream location on one of the street restricts or prevents movement of traffic through the intersection under consideration.

LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for unsignalized intersections are stated in terms of the average control delay per vehicle. The level of service is determined by the computed or measured control delay and is defined for each minor movement. Average control delay for any particular minor movement is a function of the service time for the approach and the degree of utilization. (Level of service is not defined for the intersection as a whole for two-way stop controlled intersections.)

Level of Service Criteria for TWSC/AWSC Intersections

Level of Service	Average Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle.

LOS B describes operations with control delay greater than 10 and up to 15 seconds per vehicle.

LOS C describes operations with control delay greater than 15 and up to 25 seconds per vehicle.

LOS D describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

LOS E describes operations with control delay greater than 35 and up to 50 seconds per vehicle.

LOS F describes operations with control delay in excess of 50 seconds per vehicle. For two-way stop controlled intersections, LOS F exists when there are insufficient gaps of suitable size to allow side-street demand to safely cross through a major-street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches.

LINSCOTT, LAW & GREENSPAN, ENGINEERS
600 S. Lake Avenue, Ste 500, Pasadena 91106
(626) 796.2322   Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Orange Avenue @ Cameron Avenue
Peak hr: AM
Annual Growth: 1.00%
Applied Growth: 3.03%

N-S St: Orange Avenue
E-W St: Cameron Avenue
Project: West Covina Medical Center - Behavioral Health Addition Project/1-23-4524-1
File: ICU1

Date: 2/15/2024
Existing Year: 2023
Projection Year: 2026

	2023 EXISTING TRAFFIC			2023 EXISTING WITH PROJECT				2023 EXISTING W/ PROJECT + MITIGATION				2026 FUTURE PRE-PROJECT					2026 FUTURE WITH PROJECT			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left [3]	218	0	0.121	6	224	0	0.124	0	224	0	0.124	7	0	225	1800	0.125 *	6	231	1800	0.128 *
NB Thru	5	1800	0.214 *	0	5	1800	0.219 *	0	5	1800	0.219 *	0	0	5	1800	0.096	0	5	1800	0.098
NB Right	163	0	0.000	3	166	0	0.000	0	166	0	0.000	5	0	168	0	0.000	3	171	0	0.000
SB Left [3]	106	0	0.059 *	1	107	0	0.059 *	0	107	0	0.059 *	3	18	127	1800	0.071	1	128	1800	0.071
SB Thru	56	1800	0.124	7	63	1800	0.130	0	63	1800	0.130	2	0	58	1800	0.068 *	7	65	1800	0.073 *
SB Right	62	0	0.000	2	64	0	0.000	0	64	0	0.000	2	0	64	0	0.000	2	66	0	0.000
EB Left	7	1800	0.004	1	8	1800	0.004	0	8	1800	0.004	0	0	7	1800	0.004	1	8	1800	0.004
EB Thru	346	3600	0.158 *	0	346	3600	0.160 *	0	346	3600	0.160 *	10	9	365	3600	0.166 *	0	365	3600	0.167 *
EB Right	224	0	0.000	5	229	0	0.000	0	229	0	0.000	7	0	231	0	0.000	5	236	0	0.000
WB Left	203	1800	0.113 *	6	209	1800	0.116 *	0	209	1800	0.116 *	6	0	209	1800	0.116 *	6	215	1800	0.119 *
WB Thru	513	3600	0.145	0	513	3600	0.145	0	513	3600	0.145	16	19	548	3600	0.155	0	548	3600	0.155
WB Right	9	0	0.000	1	10	0	0.000	0	10	0	0.000	0	0	9	0	0.000	1	10	0	0.000
Yellow Allowance			0.100 *				0.100 *				0.100 *					0.100 *				0.100 *
ICU			0.644				0.655				0.655					0.574				0.588
LOS			B				B				B					A				A

* *Key conflicting movement as a part of ICU*
1 *Counts conducted by: City Traffic Counters*
2 *Capacity expressed in veh/hour of green*
3 *Northbound and southbound left-turn lanes proposed on Orange Avenue as part of the City's HSIP cycle 10 grant.*

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INTERSECTION CAPACITY UTILIZATION

Orange Avenue @ Cameron Avenue
Peak hr: PM
Annual Growth: 1.00%
Applied Growth: 3.03%

N-S St: Orange Avenue
E-W St: Cameron Avenue
Project: West Covina Medical Center - Behavioral Health Addition Project/1-23-4524-1
File: ICU1

Date: 2/15/2024
Existing Year: 2023
Projection Year: 2026

	2023 EXISTING TRAFFIC			2023 EXISTING WITH PROJECT				2023 EXISTING W/ PROJECT + MITIGATION				2026 FUTURE PRE-PROJECT					2026 FUTURE WITH PROJECT			
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Amb. Grow. Volume	Added Rel. Proj. Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
NB Left [3]	211	0	0.117	12	223	0	0.124	0	223	0	0.124	6	0	217	1800	0.121	12	229	1800	0.127
NB Thru	10	1800	0.242 *	0	10	1800	0.252 *	0	10	1800	0.252 *	0	0	10	1800	0.128 *	0	10	1800	0.131 *
NB Right	214	0	0.000	6	220	0	0.000	0	220	0	0.000	6	0	220	0	0.000	6	226	0	0.000
SB Left [3]	173	0	0.096 *	1	174	0	0.097 *	0	174	0	0.097 *	5	13	191	1800	0.106 *	1	192	1800	0.107 *
SB Thru	33	1800	0.172	4	37	1800	0.176	0	37	1800	0.176	1	0	34	1800	0.078	4	38	1800	0.082
SB Right	103	0	0.000	3	106	0	0.000	0	106	0	0.000	3	0	106	0	0.000	3	109	0	0.000
EB Left	4	1800	0.002	1	5	1800	0.003	0	5	1800	0.003	0	0	4	1800	0.002	1	5	1800	0.003
EB Thru	369	3600	0.156 *	0	369	3600	0.157 *	0	369	3600	0.157 *	11	7	387	3600	0.163 *	0	387	3600	0.164 *
EB Right	193	0	0.000	3	196	0	0.000	0	196	0	0.000	6	0	199	0	0.000	3	202	0	0.000
WB Left	239	1800	0.133 *	3	242	1800	0.134 *	0	242	1800	0.134 *	7	0	246	1800	0.137 *	3	249	1800	0.138 *
WB Thru	446	3600	0.126	0	446	3600	0.126	0	446	3600	0.126	14	33	493	3600	0.139	0	493	3600	0.139
WB Right	6	0	0.000	1	7	0	0.000	0	7	0	0.000	0	0	6	0	0.000	1	7	0	0.000
Yellow Allowance			0.100 *				0.100 *				0.100 *					0.100 *				0.100 *
ICU			0.727				0.740				0.740					0.633				0.640
LOS			C				C				C					B				B

* *Key conflicting movement as a part of ICU*
1 *Counts conducted by: City Traffic Counters*
2 *Capacity expressed in veh/hour of green*
3 *Northbound and southbound left-turn lanes proposed on Orange Avenue as part of the City's HSIP cycle 10 grant.*

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	98	496	616	62	23	138
Future Vol, veh/h	98	496	616	62	23	138
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	95	-	-	-	0	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	107	539	670	67	25	150

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	737	0	-	0	1188	369
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	484	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	865	-	-	-	181	628
Stage 1	-	-	-	-	452	-
Stage 2	-	-	-	-	585	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	865	-	-	-	159	628
Mov Cap-2 Maneuver	-	-	-	-	284	-
Stage 1	-	-	-	-	396	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	865	-	-	-	284	628
HCM Lane V/C Ratio	0.123	-	-	-	0.088	0.239
HCM Control Delay (s)	9.7	-	-	-	18.9	12.5
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.3	0.9

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	171	645	483	87	30	203
Future Vol, veh/h	171	645	483	87	30	203
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	95	-	-	-	0	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	186	701	525	95	33	221

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	620	0	-	0	1296	310
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	723	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	956	-	-	-	154	686
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	441	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	956	-	-	-	124	686
Mov Cap-2 Maneuver	-	-	-	-	254	-
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	441	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	956	-	-	-	254	686
HCM Lane V/C Ratio	0.194	-	-	-	0.128	0.322
HCM Control Delay (s)	9.7	-	-	-	21.3	12.7
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.4	1.4

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	100	497	618	62	23	143
Future Vol, veh/h	100	497	618	62	23	143
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	95	-	-	-	0	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	109	540	672	67	25	155

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	739	0	-	0	1194	370
Stage 1	-	-	-	-	706	-
Stage 2	-	-	-	-	488	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	863	-	-	-	179	627
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	583	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	863	-	-	-	156	627
Mov Cap-2 Maneuver	-	-	-	-	282	-
Stage 1	-	-	-	-	393	-
Stage 2	-	-	-	-	583	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	863	-	-	-	282	627
HCM Lane V/C Ratio	0.126	-	-	-	0.089	0.248
HCM Control Delay (s)	9.8	-	-	-	19	12.6
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.3	1

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	176	647	484	87	30	206
Future Vol, veh/h	176	647	484	87	30	206
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	95	-	-	-	0	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	191	703	526	95	33	224

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	621	0	-	0	1308	311
Stage 1	-	-	-	-	574	-
Stage 2	-	-	-	-	734	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	956	-	-	-	151	685
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	436	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	956	-	-	-	121	685
Mov Cap-2 Maneuver	-	-	-	-	251	-
Stage 1	-	-	-	-	422	-
Stage 2	-	-	-	-	436	-

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	956	-	-	-	251	685
HCM Lane V/C Ratio	0.2	-	-	-	0.13	0.327
HCM Control Delay (s)	9.7	-	-	-	21.5	12.8
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.4	1.4

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	109	540	644	64	24	144
Future Vol, veh/h	109	540	644	64	24	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	95	-	-	-	0	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	118	587	700	70	26	157

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	770	0	-	0	1265	385
Stage 1	-	-	-	-	735	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	840	-	-	-	161	613
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	555	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	840	-	-	-	138	613
Mov Cap-2 Maneuver	-	-	-	-	264	-
Stage 1	-	-	-	-	374	-
Stage 2	-	-	-	-	555	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	840	-	-	-	264	613
HCM Lane V/C Ratio	0.141	-	-	-	0.099	0.255
HCM Control Delay (s)	10	-	-	-	20.1	12.9
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.3	1

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	181	679	529	90	31	216
Future Vol, veh/h	181	679	529	90	31	216
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	95	-	-	-	0	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	197	738	575	98	34	235

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	673	0	-	0	1387	337
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	763	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	914	-	-	-	134	659
Stage 1	-	-	-	-	496	-
Stage 2	-	-	-	-	421	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	914	-	-	-	105	659
Mov Cap-2 Maneuver	-	-	-	-	232	-
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	421	-

Approach	EB	WB	SB
HCM Control Delay, s	2.1	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	914	-	-	-	232	659
HCM Lane V/C Ratio	0.215	-	-	-	0.145	0.356
HCM Control Delay (s)	10	-	-	-	23.1	13.5
HCM Lane LOS	B	-	-	-	C	B
HCM 95th %tile Q(veh)	0.8	-	-	-	0.5	1.6

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	111	541	646	64	24	149
Future Vol, veh/h	111	541	646	64	24	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	95	-	-	-	0	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	121	588	702	70	26	162

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	772	0	-	0	1273	386
Stage 1	-	-	-	-	737	-
Stage 2	-	-	-	-	536	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	839	-	-	-	159	612
Stage 1	-	-	-	-	434	-
Stage 2	-	-	-	-	551	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	839	-	-	-	136	612
Mov Cap-2 Maneuver	-	-	-	-	261	-
Stage 1	-	-	-	-	372	-
Stage 2	-	-	-	-	551	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	14
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	839	-	-	-	261	612
HCM Lane V/C Ratio	0.144	-	-	-	0.1	0.265
HCM Control Delay (s)	10	-	-	-	20.3	13
HCM Lane LOS	B	-	-	-	C	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.3	1.1

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	186	681	530	90	31	219
Future Vol, veh/h	186	681	530	90	31	219
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	95	-	-	-	0	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	202	740	576	98	34	238

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	674	0	-	0	1399	337
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	774	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	913	-	-	-	132	659
Stage 1	-	-	-	-	496	-
Stage 2	-	-	-	-	415	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	913	-	-	-	103	659
Mov Cap-2 Maneuver	-	-	-	-	229	-
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	415	-

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	913	-	-	-	229	659
HCM Lane V/C Ratio	0.221	-	-	-	0.147	0.361
HCM Control Delay (s)	10.1	-	-	-	23.4	13.5
HCM Lane LOS	B	-	-	-	C	B
HCM 95th %tile Q(veh)	0.8	-	-	-	0.5	1.6

APPENDIX E

CALTRANS ANALYSIS HCM DATA WORKSHEETS - WEEKDAY AM AND PM PEAK HOURS

Appendix Table E-1
TABULATION OF OFF-RAMP VEHICLE QUEUING [1]
WEEKDAY AM AND PM PEAK HOURS

INT. NO.	OFF-RAMP LOCATION	PEAK HOUR	LANE GROUP MOVEMENT [2]	NO. OF LANES [2]	EXISTING MAXIMUM BACK OF QUEUE [3] (Veh.)	EXISTING MAXIMUM TOTAL QUEUE [4] (Veh.)	EXISTING WITH PROJECT MAXIMUM BACK OF QUEUE [3] (Veh.)	EXISTING WITH PROJECT MAXIMUM TOTAL QUEUE [4] (Veh.)	FUTURE YEAR 2026 WITHOUT PROJECT MAXIMUM BACK OF QUEUE [3] (Veh.)	FUTURE YEAR 2026 WITHOUT PROJECT MAXIMUM TOTAL QUEUE [4] (Veh.)	FUTURE YEAR 2026 WITH PROJECT MAXIMUM BACK OF QUEUE [3] (Veh.)	FUTURE YEAR 2026 WITH PROJECT MAXIMUM TOTAL QUEUE [4] (Veh.)
1	I-10 Freeway EB Off-Ramp-Orange Avenue/ Cameron Avenue	AM	SB Left/Through/Right	1	7.3	7.3	7.5	7.5	8.9	8.9	9.2	9.2
			Total AM Queuing			7.3		7.5		8.9		9.2
		PM	SB Left/Through/Right	1	10.7	10.7	10.9	10.9	12.3	12.3	12.6	12.6
			Total PM Queuing			10.7		10.9		12.3		12.6
2	I-10 Freeway WB Off-Ramp-Garvey Ave. N./ West Covina Parkway	AM	NB Left/Through	1	10.4	10.4	3.3	3.3	3.3	3.3	3.4	3.4
			NB Right	1	4.4	4.4	1.9	1.9	1.9	1.9	1.9	1.9
			Total AM Queuing			14.8		5.2		5.2		5.3
		PM	NB Left/Through	1	4.3	4.3	4.4	4.4	4.6	4.6	4.6	4.6
			NB Right	1	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8
			Total PM Queuing			6.0		6.1		6.3		6.4

[1] Queues calculated herein are utilized in the off-ramp queuing analysis presented in Table 6-1.
[2] Off-ramp movements and lane geometry assumptions based on the results of the shared-lane volume balancing procedure provided by the Synchro 11 software.
[3] The 95th percentile queue (in vehicles) as reported by the HCM methodology reflects the maximum back of queue for the lane with the highest queue in the lane group. Refer to the analysis worksheets contained in *Appendix E*.
[4] The 95th percentile maximum queue was obtained by multiplying the reported queue by the number of lanes in the lane group. The total peak hour queue was obtained by summing all lane group queues.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	346	224	203	513	9	218	5	163	106	56	62
Future Volume (veh/h)	7	346	224	203	513	9	218	5	163	106	56	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	8	376	243	221	558	10	237	5	177	115	61	67
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	14	729	464	256	1736	31	313	7	189	261	139	130
Arrive On Green	0.01	0.35	0.35	0.14	0.49	0.49	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1781	2082	1326	1781	3572	64	752	21	565	604	416	388
Grp Volume(v), veh/h	8	320	299	221	277	291	419	0	0	243	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1632	1781	1777	1859	1338	0	0	1409	0	0
Q Serve(g_s), s	0.4	12.8	13.1	10.9	8.6	8.6	15.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	12.8	13.1	10.9	8.6	8.6	27.5	0.0	0.0	12.1	0.0	0.0
Prop In Lane	1.00		0.81	1.00		0.03	0.57		0.42	0.47		0.28
Lane Grp Cap(c), veh/h	14	622	571	256	864	903	509	0	0	529	0	0
V/C Ratio(X)	0.56	0.51	0.52	0.86	0.32	0.32	0.82	0.00	0.00	0.46	0.00	0.00
Avail Cap(c_a), veh/h	109	622	571	307	864	903	547	0	0	568	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.5	23.2	23.3	37.7	14.1	14.1	29.4	0.0	0.0	23.8	0.0	0.0
Incr Delay (d2), s/veh	12.0	3.0	3.4	16.8	1.0	0.9	8.5	0.0	0.0	0.2	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	9.4	9.0	9.7	6.0	6.3	14.4	0.0	0.0	7.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	26.2	26.7	54.5	15.1	15.0	37.9	0.0	0.0	24.0	0.0	0.0
LnGrp LOS	E	C	C	D	B	B	D	A	A	C	A	A
Approach Vol, veh/h		627			789			419			243	
Approach Delay, s/veh		26.8			26.1			37.9			24.0	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	49.2		35.5	17.4	37.0		35.5				
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	5.5	36.5		32.5	15.5	26.5		32.5				
Max Q Clear Time (g_c+I1), s	2.4	10.6		29.5	12.9	15.1		14.1				
Green Ext Time (p_c), s	0.0	4.8		0.6	0.1	0.5		0.9				
Intersection Summary												
HCM 6th Ctrl Delay			28.4									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	369	193	239	446	6	211	10	214	173	33	103
Future Volume (veh/h)	4	369	193	239	446	6	211	10	214	173	33	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	4	401	210	260	485	7	229	11	233	188	36	112
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	8	689	356	294	1667	24	295	16	244	291	61	145
Arrive On Green	0.00	0.30	0.30	0.17	0.46	0.46	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1781	2265	1172	1781	3586	52	656	44	679	636	170	403
Grp Volume(v), veh/h	4	314	297	260	240	252	473	0	0	336	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1659	1781	1777	1861	1378	0	0	1209	0	0
Q Serve(g_s), s	0.2	13.4	13.7	12.8	7.5	7.5	8.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	13.4	13.7	12.8	7.5	7.5	30.2	0.0	0.0	22.2	0.0	0.0
Prop In Lane	1.00		0.71	1.00		0.03	0.48		0.49	0.56		0.33
Lane Grp Cap(c), veh/h	8	540	505	294	826	865	554	0	0	496	0	0
V/C Ratio(X)	0.53	0.58	0.59	0.88	0.29	0.29	0.85	0.00	0.00	0.68	0.00	0.00
Avail Cap(c_a), veh/h	109	540	505	307	826	865	557	0	0	499	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.7	26.5	26.6	36.7	14.9	14.9	28.2	0.0	0.0	25.3	0.0	0.0
Incr Delay (d2), s/veh	19.8	4.5	5.0	23.3	0.9	0.9	11.7	0.0	0.0	3.0	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	10.1	9.7	11.7	5.4	5.6	16.4	0.0	0.0	10.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.6	31.0	31.5	60.0	15.8	15.8	39.9	0.0	0.0	28.3	0.0	0.0
LnGrp LOS	E	C	C	E	B	B	D	A	A	C	A	A
Approach Vol, veh/h		615			752			473			336	
Approach Delay, s/veh		31.5			31.1			39.9			28.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	47.3		37.8	19.4	32.9		37.8
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	36.5		32.5	15.5	26.5		32.5
Max Q Clear Time (g_c+I1), s	2.2	9.5		32.2	14.8	15.7		24.2
Green Ext Time (p_c), s	0.0	4.1		0.1	0.0	0.5		1.0

Intersection Summary			
HCM 6th Ctrl Delay			32.7
HCM 6th LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	346	229	209	513	10	224	5	166	107	63	64
Future Volume (veh/h)	8	346	229	209	513	10	224	5	166	107	63	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	9	376	249	227	558	11	243	5	180	116	68	70
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	16	695	454	262	1695	33	319	7	191	260	152	135
Arrive On Green	0.01	0.34	0.34	0.15	0.48	0.48	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	2060	1345	1781	3564	70	746	20	556	587	444	392
Grp Volume(v), veh/h	9	324	301	227	278	291	428	0	0	254	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1628	1781	1777	1858	1321	0	0	1423	0	0
Q Serve(g_s), s	0.5	13.3	13.5	11.2	8.8	8.8	16.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	13.3	13.5	11.2	8.8	8.8	28.5	0.0	0.0	12.4	0.0	0.0
Prop In Lane	1.00		0.83	1.00		0.04	0.57		0.42	0.46		0.28
Lane Grp Cap(c), veh/h	16	600	550	262	845	884	516	0	0	547	0	0
V/C Ratio(X)	0.56	0.54	0.55	0.87	0.33	0.33	0.83	0.00	0.00	0.46	0.00	0.00
Avail Cap(c_a), veh/h	109	600	550	307	845	884	541	0	0	572	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.4	24.1	24.2	37.5	14.7	14.7	29.1	0.0	0.0	23.3	0.0	0.0
Incr Delay (d2), s/veh	11.1	3.5	3.9	17.9	1.0	1.0	9.3	0.0	0.0	0.2	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	9.8	9.3	10.0	6.2	6.5	14.8	0.0	0.0	7.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	27.6	28.1	55.4	15.7	15.7	38.4	0.0	0.0	23.5	0.0	0.0
LnGrp LOS	E	C	C	E	B	B	D	A	A	C	A	A
Approach Vol, veh/h		634			796			428			254	
Approach Delay, s/veh		28.3			27.0			38.4			23.5	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	48.3		36.4	17.7	35.9		36.4
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	36.5		32.5	15.5	26.5		32.5
Max Q Clear Time (g_c+I1), s	2.5	10.8		30.5	13.2	15.5		14.4
Green Ext Time (p_c), s	0.0	4.8		0.4	0.1	0.5		1.0

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	369	196	242	446	7	223	10	220	174	37	106
Future Volume (veh/h)	5	369	196	242	446	7	223	10	220	174	37	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	5	401	213	263	485	8	242	11	239	189	40	115
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	9	676	355	297	1651	27	299	13	238	290	65	147
Arrive On Green	0.01	0.30	0.30	0.17	0.46	0.46	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1781	2253	1182	1781	3578	59	662	37	660	630	181	407
Grp Volume(v), veh/h	5	315	299	263	241	252	492	0	0	344	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1658	1781	1777	1860	1359	0	0	1219	0	0
Q Serve(g_s), s	0.3	13.6	13.8	13.0	7.6	7.6	10.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	13.6	13.8	13.0	7.6	7.6	32.5	0.0	0.0	22.4	0.0	0.0
Prop In Lane	1.00		0.71	1.00		0.03	0.49		0.49	0.55		0.33
Lane Grp Cap(c), veh/h	9	533	497	297	820	858	550	0	0	502	0	0
V/C Ratio(X)	0.54	0.59	0.60	0.89	0.29	0.29	0.89	0.00	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	109	533	497	307	820	858	550	0	0	502	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.7	26.8	26.9	36.7	15.1	15.1	28.9	0.0	0.0	25.3	0.0	0.0
Incr Delay (d2), s/veh	16.7	4.8	5.3	23.8	0.9	0.9	16.5	0.0	0.0	3.2	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	10.2	9.9	11.8	5.4	5.7	18.0	0.0	0.0	10.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.4	31.6	32.2	60.4	16.0	16.0	45.4	0.0	0.0	28.5	0.0	0.0
LnGrp LOS	E	C	C	E	B	B	D	A	A	C	A	A
Approach Vol, veh/h		619			756			492			344	
Approach Delay, s/veh		32.1			31.5			45.4			28.5	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	47.0		38.0	19.5	32.5		38.0
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	36.5		32.5	15.5	26.5		32.5
Max Q Clear Time (g_c+I1), s	2.3	9.6		34.5	15.0	15.8		24.4
Green Ext Time (p_c), s	0.0	4.1		0.0	0.0	0.5		1.0

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	365	231	209	548	9	225	5	168	127	58	64
Future Volume (veh/h)	7	365	231	209	548	9	225	5	168	127	58	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	8	397	251	227	596	10	245	5	183	138	63	70
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	14	840	525	262	1928	32	356	12	435	300	227	252
Arrive On Green	0.01	0.40	0.40	0.15	0.54	0.54	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	2100	1312	1781	3576	60	1257	42	1549	1195	809	899
Grp Volume(v), veh/h	8	335	313	227	296	310	245	0	188	138	0	133
Grp Sat Flow(s),veh/h/ln	1781	1777	1634	1781	1777	1860	1257	0	1592	1195	0	1709
Q Serve(g_s), s	0.4	12.6	12.8	11.2	8.3	8.3	17.0	0.0	8.7	9.6	0.0	5.5
Cycle Q Clear(g_c), s	0.4	12.6	12.8	11.2	8.3	8.3	22.5	0.0	8.7	18.3	0.0	5.5
Prop In Lane	1.00		0.80	1.00		0.03	1.00		0.97	1.00		0.53
Lane Grp Cap(c), veh/h	14	711	654	262	958	1003	356	0	446	300	0	479
V/C Ratio(X)	0.56	0.47	0.48	0.87	0.31	0.31	0.69	0.00	0.42	0.46	0.00	0.28
Avail Cap(c_a), veh/h	109	711	654	307	958	1003	457	0	575	396	0	617
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	44.5	20.0	20.0	37.5	11.5	11.5	34.0	0.0	26.4	33.9	0.0	25.3
Incr Delay (d2), s/veh	12.0	2.2	2.5	17.9	0.8	0.8	1.6	0.0	0.2	0.4	0.0	0.1
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(95%),veh/ln	0.4	9.0	8.6	10.0	5.6	5.9	8.8	0.0	5.7	5.0	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	22.2	22.5	55.4	12.3	12.3	35.6	0.0	26.6	34.3	0.0	25.4
LnGrp LOS	E	C	C	E	B	B	D	A	C	C	A	C
Approach Vol, veh/h		656			833			433			271	
Approach Delay, s/veh		22.8			24.0			31.7			29.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	54.0		30.7	17.7	41.5		30.7
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5		5.5
Max Green Setting (Gmax), s	5.5	36.5		32.5	15.5	26.5		32.5
Max Q Clear Time (g_c+I1), s	2.4	10.3		24.5	13.2	14.8		20.3
Green Ext Time (p_c), s	0.0	5.2		0.8	0.1	0.5		0.6

Intersection Summary			
HCM 6th Ctrl Delay			25.9
HCM 6th LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	387	199	246	493	6	217	10	220	191	34	106
Future Volume (veh/h)	4	387	199	246	493	6	217	10	220	191	34	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	4	421	216	267	536	7	236	11	239	208	37	115
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	8	750	381	301	1773	23	404	23	504	312	132	411
Arrive On Green	0.00	0.33	0.33	0.17	0.49	0.49	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1781	2281	1158	1781	3592	47	1235	70	1526	1130	401	1245
Grp Volume(v), veh/h	4	327	310	267	265	278	236	0	250	208	0	152
Grp Sat Flow(s),veh/h/ln	1781	1777	1662	1781	1777	1862	1235	0	1596	1130	0	1646
Q Serve(g_s), s	0.2	13.6	13.8	13.2	8.0	8.0	15.7	0.0	11.2	16.1	0.0	6.1
Cycle Q Clear(g_c), s	0.2	13.6	13.8	13.2	8.0	8.0	21.8	0.0	11.2	27.3	0.0	6.1
Prop In Lane	1.00		0.70	1.00		0.03	1.00		0.96	1.00		0.76
Lane Grp Cap(c), veh/h	8	585	547	301	877	919	404	0	527	312	0	543
V/C Ratio(X)	0.53	0.56	0.57	0.89	0.30	0.30	0.58	0.00	0.47	0.67	0.00	0.28
Avail Cap(c_a), veh/h	109	585	547	307	877	919	442	0	576	347	0	594
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	44.7	24.8	24.9	36.6	13.6	13.6	30.3	0.0	23.9	34.8	0.0	22.3
Incr Delay (d2), s/veh	19.8	3.8	4.2	24.4	0.9	0.8	0.9	0.0	0.2	3.0	0.0	0.1
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(95%),veh/ln	0.2	10.0	9.7	12.0	5.6	5.9	8.0	0.0	7.2	8.1	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.6	28.7	29.1	61.0	14.5	14.4	31.2	0.0	24.2	37.8	0.0	22.4
LnGrp LOS	E	C	C	E	B	B	C	A	C	D	A	C
Approach Vol, veh/h		641			810			486			360	
Approach Delay, s/veh		29.1			29.8			27.6			31.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	49.9		35.2	19.7	35.1		35.2				
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	5.5	36.5		32.5	15.5	26.5		32.5				
Max Q Clear Time (g_c+I1), s	2.2	10.0		23.8	15.2	15.8		29.3				
Green Ext Time (p_c), s	0.0	4.6		1.0	0.0	0.5		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			29.4									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	365	236	215	548	10	231	5	171	128	65	66
Future Volume (veh/h)	8	365	236	215	548	10	231	5	171	128	65	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	9	397	257	234	596	11	251	5	186	139	71	72
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	16	803	514	269	1886	35	361	12	450	311	247	251
Arrive On Green	0.01	0.39	0.39	0.15	0.53	0.53	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1781	2078	1330	1781	3569	66	1245	42	1550	1192	851	863
Grp Volume(v), veh/h	9	339	315	234	297	310	251	0	191	139	0	143
Grp Sat Flow(s),veh/h/ln	1781	1777	1631	1781	1777	1859	1245	0	1591	1192	0	1715
Q Serve(g_s), s	0.5	13.0	13.2	11.6	8.5	8.5	17.6	0.0	8.7	9.6	0.0	5.8
Cycle Q Clear(g_c), s	0.5	13.0	13.2	11.6	8.5	8.5	23.4	0.0	8.7	18.3	0.0	5.8
Prop In Lane	1.00		0.82	1.00		0.04	1.00		0.97	1.00		0.50
Lane Grp Cap(c), veh/h	16	686	630	269	939	982	361	0	462	311	0	498
V/C Ratio(X)	0.56	0.49	0.50	0.87	0.32	0.32	0.69	0.00	0.41	0.45	0.00	0.29
Avail Cap(c_a), veh/h	109	686	630	307	939	982	449	0	575	395	0	619
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	44.4	20.9	21.0	37.3	12.0	12.0	33.8	0.0	25.7	33.1	0.0	24.7
Incr Delay (d2), s/veh	11.1	2.5	2.8	19.1	0.9	0.8	2.1	0.0	0.2	0.4	0.0	0.1
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(95%),veh/ln	0.4	9.4	8.9	10.3	5.8	6.1	9.0	0.0	5.7	5.0	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	23.5	23.8	56.4	12.9	12.9	35.9	0.0	26.0	33.5	0.0	24.8
LnGrp LOS	E	C	C	E	B	B	D	A	C	C	A	C
Approach Vol, veh/h		663			841			442			282	
Approach Delay, s/veh		24.1			25.0			31.6			29.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	53.1		31.6	18.1	40.3		31.6				
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	5.5	36.5		32.5	15.5	26.5		32.5				
Max Q Clear Time (g_c+I1), s	2.5	10.5		25.4	13.6	15.2		20.3				
Green Ext Time (p_c), s	0.0	5.2		0.7	0.1	0.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay			26.5
HCM 6th LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	387	202	249	493	7	229	10	226	192	38	109
Future Volume (veh/h)	5	387	202	249	493	7	229	10	226	192	38	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	5	421	220	271	536	8	249	11	246	209	41	118
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	9	729	377	304	1747	26	404	23	512	313	143	410
Arrive On Green	0.01	0.32	0.32	0.17	0.49	0.49	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1781	2265	1171	1781	3584	53	1227	68	1527	1123	425	1224
Grp Volume(v), veh/h	5	329	312	271	266	278	249	0	257	209	0	159
Grp Sat Flow(s),veh/h/ln	1781	1777	1660	1781	1777	1861	1227	0	1595	1123	0	1650
Q Serve(g_s), s	0.3	13.9	14.1	13.4	8.1	8.1	16.9	0.0	11.5	16.3	0.0	6.4
Cycle Q Clear(g_c), s	0.3	13.9	14.1	13.4	8.1	8.1	23.2	0.0	11.5	27.8	0.0	6.4
Prop In Lane	1.00		0.71	1.00		0.03	1.00		0.96	1.00		0.74
Lane Grp Cap(c), veh/h	9	572	534	304	866	907	404	0	534	313	0	553
V/C Ratio(X)	0.54	0.58	0.58	0.89	0.31	0.31	0.62	0.00	0.48	0.67	0.00	0.29
Avail Cap(c_a), veh/h	109	572	534	307	866	907	436	0	576	342	0	596
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	44.7	25.4	25.5	36.5	13.9	13.9	30.6	0.0	23.7	34.7	0.0	22.0
Incr Delay (d2), s/veh	16.7	4.2	4.6	25.0	0.9	0.9	1.5	0.0	0.3	3.2	0.0	0.1
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(95%),veh/ln	0.3	10.2	9.9	12.2	5.7	6.0	8.5	0.0	7.4	8.2	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.4	29.6	30.1	61.5	14.8	14.8	32.1	0.0	24.0	38.0	0.0	22.1
LnGrp LOS	E	C	C	E	B	B	C	A	C	D	A	C
Approach Vol, veh/h		646			815			506			368	
Approach Delay, s/veh		30.1			30.3			28.0			31.1	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	49.4		35.6	19.9	34.5		35.6				
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	5.5	36.5		32.5	15.5	26.5		32.5				
Max Q Clear Time (g_c+I1), s	2.3	10.1		25.2	15.4	16.1		29.8				
Green Ext Time (p_c), s	0.0	4.6		1.0	0.0	0.5		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			29.9									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	528	107	140	135	85	220	5	149	101	157	85
Future Volume (veh/h)	5	528	107	140	135	85	220	5	149	101	157	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	5	574	116	152	147	92	239	5	162	110	171	92
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	11	707	315	176	627	370	464	9	970	175	266	134
Arrive On Green	0.01	0.20	0.20	0.10	0.29	0.29	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	1781	3554	1585	1781	2150	1269	680	14	1585	235	435	219
Grp Volume(v), veh/h	5	574	116	152	120	119	244	0	162	373	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1642	694	0	1585	889	0	0
Q Serve(g_s), s	0.4	23.1	9.5	12.6	7.7	8.3	0.0	0.0	6.6	25.3	0.0	0.0
Cycle Q Clear(g_c), s	0.4	23.1	9.5	12.6	7.7	8.3	44.9	0.0	6.6	70.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.77	0.98		1.00	0.29		0.25
Lane Grp Cap(c), veh/h	11	707	315	176	518	479	472	0	970	575	0	0
V/C Ratio(X)	0.45	0.81	0.37	0.86	0.23	0.25	0.52	0.00	0.17	0.65	0.00	0.00
Avail Cap(c_a), veh/h	303	1789	798	279	871	805	472	0	970	575	0	0
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	0.00
Uniform Delay (d), s/veh	74.3	57.4	51.9	66.6	40.4	40.6	20.0	0.0	12.6	35.6	0.0	0.0
Incr Delay (d2), s/veh	25.6	2.3	0.7	14.9	0.2	0.3	4.0	0.0	0.4	5.6	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	15.9	6.9	10.6	6.2	6.2	10.4	0.0	4.4	18.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.9	59.7	52.6	81.5	40.6	40.9	24.0	0.0	12.9	41.2	0.0	0.0
LnGrp LOS	F	E	D	F	D	D	C	A	B	D	A	A
Approach Vol, veh/h		695			391			406			373	
Approach Delay, s/veh		58.8			56.6			19.6			41.2	
Approach LOS		E			E			B			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		96.3	19.3	34.3		96.3	5.4	48.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		37.5	23.5	75.5		37.5	25.5	73.5
Max Q Clear Time (g_c+I1), s		46.9	14.6	25.1		72.1	2.4	10.3
Green Ext Time (p_c), s		0.0	0.2	4.7		0.0	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	46.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	499	122	284	242	124	286	15	139	87	126	46
Future Volume (veh/h)	9	499	122	284	242	124	286	15	139	87	126	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	10	542	133	309	263	135	311	16	151	95	137	50
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	475	1421	634	412	919	458	646	25	634	287	387	122
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	987	3554	1585	864	2297	1144	1226	63	1585	451	968	306
Grp Volume(v), veh/h	10	542	133	309	202	196	327	0	151	282	0	0
Grp Sat Flow(s),veh/h/ln	987	1777	1585	864	1777	1664	1289	0	1585	1724	0	0
Q Serve(g_s), s	0.3	4.9	2.5	13.1	3.5	3.6	3.5	0.0	2.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.9	4.9	2.5	18.0	3.5	3.6	8.5	0.0	2.8	5.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.69	0.95		1.00	0.34		0.18
Lane Grp Cap(c), veh/h	475	1421	634	412	711	666	672	0	634	797	0	0
V/C Ratio(X)	0.02	0.38	0.21	0.75	0.28	0.29	0.49	0.00	0.24	0.35	0.00	0.00
Avail Cap(c_a), veh/h	475	1421	634	412	711	666	672	0	634	797	0	0
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	0.00
Uniform Delay (d), s/veh	10.5	9.6	8.8	17.1	9.1	9.2	10.5	0.0	9.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.8	11.8	1.0	1.1	2.5	0.0	0.9	1.2	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	2.9	1.4	7.6	2.2	2.2	4.3	0.0	1.7	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.6	10.3	9.6	29.0	10.1	10.3	13.0	0.0	9.8	10.8	0.0	0.0
LnGrp LOS	B	B	A	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		685			707			478			282	
Approach Delay, s/veh		10.2			18.4			12.0			10.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		10.5		6.9		7.0		20.0				
Green Ext Time (p_c), s		1.7		3.2		1.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			13.4
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	530	111	140	135	85	225	5	154	101	157	85
Future Volume (veh/h)	5	530	111	140	135	85	225	5	154	101	157	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	5	576	121	152	147	92	245	5	167	110	171	92
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	563	1421	634	398	860	507	600	11	634	255	365	169
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1141	3554	1585	837	2150	1269	1103	27	1585	379	912	423
Grp Volume(v), veh/h	5	576	121	152	120	119	250	0	167	373	0	0
Grp Sat Flow(s),veh/h/ln	1141	1777	1585	837	1777	1642	1130	0	1585	1714	0	0
Q Serve(g_s), s	0.1	5.2	2.2	7.1	2.0	2.1	0.6	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	5.2	2.2	12.4	2.0	2.1	7.6	0.0	3.2	7.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.77	0.98		1.00	0.29		0.25
Lane Grp Cap(c), veh/h	563	1421	634	398	711	657	610	0	634	789	0	0
V/C Ratio(X)	0.01	0.41	0.19	0.38	0.17	0.18	0.41	0.00	0.26	0.47	0.00	0.00
Avail Cap(c_a), veh/h	563	1421	634	398	711	657	610	0	634	789	0	0
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	0.00
Uniform Delay (d), s/veh	9.5	9.7	8.8	14.1	8.7	8.7	10.4	0.0	9.1	10.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.7	2.8	0.5	0.6	2.0	0.0	1.0	2.0	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	3.2	1.3	2.6	1.2	1.3	3.3	0.0	1.9	4.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.5	10.5	9.4	16.9	9.2	9.3	12.4	0.0	10.1	12.2	0.0	0.0
LnGrp LOS	A	B	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		702			391			417			373	
Approach Delay, s/veh		10.3			12.2			11.5			12.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		9.6		7.2		9.0		14.4				
Green Ext Time (p_c), s		1.5		3.2		1.5		0.8				

Intersection Summary			
HCM 6th Ctrl Delay			11.4
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	504	131	284	242	124	289	15	142	87	126	46
Future Volume (veh/h)	9	504	131	284	242	124	289	15	142	87	126	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	10	548	142	309	263	135	314	16	154	95	137	50
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	475	1421	634	410	919	458	647	25	634	287	387	122
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	987	3554	1585	859	2297	1144	1226	62	1585	451	968	306
Grp Volume(v), veh/h	10	548	142	309	202	196	330	0	154	282	0	0
Grp Sat Flow(s),veh/h/ln	987	1777	1585	859	1777	1664	1288	0	1585	1725	0	0
Q Serve(g_s), s	0.3	4.9	2.7	13.1	3.5	3.6	3.6	0.0	2.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.9	4.9	2.7	18.0	3.5	3.6	8.6	0.0	2.9	5.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.69	0.95		1.00	0.34		0.18
Lane Grp Cap(c), veh/h	475	1421	634	410	711	666	672	0	634	797	0	0
V/C Ratio(X)	0.02	0.39	0.22	0.75	0.28	0.29	0.49	0.00	0.24	0.35	0.00	0.00
Avail Cap(c_a), veh/h	475	1421	634	410	711	666	672	0	634	797	0	0
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	0.00
Uniform Delay (d), s/veh	10.5	9.6	8.9	17.2	9.1	9.2	10.5	0.0	9.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.8	12.2	1.0	1.1	2.6	0.0	0.9	1.2	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	3.0	1.6	7.7	2.2	2.2	4.4	0.0	1.7	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.6	10.4	9.7	29.4	10.1	10.3	13.1	0.0	9.9	10.8	0.0	0.0
LnGrp LOS	B	B	A	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		700			707			484			282	
Approach Delay, s/veh		10.2			18.6			12.1			10.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		10.6		6.9		7.0		20.0				
Green Ext Time (p_c), s		1.7		3.2		1.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			13.4
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	545	110	144	157	88	227	5	154	104	162	88
Future Volume (veh/h)	5	545	110	144	157	88	227	5	154	104	162	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	5	592	120	157	171	96	247	5	167	113	176	96
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	547	1421	634	391	895	478	593	10	634	256	363	171
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1112	3554	1585	825	2237	1195	1086	26	1585	382	907	428
Grp Volume(v), veh/h	5	592	120	157	134	133	252	0	167	385	0	0
Grp Sat Flow(s),veh/h/ln	1112	1777	1585	825	1777	1655	1112	0	1585	1718	0	0
Q Serve(g_s), s	0.1	5.4	2.2	7.6	2.2	2.4	0.7	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	5.4	2.2	13.0	2.2	2.4	8.0	0.0	3.2	7.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.72	0.98		1.00	0.29		0.25
Lane Grp Cap(c), veh/h	547	1421	634	391	711	662	603	0	634	791	0	0
V/C Ratio(X)	0.01	0.42	0.19	0.40	0.19	0.20	0.42	0.00	0.26	0.49	0.00	0.00
Avail Cap(c_a), veh/h	547	1421	634	391	711	662	603	0	634	791	0	0
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	0.00
Uniform Delay (d), s/veh	9.6	9.7	8.8	14.4	8.8	8.8	10.5	0.0	9.1	10.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.7	3.1	0.6	0.7	2.1	0.0	1.0	2.1	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	3.3	1.3	2.7	1.4	1.4	3.3	0.0	1.9	4.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	10.6	9.4	17.5	9.3	9.5	12.6	0.0	10.1	12.4	0.0	0.0
LnGrp LOS	A	B	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		717			424			419			385	
Approach Delay, s/veh		10.4			12.4			11.6			12.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		10.0		7.4		9.3		15.0				
Green Ext Time (p_c), s		1.5		3.3		1.6		0.7				

Intersection Summary			
HCM 6th Ctrl Delay			11.5
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	514	126	293	262	128	296	15	143	90	130	47
Future Volume (veh/h)	9	514	126	293	262	128	296	15	143	90	130	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	10	559	137	318	285	139	322	16	155	98	141	51
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	463	1421	634	405	935	444	643	24	634	289	389	122
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	963	3554	1585	850	2337	1110	1217	60	1585	455	972	304
Grp Volume(v), veh/h	10	559	137	318	215	209	338	0	155	290	0	0
Grp Sat Flow(s),veh/h/ln	963	1777	1585	850	1777	1671	1277	0	1585	1731	0	0
Q Serve(g_s), s	0.3	5.0	2.6	13.0	3.7	3.9	4.0	0.0	2.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.2	5.0	2.6	18.0	3.7	3.9	9.1	0.0	2.9	5.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.66	0.95		1.00	0.34		0.18
Lane Grp Cap(c), veh/h	463	1421	634	405	711	668	667	0	634	800	0	0
V/C Ratio(X)	0.02	0.39	0.22	0.79	0.30	0.31	0.51	0.00	0.24	0.36	0.00	0.00
Avail Cap(c_a), veh/h	463	1421	634	405	711	668	667	0	634	800	0	0
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	0.00
Uniform Delay (d), s/veh	10.7	9.6	8.9	17.5	9.2	9.3	10.7	0.0	9.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.8	14.2	1.1	1.2	2.7	0.0	0.9	1.3	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	3.0	1.5	8.2	2.4	2.4	4.6	0.0	1.7	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	10.4	9.6	31.7	10.3	10.5	13.4	0.0	9.9	10.9	0.0	0.0
LnGrp LOS	B	B	A	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		706			742			493			290	
Approach Delay, s/veh		10.3			19.5			12.3			10.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		11.1		7.0		7.1		20.0				
Green Ext Time (p_c), s		1.6		3.2		1.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.9									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	547	114	144	157	88	232	5	159	104	162	88
Future Volume (veh/h)	5	547	114	144	157	88	232	5	159	104	162	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	5	595	124	157	171	96	252	5	173	113	176	96
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	547	1421	634	390	895	478	593	10	634	257	363	172
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1112	3554	1585	823	2237	1195	1086	26	1585	383	908	429
Grp Volume(v), veh/h	5	595	124	157	134	133	257	0	173	385	0	0
Grp Sat Flow(s),veh/h/ln	1112	1777	1585	823	1777	1655	1112	0	1585	1720	0	0
Q Serve(g_s), s	0.1	5.4	2.3	7.6	2.2	2.4	0.9	0.0	3.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	5.4	2.3	13.1	2.2	2.4	8.2	0.0	3.3	7.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.72	0.98		1.00	0.29		0.25
Lane Grp Cap(c), veh/h	547	1421	634	390	711	662	603	0	634	791	0	0
V/C Ratio(X)	0.01	0.42	0.20	0.40	0.19	0.20	0.43	0.00	0.27	0.49	0.00	0.00
Avail Cap(c_a), veh/h	547	1421	634	390	711	662	603	0	634	791	0	0
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	0.00
Uniform Delay (d), s/veh	9.6	9.7	8.8	14.4	8.8	8.8	10.5	0.0	9.1	10.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.7	3.1	0.6	0.7	2.2	0.0	1.1	2.1	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	3.3	1.3	2.7	1.4	1.4	3.4	0.0	1.9	4.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	10.6	9.5	17.5	9.3	9.5	12.7	0.0	10.2	12.4	0.0	0.0
LnGrp LOS	A	B	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		724			424			430			385	
Approach Delay, s/veh		10.4			12.4			11.7			12.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		10.2		7.4		9.3		15.1				
Green Ext Time (p_c), s		1.5		3.3		1.6		0.7				

Intersection Summary			
HCM 6th Ctrl Delay			11.5
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	519	135	293	262	128	299	15	146	90	130	47
Future Volume (veh/h)	9	519	135	293	262	128	299	15	146	90	130	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	10	564	147	318	285	139	325	16	159	98	141	51
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	463	1421	634	403	935	444	643	24	634	289	389	122
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	963	3554	1585	847	2337	1110	1217	60	1585	455	973	305
Grp Volume(v), veh/h	10	564	147	318	215	209	341	0	159	290	0	0
Grp Sat Flow(s),veh/h/ln	963	1777	1585	847	1777	1671	1277	0	1585	1733	0	0
Q Serve(g_s), s	0.3	5.1	2.8	12.9	3.7	3.9	4.1	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.2	5.1	2.8	18.0	3.7	3.9	9.2	0.0	3.0	5.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.66	0.95		1.00	0.34		0.18
Lane Grp Cap(c), veh/h	463	1421	634	403	711	668	667	0	634	800	0	0
V/C Ratio(X)	0.02	0.40	0.23	0.79	0.30	0.31	0.51	0.00	0.25	0.36	0.00	0.00
Avail Cap(c_a), veh/h	463	1421	634	403	711	668	667	0	634	800	0	0
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	0.00
Uniform Delay (d), s/veh	10.7	9.6	8.9	17.6	9.2	9.3	10.7	0.0	9.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.9	14.5	1.1	1.2	2.8	0.0	0.9	1.3	0.0	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	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	3.1	1.6	8.2	2.4	2.4	4.6	0.0	1.8	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	10.5	9.8	32.1	10.3	10.5	13.5	0.0	10.0	10.9	0.0	0.0
LnGrp LOS	B	B	A	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		721			742			500			290	
Approach Delay, s/veh		10.3			19.7			12.4			10.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		22.5		22.5		22.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		11.2		7.1		7.1		20.0				
Green Ext Time (p_c), s		1.6		3.3		1.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			13.9
HCM 6th LOS			B