City of Rohnert Park
Planning Commission Report

DATE: December 8, 2016

ITEM NO: 8.1

SUBJECT: (A) Conduct a Public Hearing on a Mitigated Negative Declaration for Residences at Five Creek/City Public Safety/Public Works Facilities; and (B) Continue the Public Hearing on the Residences at Five Creek Project: (a) General Plan Amendment; (b) Stadium Area Master Plan Amendments; Final Development Plan and Conditional Use Permit; (c) Development Agreement between the City and Stadium RP Development Partners LLC; and (d) Tentative Map (File No. PROJ2016-0001)

LOCATION: Area bounded by Dowdell Avenue on the east, Hinebaugh Creek and the Martin Avenue Extension on the south, Labath Avenue on the west and Carlson Avenue on the north (APN 143-040-124)

APPLICANT: Mathew J. Waken for MJW Investments LLC

The applicant has requested that the land use approvals for the proposed Residences at Five Creek (Five Creek) project be continued as negotiations regarding the project's Development Agreement (DA) are on-going.

Staff is recommending that the Planning Commission open the public hearing on the proposed Initial Study/Mitigated Negative Declaration for the Five Creek project, which also includes the environmental review of the City Public Safety/Public Works Facilities project located on an adjacent parcel, take all public comments, close the public hearing, and then continue the item to a date uncertain to allow staff to respond to any comments. Staff is further recommending that the Planning Commission continue action on the General Plan Amendment, Stadium Area Master Plan (SAMP) amendments, Final Development Plan, Development Agreement and Tentative Map to a date uncertain. Staff would then re-notice these items.

The proposed Five Creek project will develop 12.32 acres with:

- a 132 room hotel
- a 34,300 square foot retail center
- a 135 unit apartment complex
- a 0.65 acre public park.

The project's proposed tentative map also creates a 2.97 acre parcel that will be developed by the City as a fire station and a corporation yard. The Planning Commission approved a Preliminary Development Plan for this project in May 12, 2016 and conducted a joint study session with the Parks and Recreation Commission on June 8, 2016 to identify the preferred location, configuration and improvements for the proposed park.

Background:

The SAMP was adopted by the City of Rohnert Park in February 2008 and amended in 2013 and is the guiding document for this development. A portion of the SAMP has been developed with the Fiori Estates and The Reserve at Dowdell apartment complexes. The remaining undeveloped 15.25 acres within the SAMP are owned by the city.

A Purchase and Sale Agreement (PSA) has been entered into between the city and MJW Investments LLC which describes the conditions under which the city will sell 12.32 acres to the applicant. The agreement, among other things, requires that the site be developed with a hotel, a separate retail-commercial center, a residential or office component and a public park. Completing the property transfer and development envisioned by the PSA is an important economic development initiative for the City.

The majority of the 15.25 acre site (approximately 12.62 acres) is zoned Planned Development (P-D). The remainder is zoned Public Institutional (P-I) for the planned city facilities. The land use designation underlying the P-D zoning is Regional Commercial. In order to accommodate the Five Creek project, both the General Plan and SAMP must be amended to introduce High Density Residential and Park and Recreational land uses to accommodate the proposed apartment complex and public park.

A **Mitigated Negative Declaration** has been prepared to comply with the required environmental review for the Five Creek development, in addition to the City's neighboring Public Safety/Public Works Facilities.

Analysis of Mitigated Negative Declaration:

An environmental impact report (EIR) was prepared for the original Stadium Area Master Plan. Mitigation measures included in the adopted EIR are required to be implemented as projects develop. Because of the proposed changes to the approved land uses, an Initial Study was prepared to determine whether the proposed project, including the City's proposed facilities, would have a significant adverse effect on the environment. As indicated above, the Five Creek project proposes to change the current Regional Commercial land use designation of the Five Creek project site to a combination of Parks/Recreation, High Density Residential and Regional Commercial. The Public/Institutional portion of the site would remain. The Five Creek project consists of the following:

- *Public Park*- The park is located in the northeast corner of the property, with minor frontage on Dowdell Avenue and major frontage along Carlson Avenue. Amenities in the Park will include a bocce ball court, a 400 square foot picnic area, a skate feature, a tot lot, a passive lawn area and an entry plaza. The Park and Recreation Commission has recommended approval of the park.
- *High Density Residential Complex*- The proposed multi-family residential complex would be located on the north portion of the site and would contain 135 units with a mix

of one, two and three bedroom units. As currently envisioned, the complex would consist of seven (7) individual buildings. Access would be primarily from Carlson Avenue and Labath Avenue. All of the buildings would be three (3) stories with garage, carport and open parking provided. The development would include a clubhouse and pool complex. The SAMP limits the number of multi-family units in the plan area to 338, which have been largely developed with the Fiori Estates and Reserve at Dowdell projects. The proposed amendments to the SAMP will increase the number of permitted multi-family units to 473, which will accommodate the Five Creeks proposal. The final design of the apartment complex will be determine through the Site Plan and Architectural Review (SPAR) process.

- *Hotel* - The hotel would consist of 132 rooms at the northeast corner of Labath Avenue and Martin Avenue extension on the west side of the site. As currently envisioned, the hotel building would be four (4) stories tall. The entrance would be from the Martin Avenue extension with a porte-cochere off of Martin Avenue. There will be vehicular access between the hotel site and adjacent retail commercial property. There will also be parallel parking on Martin Avenue extension but it will not be counted as required parking for the hotel or commercial development. The final design of the hotel will be determined by the SPAR process.

- *Retail Commercial Center* - The commercial portion of the project would be located at the northwest corner of Dowdell Avenue and the Martin Avenue extension. As currently envisioned, the project would consist of three (3) buildings with a total area of 34,300 square feet. The main building consisting of the retail anchor located at the Martin Avenue and Dowdell Avenue intersection and the remaining buildings on the north end of the site. A retail plaza would connect the commercial portion of the project with the multi-family development resulting in an attractive connection for residents to gain access to the commercial area. The retail commercial area would also be easily accessible by hotel guests. There would also be joint parking between the hotel site and the retail commercial site. The final design of the commercial project will be determined by the SPAR process.

Components of the EIR and applicable mitigation measures are discussed within the Initial Study. New mitigation measures that apply specifically to the proposed project were included for air quality, biological resources, greenhouse gas emissions, noise, and traffic. The most significant new mitigation measure is the requirement to purchase greenhouse gas emissions credits in order to offset the impacts of the project. Based on the analysis included in the Initial Study, a Mitigated Negative Declaration (MND) was prepared. The MND was circulated for public review between November 8, 2016 and December 8, 2016. To date, staff has not received any public comment but will forward comments as received to the Commission.

Public Notification: A 30 day notice was posted as required and advertised for the Mitigated Negative Declaration in the Community Voice. A 10 day public hearing notice was posted at prescribed locations in Rohnert Park. Property owners within 300 feet of the project were mailed notices of the proposed application.

Staff Recommendation: Staff recommends that the Planning Commission:

(1) Conduct a Public Hearing on a Mitigated Negative Declaration for Residences at Five Creek/City Public Safety/Public Works Facilities and continue the item to a date uncertain.

(2) Continue the Public Hearing on the Residences at Five Creek Project: (a) General Plan Amendment; (b) Stadium Area Master Plan Amendments; Final Development Plan and Conditional Use Permit; (c) Development Agreement between the City and Stadium RP Development Partners LLC; and (d) Tentative Map, to a date uncertain.

Attachments:

A. Mitigated Negative Declaration

APPROVALS:

Jeffrey Beiswenger, AICP, Planning Manager

12-2-16

Date

INITIAL STUDY

STADIUM AREA MASTER PLAN AMENDMENT

RESIDENCES AT FIVE CREEK AND

CITY PUBLIC SAFETY / PUBLIC WORKS FACILITIES

City of Rohnert Park
Development Services
130 Avram Avenue
Rohnert Park, CA 94928-2486

NOVEMBER 2016

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1 INTRODUCTION

1.1 Project Overview and Location

The proposed amendment to the Stadium Area Master Plan (SAMP) Final Development Plan includes changes associated with two proposed development projects within the Plan area: the Residences at Five Creek and the City Public Safety / Public Works facilities (collectively referred to as the "proposed project").

The proposed project site is located in Rohnert Park, Sonoma County, California. The proposed project would be located on one 15.30 acres parcel (Assessor Parcel Number (APN) 143-040-124) within the SAMP area, bounded by Dowdell Avenue to the east, Labath Avenue to the west, Carlson Avenue to the north, and Hinebaugh Creek to the south. The northern portion of the site includes plans for the Residences at Five Creek, which proposes to include 135 multifamily residential units, 34,400 square feet (sf) of commercial space, a 132-room hotel, and a 0.65-acre park. The southern portion of the site includes plans for a new City of Rohnert Park Public Safety facility (fire station) and Public Works corporation yard.

1.2 California Environmental Quality Act Compliance

This Initial Study has been prepared per the requirements of the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code [PRC] Section 21000, et seq.), and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

1.3 Public Review Process

The Initial Study and the proposed Mitigated Negative Declaration will be circulated for public review for a period of 30 days, pursuant to CEQA Guidelines Section 15073(a). The City of Rohnert Park will provide public notice at the beginning of the public review period.

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2 INITIAL STUDY CHECKLIST

Project title:

The Residences at Five Creek and City Public Safety / Public Works Facilities

Lead agency name and address:

City of Rohnert Park
Development Services
130 Avram Avenue
Rohnert Park, CA 94928-2486

Contact person and phone number:

Jeffrey Beiswenger, Planning Manager
(707) 588-2253

Project location:

Labath Avenue/Martin Avenue, Rohnert Park, CA
APN: APN 143-040-124

Project sponsor's name and address:

MW Investments LLC
1278 Glenneyre Street, Suite 439
Laguna Beach, CA 92651

City of Rohnert Park
130 Avram Ave
Rohnert Park, CA 94928-2486

General plan and zoning designations:

Project Parcel	General Plan Designation		Zoning	
	Existing	Proposed	Existing	Proposed
Residences at Five Creek Site APN 143-040-124 (12.5 acres +/-)	Regional Commercial	Regional Commercial; High Density Residential; and Parks/Recreation	Planned Development	Planned Development
City Public Safety/Public Works Facilities Site APN 143-040-124 (3.0 acres +/-)	Public/Institutional	Public/Institutional	Planned Development	Planned Development

Description of project and environmental setting:

The proposed project would amend the Stadium Area Master Plan (SAMP) Final Development Plan to include changes associated with two proposed development projects within the Plan area: the Residences at Five Creek and the City Public Safety / Public Works facilities (collectively referred to as the "proposed project"). Details related to the proposed project components are provided below.

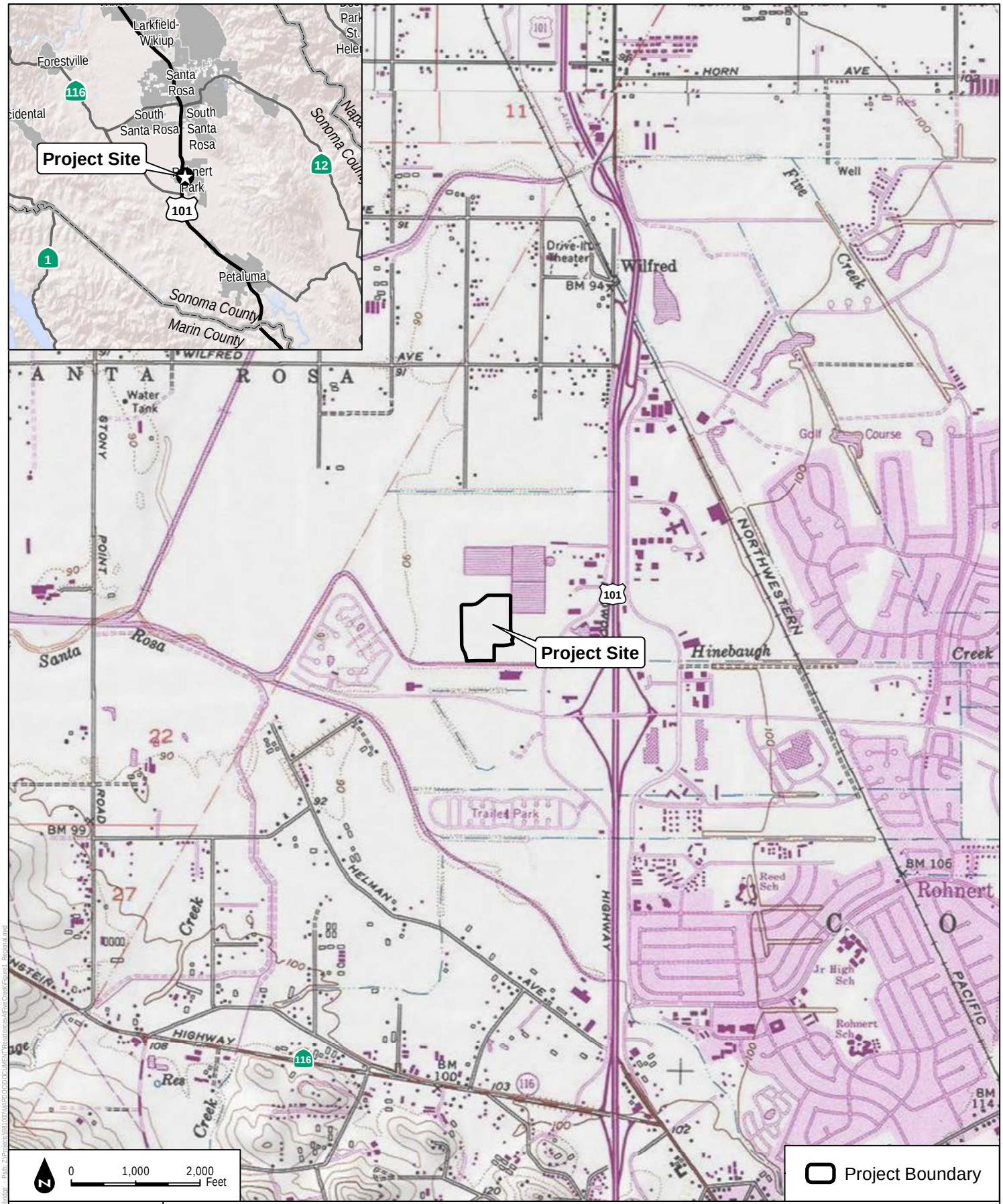
Project Location and Site Characteristics

As shown on **Figure 1 Regional Location Map**, the project site is located within the City of Rohnert Park, Sonoma County, California. The project parcel is approximately 15.30 acres within the 32.80-acre SAMP area. The SAMP Final Development Plan, adopted by the City of Rohnert Park in February 2008 and amended in 2013, provides standards for development within the 32.80-acre SAMP area, which is located in the northwest corner of the City.

The project parcel is composed of two related project sites. The Residences at Five Creek site is approximately 12.60 acres total located west of Highway 101, bounded by Carlson Avenue on the north, Labath Avenue on the west, the extension of Martin Avenue on the south, and Dowdell Avenue on the east. The Residences at Five Creek site is mostly vacant and undeveloped land, except for a small, paved parking lot and planter strip located along a portion of the western site boundary (adjacent to Labath Avenue). The City Public Safety and Public Works site is approximately 3.0 acres is size located immediately south of the Residences at Five Creek site and north of Hinebaugh Creek, is also comprised of vacant, undeveloped land. **Figure 2 Aerial Photo Map** provides aerial imagery of the proposed project site. The entire project site is generally flat, sloping slightly to the southwest. The proposed project includes a subdivision to create a separate parcel for the City Public Safety and Public Works site.

Surrounding Land Uses and Setting:

The project site is located in the northwest portion of the City in an area predominately characterized by existing commercial and industrial/business uses. The site is located west of Highway 101, bounded by Carlson Avenue on the north, Labath Avenue on the west, Hinebaugh Creek on the south, and Dowdell Avenue on the east. The site is located adjacent to Costco, Ashley Furniture and KRCB Public Radio Station.



SOURCE: USGS 7.5-Minute Series Cotati Quadrangle

FIGURE 1

Regional Map

DUDEK

The Residences at Five Creek & City Public Safety Project

City of Rohnert Park

SOURCE: Bing Maps (2016)

FIGURE 2

Project Site

DUDEK

The Residences at Five Creek & City Public Safety Project

City of Rohnert Park

Background Documents and Plans:

Stadium Area Master Plan Final Development Area Plan and EIR

In 2008, the City of Rohnert Park City Council adopted the SAMP Final Development Plan that provided standards for development within the 29.8-acre SAMP area. Land uses within the boundaries of the 2008 SAMP included: High Density Residential (12-24 units/acre), Commercial-Regional, and Parks/Recreation.

An Environmental Impact Report (EIR) was prepared for the SAMP (SCH# 2005042111). The EIR evaluated the programmatic impacts of Plan adoption and was certified by the City Council in June 2008. Several mitigation measures included in the adopted EIR are required to be implemented as projects develop within the Plan area. Components of the EIR and applicable mitigation measures are discussed within this Initial Study.

Amended in 2013 to include an additional 3.0-acre parcel for development of high density residential units, the total development area within the SAMP currently stands at 32.8 acres. The 2013 amendment also included changes to allow for future development of a new City of Rohnert Park Department of Public Safety facility on approximately 3.0-acre parcel within the SAMP. The site designation for the Public Safety facility was amended from Regional Commercial to Public/Institutional. Mitigated Negative Declarations (MNDs) were prepared to evaluate the changes associated with the 2013 amendments and the amendments were approved by the City Council in November 2013.

One housing project, the Fiori Estates 244 apartment complex project has been completed since approval of SAMP amendments in 2013. A second housing project, The Reserve 84 unit apartment complex is currently under construction and nearing completion. Both apartment complexes are located north of Hinebaugh Creek, south of Business Park Drive, west of Costco and east of Labath Avenue.

Project Characteristics

As previously mentioned, the proposed project would include amendments to the SAMP to include changes associated with the Residences at Five Creek development and the City Public Safety / Public Works development. The proposed project would also include a General Plan Amendment to designate additional High Density Residential land in the SAMP area (currently designated Commercial - Regional) to allow for the additional residential development. The Residences at Five Creek development would include multifamily residential units, commercial land uses, a hotel, and a neighborhood park. The Public Safety facility, which would be constructed on the southern site, includes

plans for a future City of Rohnert Park Public Safety facility, as anticipated in the SAMP, and relocation of the City's Public Works offices and corporation yard. Additional details related to these developments are provided in the subsequent paragraphs.

Residences at Five Creek: The Residences at Five Creek project applicant, MW Investments LLC, is proposing a mixed use development consisting of a 132-room hotel, 34,300 square feet (sf) of retail and commercial uses, approximately 135 multi-family residential units, and a 0.65-acre public park on the roughly 12.50-acre parcel. **Figure 3 Residences at Five Creek Conceptual Site Plan** shows the proposed layout for land uses within the project site. As shown on the site plan, the hotel would be located in the southwestern corner of the parcel, adjacent to Labath Avenue and the extension of Martin Avenue extension. The retail and commercial uses would be located adjacent to Dowdell Avenue and Martin Avenue. The multi-family residential apartment complex would be in the northern half of the parcel, adjacent to Carlson Avenue and extending from Labath Avenue to Dowdell Avenue. The park would be located parallel to Carlson Avenue in the northeastern corner of the parcel. The following provides a summary of each of the proposed land uses for the Residences at Five Creek project:

Hotel: A 132-room hotel would be constructed on approximately 2.5 acres of the parcel. The building footprint is approximately 30,000 sf and the total building area would be approximately 75,721 sf. The hotel is proposed to be 4 stories in height. The maximum height limit in the Regional Commercial zone is 65 feet. 139 parking spaces would be provided to satisfy the City's parking requirement of 102 spaces total.

Commercial: The commercial retail area would be developed on approximately 3.4 acres of the parcel. The total proposed building area is a one-story in height and 34,300 sf. 125 parking spaces would be provided to satisfy the City's parking requirement of 106 spaces.

High Density Residential: The 135-unit multi-family development would be located on approximately 6.1 acres of the parcel, for a density of 22.2 dwelling units per acre. 55 of the units would be one-bedroom, 74 would be two-bedrooms, and 6 would be three-bedrooms. Buildings are proposed to be three-stories. The maximum height limit in the Residential – High Density zone is 45 feet. A 4,000 sf community building is proposed to be centrally located within the complex. 252 parking spaces are proposed to satisfy the City's parking requirement of 251.8 spaces total.

SOURCE: ktgy Architecture + Planning (2016)

FIGURE 3
Residences at Five Creek Site Plan

DUDEK

The Residences at Five Creek & City Public Safety Project

City of Rohnert Park

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Park: The 0.65-acre park would be located in the northeast corner of the project site, adjacent to Carlson Avenue and a portion of the proposed multifamily residential units. Amenities proposed for the park include two bocce ball courts and a pavilion barbeque area.

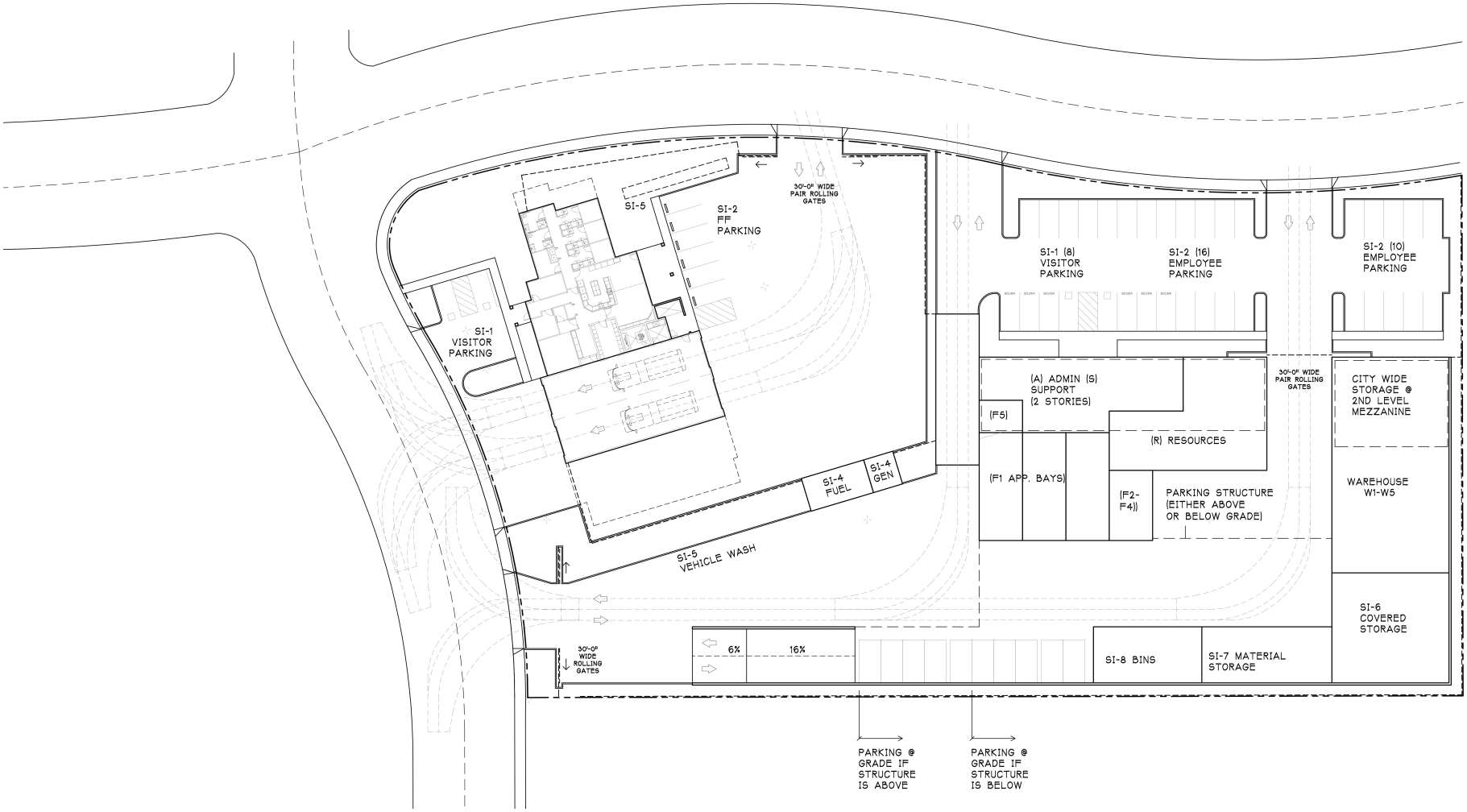
Access to the project site would be provided from Dowdell Avenue, Carlson Avenue, Labath Avenue and a proposed extension of Martin Avenue that would span from Dowdell Avenue to Labath Avenue. The project includes the completion of frontage improvements on Carlson Avenue. The Project would not reconfigure any existing roadways. Parallel parking would be provided on both sides of the Martin Avenue extension. On-street parking would also be available on Labath Avenue and Carlson Avenue.

The Residences at Five Creek site would be constructed in two phases, with the hotel, residential apartments, and park developing first, followed by the commercial portion. Construction for the first phase of the project would be expected to take 12 months, and the second phase of construction would be completed approximately 6 months thereafter, although construction phasing could be extended. Heavy construction equipment would be required to form the drive aisles, parking lots, and building pads proposed throughout the site. The project would require the over excavation and recompaction of the first two feet of soil over the site, requiring approximately 40,800 cubic yards of earthwork. Earthwork would be balanced on-site. Staging for construction equipment will occur on the project site.

City Public Safety/ Public Works Facilities: The City is proposing to construct a new Public Safety facility (fire station) and Public Works offices and corporation yard on the approximately 3.0-acre site located immediately south of Martin Avenue and the site of the proposed Residences at Five Creek development. The undeveloped site is zoned for public facilities in the SAMP. **Figure 4 City Public Safety / Public Works Facilities Conceptual Site Plan** shows the preliminary proposed site layout.

Public Safety Facility: This facility would include an approximately 7,500 sf building comprised of approximately 3,000 sf for fire truck bays and approximately 3,500 for a "residential" living area for staff. The facility would also include approximately 3,000 sf of training area. The training area would consist of stairs and other props for firefighter training drills.

The station would include three full fire truck bays designed to hold at least one aerial apparatus and two pumper trucks along with other vehicles. A gasoline and diesel fueling station for fire trucks and other vehicles would be shared with the



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SOURCE: City of Rohnert Park Development Services (2016)

FIGURE 4

Public Safety/Public Works Facility Site Plan

Public Works corporation yard. The fire station would have up to four full- time firefighters occupying it at all times. The "residential" part of the fire station would function like a house on the inside and is where the staff would be stationed. There would be up to four bathrooms, four bedrooms, a full kitchen, a gym, a patio area, and a living room area.

The entire facility would have a backup generator onsite for power outages, as well as a data center with the city's backup servers.

Public Works Facilities: The proposed Public Works facilities would accommodate 60 employees and include the following uses (note: all building sizes/areas are approximate):

- Administration building (approximately 6,400 sf): The administrative building would contain the Public Works administrative offices.
- Warehouse (approximately 8,060 sf): The warehouse would store parts for public work's various repairs/ maintenance work. The warehouse would have roll up doors for commercial grade trucks to make deliveries on a regular basis. There would also be some vehicle storage in the warehouse while vehicles wait to be serviced by the maintenance shop.
- Maintenance shop/ wood shop/ metal shop (approximately 9,000 sf): The maintenance shop services all of the City vehicles, and would have a service pit for changing oil. Attached to it would be a wood and metal shop, where welding and woodcutting would take place.
- Hazardous materials storage area (approximately 2,500 sf): There would also a storage area designated to covered hazardous material storage, such as paint, pesticide, and cleaner
- Equipment shed/ storage (approximately 2,500 sf): A storage shed for lawn mowing equipment, tractors, etc. would also potentially be located onsite.
- There corporation yard would also include covered and open parking for up to 100 vehicles.

Water: The project would tie into the City water system to serve domestic and fire protection demands. Existing water mains are located in the streets adjacent to the project site. Labath Avenue contains an existing 8-inch water main, which currently has three 8-inch lines stubbed into the project. A 12-inch water main was installed in Dowdell Avenue with the construction of the Fiori Estates project to the north. The water main in Dowdell Avenue connects to an existing 12-inch main in Martin Avenue. The main in Martin Avenue ends just outside the project limits, at the existing edge of pavement at the

westerly end of Martin Avenue. A 12-inch water main was installed in Carlson Avenue with the construction of The Reserve at Dowdell project to the northeast. The water main in Carlson Avenue ties into the water main within Dowdell Avenue. As part of the project, the 12-inch water main in Carlson Avenue would be extended to the existing 8-inch water main in Labath Avenue, providing a looped water system around the project.

Recycled Water: The project would tie into the City recycled water system to serve irrigation demands. There are existing recycled water mains in the public streets adjacent to the project. Labath Avenue contains an existing 8-inch recycled water main, with a 4-inch lateral stubbed into the project. Also, a 2-inch service line currently serves irrigation needs for the existing parking lot in the northwest corner of the project. An 8-inch recycled water main was installed within Dowdell Avenue with the construction of the Fiori Estates project to the north.

New services would be required to serve irrigation demands for the hotel, retail, residential dwelling units, and the public park.

Wastewater: To serve wastewater demands, the project would tie into the existing City sanitary sewer system in the public streets adjacent to the site. Labath Avenue contains an existing 6-inch sanitary sewer directing effluent in a northerly direction. Carlson Avenue has an existing 6-inch sanitary sewer that connects into the system in Labath Avenue. An 8-inch sanitary sewer system was installed within Dowdell Avenue with the construction of the Fiori Estates project to the north. This system ties into an existing 8-inch system within Martin Avenue, which flows easterly to a trunk sewer within Redwood Drive.

Two, 6-inch sanitary sewer laterals were stubbed into the project property from the Dowdell system as part of the Fiori Estates project, which considered future flows from this project site as tributary to this system. There are also 6-inch sanitary sewer laterals stubbed into the project from Labath Avenue.

Stormwater: The project would require the construction of a new system to drain on-site runoff. This system would require a new 36” storm water outfall to Hinebaugh Creek, just west of the existing Labath Avenue Bridge. The line would run south of the project site then west across Labath Avenue just north of the Hinebaugh creek trail. New manholes would be constructed in Labath Avenue and another constructed in the Hinebaugh Creek trail approximately 20 feet west of Labath Avenue. The 36” storm water line would then extend underground from the creek trail manhole to a concrete collar. From the collar, the storm water line would slope underground at approximately a 0.5% grade to the outfall location, where it daylights into the creek. The invert of the outfall is approximately 12” above the creek bottom.

Construction of the storm water outfall area would consist of keying in riprap underneath and in front of the outfall location to dissipate high flows prior to entering the channel. Directly above the riprap and below the outfall pipe, a gravel sand substrate would be installed for low flow infiltration into the channel. Native backfill would be placed over the pipe once the outfall is constructed to return the channel to its original configuration. The small area of the creek slope that would be affected by the outfall and pipe construction would have an erosion mat placed on the topsoil. Seed for grasses would be established on top of the erosion mat, bringing the area disturbed during construction back to its original state.

The new storm drain system would be designed to accept runoff from 15.25 acres of the Residence at Five Creek site, the City Public Safety and Public Works site, and one additional adjacent parcel, for a total tributary area of 17.08 acres. The storm drain system would be designed to accommodate the 10-year storm event.

In addition to flood control, the City of Rohnert Park has adopted the City of Santa Rosa and County of Sonoma Storm Water Low Impact Design Technical Design Manual to address stormwater runoff quality and quantity from new development and redevelopment projects. To meet the design goal, the project would include gravel storage zones under vegetated areas within the site. CalGreen requirements would require a certain percentage of the Residence at Five Creek high density residential apartment complex to be paved with permeable materials, potentially allowing for additional runoff storage under the parking lot. The total volume of storage required for the project would be reduced based on the use of pollution prevention measures such as interceptor trees, impervious area disconnection, and vegetated buffers.

Sustainability Features: The project would include the following energy, water conservation, and solid waste diversion features to minimize greenhouse gas emissions and to promote more sustainable practices:

- The project would comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for electrical appliances and other devices at the time of building construction. The project would use high-efficiency LED lighting for outdoor areas.
- The project would comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for natural gas appliances and other devices at the time of building construction.
- The project would comply with CALGreen Tier 1 and result in reduced indoor and outdoor water use by 20%.

- The project would be required to be constructed in compliance with state or local green building standards in effect at the time of building construction.
- During both construction and operation of the project, the project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. During construction, all wastes would be recycled to the maximum extent possible.

Entitlements and required approvals:

The project would require the following approvals:

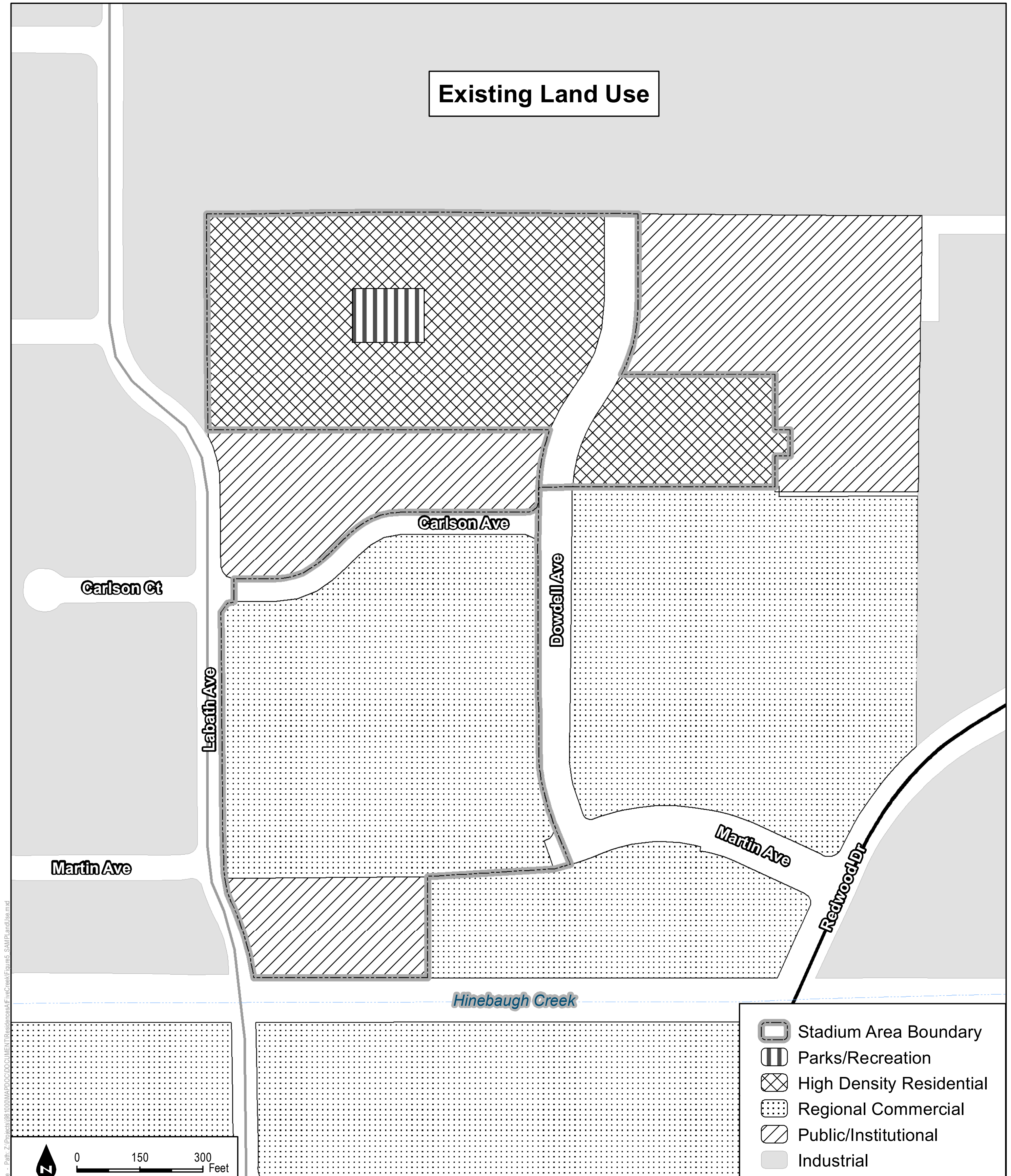
- General Plan Amendment;
- Amendment to Stadium Area Master Plan (Planned Development);
- Final Development Plan for the Residences at Five Creek;
- Development Agreement for the Residences at Five Creek;
- Tentative Map;
- Site Plan and Architectural Review;
- Conditional Use Permits;
- Section 404 Permit (U.S. Army Corps of Engineers) and Section 401 Water Quality Certification (Regional Water Quality Control Board; and
- Section 1602 Streambed Alteration Agreement (California Department of Fish and Wildlife)

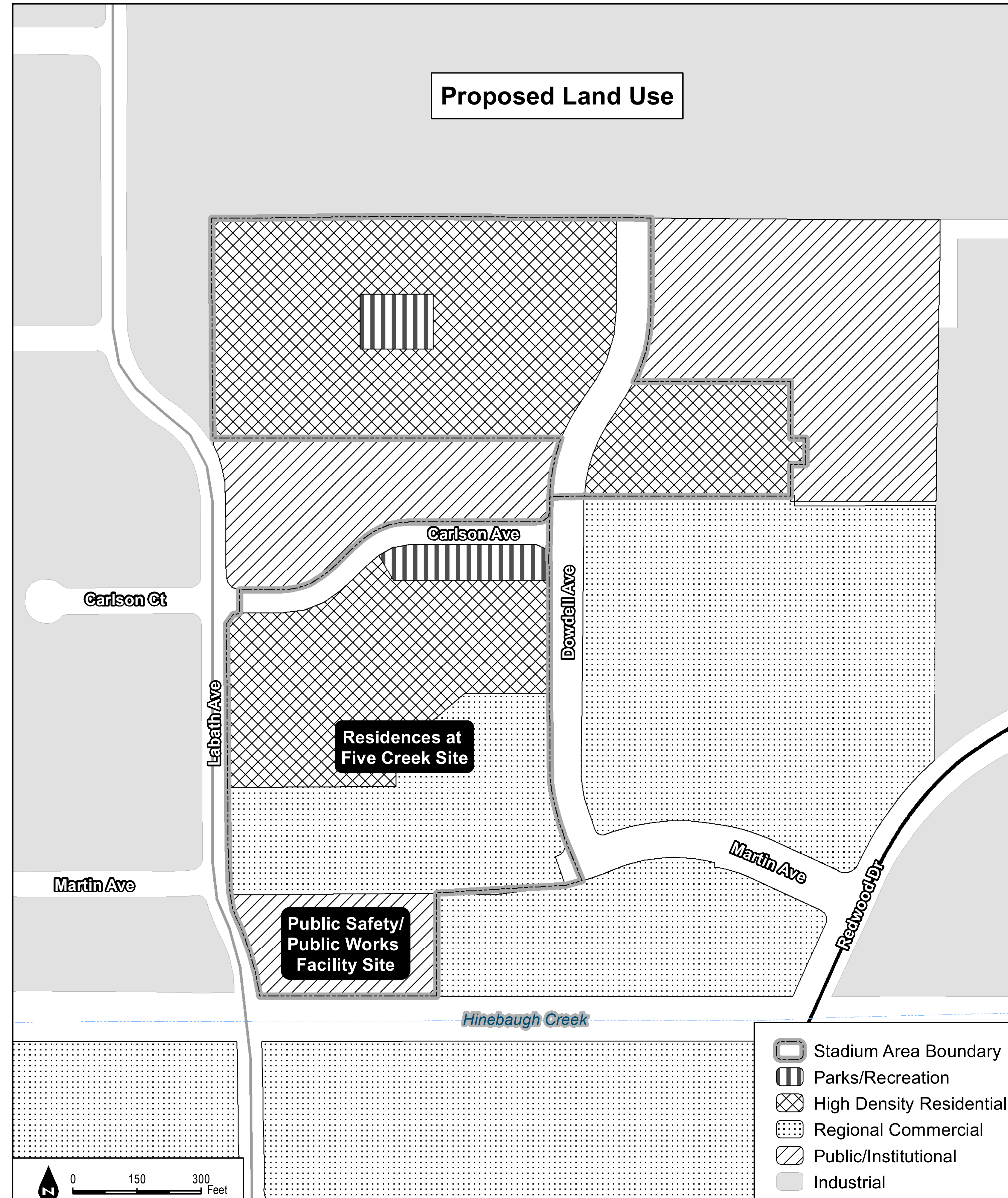
General Plan Amendment

The project proposes to amend the City of Rohnert Park General Plan Diagram (General Plan Figure 2.2-1) to change the land use designation of the Residences at Five Creek parcel from Regional Commercial to Regional Commercial, High Density Residential, and Parks/Recreation.

SAMP Final Development Plan Amendment

Currently, the SAMP land use designation for the 12.70-acre Residences at Five Creek site is Regional Commercial. While this designation would allow for the hotel and commercial development, it would not allow for the proposed multifamily residential units or the park. To allow for the project as proposed, the SAMP would be amended to include High Density Residential and Parks/Recreation designations within the Residences at Five Creek site. As shown in **Figure 5 SAMP Land Use Map**, the project proposes to retain the Regional Commercial designation on 5.9 acres in the southern portion of the site. The project would add the High Density Residential land use designation to approximately 6.03 acres in the northern portion of the site and add the





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SOURCE: City of Rohnert Park (2011)

FIGURE 5

SAMP Land Use

The Residences at five Creek & City Public Safety Project

City of Rohnert Park

Parks/Recreation designation to the approximately 0.65 acres located in the northeastern corner of the site.

In addition to the proposed SAMP land use map amendments, the project would also require an amendment to the text of the SAMP to allow for an increased number of residential units within the Plan area. Currently, the SAMP permits a maximum of 338 housing units. Combined, the existing Fiori Estates and Reserve apartment complexes (both also within the SAMP) account for 328 of those 338 allowable units. The addition of the proposed 135 multifamily units would result in 125 units over what is currently allowed in the SAMP. Accordingly, the SAMP would be amended to allow for up to a total of 463 residential units.

Additional minor text amendments to the SAMP document would also be required for internal consistency and to update outdated information.

Residences at Five Creek Final Development Plan

In accordance with the City of Rohnert Park Zoning Code 17.06. Article VII, the purpose of a "PD" Planned Development Zoning District is to set forth the standards for the development of a Final Development Plan. The Residences at Five Creek Final Development Plan would provide the specific development standards for the 12.70 acre site. The proposed Development Plan is included as Appendix A.

Residences at Five Creek Development Agreement

The City and project proponent have prepared a Development Agreement, which memorializes the manner in which the Project will be developed, constructed, completed and used, as more fully set forth in this Initial Study as well as other project approvals. The Development Agreement includes, among other things, requirements to ensure that the developer begins constructing the hotel concurrently with residential development and that the hotel receives a certificate of occupancy prior to the issuance of a certificate of occupancy for any residential development. The Development Agreement also requires the developer to implement a public services payment of $800 per residential unit, adjusted by the Consumer Price Index, for the purpose of mitigating the costs of the residential development on the City and pay a one-time affordable housing payment of $50,000. The DA obligates the developer to deliver an improved 0.65 acre park to the City. In addition, the agreement includes the requirement for the developer to purchase Greenhouse Gas Emission Offset Credits to mitigate the impacts of the project on greenhouse gases.

Tentative Map

The project includes a tentative map that would subdivide the proposed project parcel into five parcels. Parcel 1 (park) would be 0.65 acres, Parcel 2 (residential) would be 6.0 acres (+/-), Parcel 3 (hotel) would be 2.5(+/-0 acres, Parcel 4 (retail) would be 3.4 acres (+/-), and Parcel 5 (City facilities) would be 3.0 acres (+/-).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

☒ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology and Soils
☒ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☒ Public Services	☐ Recreation
☒ Transportation and Traffic	☐ Utilities and Service Systems	☐ 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 impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

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

Signature Date

ENVIRONMENTAL BASELINE:

The 15.3 acres that comprise the Residences at Five Creek and City Public Safety/Public Works Facilities site is vacant and undeveloped land, with the exception of a small, paved parking lot and planter strip located along a portion of the western site boundary (adjacent to Labath Avenue). The site is disturbed as previously it was location of a stadium and associated facilities. All of the previous stadium features have been removed from the project site. The focus of this environmental review is the evaluation between the current conditions of the project area which are undeveloped and unused, and the increased density arising from the project as proposed as described in the Project Characteristics above.

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

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

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

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

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

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

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

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

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

The explanation of each issue should identify:

d. The significance criteria or threshold, if any, used to evaluate each question; and

e. The mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. 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 the site and its surroundings?	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

2.1 Aesthetics

a) Would the project have a substantial adverse effect on a scenic vista?

For purposes of this analysis, a scenic vista is defined as an expansive view of highly valued landscape feature (e.g. a mountain range, lake or coastline) observable from a publicly accessible vantage point. In the project vicinity, publically accessible vantage points are limited to public roads. The project site is located in an urban area that contains a mixture of existing regional commercial, public/institutional, and industrial uses. The project site is comprised of vacant, graded land which is void of scenic resources and unique natural features. The site is not designated, nor is it adjacent to, a designated scenic vista or a state scenic highway (City of Rohnert Park, 2015). As noted in the SAMP EIR, the Sonoma County General Plan identifies U.S. 101 and Petaluma Hill Road as designated scenic corridors (City of Rohnert Park, 2007). However, the SAMP area, which includes the project site, is not visible from either of those corridors. Accordingly, development of the project would result in **no impacts** to scenic vistas nor result in damage to scenic resources.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Refer to answer provided in 'a' above.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

For the purposes of this analysis, a substantial degradation of the existing visual character or quality would occur if the project would introduce a new visible element that would be inconsistent with the overall quality, scale, and character of the surrounding development**.** As stated above, the site is located within the SAMP, a developed, urban area that contains a mixture of existing regional commercial, residential, public/institutional, and industrial park uses. The proposed development site is comprised of vacant, graded land. On the Residences at Five Creek parcel, the project would amend the land use from Regional Commercial to a combination of Regional Commercial, High Density Residential, and Parks/Recreation land uses. The SAMP currently allows for development of each of those types of land uses within the 32.8-acre Plan area. The proposed location for the City Public Safety and Public Works development is currently designated Public/Institutional in the SAMP. Thus, the proposed use of the site would be consistent with the planned use for the site in the SAMP.

The project site is presently undeveloped with sparse vegetation. Surrounding parcels within the SAMP support residential, industrial, commercial, and public facility land uses. The visual and urban design character of the project site will be influenced by both the developed uses in the area that include business park, office and commercial uses in addition to adjacent multi-family residential complexes. The existing conditions of the site do not provide substantial scenic value because the site is an undeveloped, generally flat parcel with little vegetation, trees or greenery surrounded by regional commercial, public/institutional, and light industrial buildings and development. The project would replace the undeveloped site with new buildings, enhanced landscaping and amenities that would complement the existing development in the direct vicinity of the project site. The proposed site plan would provide increased unity with its surroundings by adding buildings that comply with City standards and reflect a similar architectural design. Therefore, while development of the project site with high density residential, commercial, a park, and public facilities would change the visual character of the site, such changes will not result in significant impacts to visual character.

The project site is also located adjacent to the Hinebaugh Creek corridor, which supports riparian vegetation and trees. The project would not include alterations within the adjacent creek area, but it would construct a new offsite storm drain outfall at Hinebaugh Creek, west of the existing Labath Avenue Bridge. As discussed in the Project Description and in Section 2.4 Biological Resources, upon completion of construction of

the storm water outfall area, native backfill would be placed over the pipe to return the channel to its original configuration. The small area of the creek slope that would be affected by the outfall and pipe construction would have an erosion mat placed on the topsoil. Seed for grasses would be established on top of the erosion mat, bringing the area disturbed during construction back to its original state. Construction of the new storm drain outfall would not be expected to result in significant changes to the visual character within the creek corridor.

In addition, because the project site is within the SAMP area, mitigation measures included in the SAMP EIR designed to reduce impacts to visual character, would be required to be implemented. Specifically, *Mitigation Measures AES-1* and *AES-2* (included as Mitigation Measures 4-1a and 4-1b in the SAMP EIR), which require design review pursuant to the City's guidelines, would ensure that the project's impacts to the visual character of the area remain **less than significant**.

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

Exterior lighting will be added to the proposed buildings on a parcel of land upon which there is currently no lighting. The project would increase nighttime lighting from vehicles, the interior streets, parking and buildings. However, due to the urbanized nature of the surrounding area, a significant amount of ambient nighttime lighting currently exists, which affects nighttime views in the area. Despite that the project would introduce new sources of light in the area, all future development on the project site must comply with the City of Rohnert Park's lighting and glare standards (Municipal Code Section 17.12.050). The development agreement requires compliance with this section of the Municipal Code. Accordingly, impacts associated with lighting and glare would be **less than significant**.

Mitigation Measures

Mitigation Measure AES-1 (SAMP EIR Mitigation Measure 4-1a from the SAMP EIR) requires that the project design conform to standards included in the City's General Plan Urban Design Element, the Community Design Program, and the City's Subdivision Design Guidelines. Mitigation Measure AES-2 (SAMP EIR Mitigation Measure 4-1b) would ensure that during site plan and architectural review, attention would be given to the interface between different land use types within the SAMP and building transitions are complimentary to adjacent uses. Implementation of these measures will ensure that the project's design would not change or be inconsistent with the visual character within the SAMP area.

Mitigation Measure AES-1 (SAMP EIR Mitigation Measure 4-1a): The planning and design of projects constructed within the Stadium Area Master Plan shall conform to the Community Design Element of the Rohnert Park General Plan. Conformance review would occur prior to construction within the Project area utilizing the General Plan Urban Design Element, the Community Design Program, and the City's Subdivision Design Guidelines.

Mitigation Measure AES-2 (SAMP EIR Mitigation Measure 4-1b): During the site plan and architectural review of proposed projects pursuant to Mitigation Measure AES-1 (SAMP Mitigation Measure 4-1a), attention will be given to the interface between the industrial, institutional, commercial, and residential uses. The building and spaces shall be arranged to provide transition between uses that are complimentary to adjacent uses. The building materials, colors, linkage to sidewalks, parking placement, landscape design, and plant materials will be selected to provide a transition between uses to compliment the new and existing uses.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

2.2 Agriculture and Forestry Resources

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

The proposed project site is located in an urban area and surrounding parcels within the SAMP support residential, industrial, commercial, and public facility land uses. The project site has previously been disturbed and does not contain land that is designated as prime agricultural soils by the Natural Resources Conservation Service. The site has not been identified as prime farmland, unique farmland or farmland of statewide importance by the California Department of Conservation. The site is not subject to a Williamson Act contract site pursuant to Sections 51200–51207 of the California Government Code (DOC, 2013).

In the SAMP, the Residences at Five Creek parcel is designated Regional Commercial and City Public Safety and Public Works site is designated Public/Institutional. Both parcels are zoned Planned Development ("PD"). The site is not planned for or used for any agricultural or forestry purposes and the proposed project would not result in the conversion of any agricultural or forest land, conflict with any agricultural use, or conflict with a Williamson Act contract.

In addition, the plan area is designated as developed land and not designated as farmland under the Farmland Mapping and Monitoring Program of the California Department of Conservation or the City of Rohnert Park General Plan (General Plan) (City of Rohnert Park, 2015 [originally adopted 2000]). No portion of the plan area could be considered forest land as defined in PRC Section 12220(g). Timberland (as defined by PRC Section 4526) or timberland-zoned timberland production (as defined by Section 51104[g] of the Government Code) is not present on-site, nor are any active or potential commercial timber operations present in the area. Therefore, **no impact** associated with agriculture and forestry resources would result from implementation of the proposed plan.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Refer to answer provided in 'a' above.

c) Would the project 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))?

Refer to answer provided in 'a' above.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Refer to answer provided in 'a' above.

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

Refer to answer provided in 'a' above.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

2.3 Air Quality

Introduction

The Bay Area Air Quality Management District (BAAQMD) adopted updated CEQA Air Quality Guidelines, including new thresholds of significance in June 2010, and revised them in May 2011. The CEQA Air Quality Guidelines advise lead agencies on how to evaluate potential air quality impacts, including establishing quantitative and qualitative thresholds of significance. The BAAQMD resolutions adopting and revising the significance thresholds in 2011 were set aside by a judicial writ of mandate on March 5, 2012. In May of 2012, BAAQMD updated its CEQA Air Quality Guidelines to continue to provide direction on recommended analysis methodologies, but without recommended quantitative significance thresholds (BAAQMD 2012). On August 13, 2013, the First District Court of Appeal ordered the trial court to reverse the judgment and upheld the BAAQMD's CEQA thresholds. BAAQMD has not formally re-instated the thresholds or otherwise responded to this Appellate Court reversal at this time.

The air quality impact analysis below uses the previously-adopted 2011 thresholds of the BAAQMD to determine the potential impacts of the project. While the significance thresholds adopted by BAAQMD in 2011 are not currently recommended by the BAAQMD, these thresholds are based on substantial evidence identified in BAAQMD's 2009 Justification Report and are therefore used within this document. Project emissions have been compared to the BAAQMD 2011 significance criteria, which include the following:

- Result in total construction emissions of reactive organic gases (ROG), nitrogen oxides (NO_x), or fine particulate matter ($PM_{2.5}$) (exhaust) of 10 tons per year or greater or 54 pounds per day or greater.
- Exceed a construction emission threshold for coarse particulate matter (PM_{10}) (exhaust) of 15 tons per year or greater, or 82 pounds per day or greater.
- For PM_{10} and $PM_{2.5}$ as part of fugitive dust generated during construction, the BAAQMD Guidelines specify compliance with Best Management Practices as the threshold.
- Result in total operational emissions of ROG, NO_x, or $PM_{2.5}$ of 10 tons per year or greater, or 54 pounds per day or greater.
- Exceed an operational emission threshold for PM_{10} of 15 tons per year or greater, or 82 pounds per day or greater.

- Result in carbon monoxide (CO) concentrations of 9.0 parts per million (ppm) (8-hour average) and 20.0 ppm (1-hour average) as estimated by roadway vehicle volumes exceeding 44,000 vehicles per hour at any intersection.

- For risks and hazards during construction and operations, the BAAQMD Guidelines specify an increase in cancer risk exposure by 10 in one million, contribute hazard indices by a ratio of 1.0, or increase local concentrations of $PM_{2.5}$ by 0.3 micrograms per cubic meter ($\mu g/m^3$).

A project's contribution to regional cumulative impacts for criteria pollutants are considered significant if the project's impact individually would be significant (i.e., if it exceeds the BAAQMD's quantitative thresholds).

With regard to localized cumulative impacts from $PM_{2.5}$, a significant cumulative air quality impact would occur if localized annual average concentrations of $PM_{2.5}$ would exceed 0.8 $\mu g/m^3$ at any receptor from project operations in addition to cumulative emissions sources within a 1,000-foot radius of the property line of the source or receptor. Sensitive receptors are groups of individuals, including children, the elderly, the acutely ill, and the chronically ill, that may be more susceptible to health risks due to chemical exposure. Sensitive-receptor population groups are likely to be located at hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes.

With regard to cumulative impacts from toxic air contaminants (TACs), a significant cumulative air quality impact would be considered to occur if the probability of contracting cancer for the maximally exposed individual (MEI) would exceed 100 in one million as a result of project operations plus cumulative emissions sources within a 1,000-foot radius of the project site. A significant cumulative TAC impact would also be considered to occur if a non-cancer chronic Hazard Index (HI) of 10.0 would be exceeded at any receptor as a result of project operations plus cumulative emissions sources within a 1,000-foot radius of the project site. Notably, a project's construction or operational impacts would be considered to result in a considerable contribution to an identified cumulative health risk impact if the project's construction or operation activities would exceed the project-level health risk significance thresholds identified above.

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

An area is designated as "in attainment" when it is in compliance with the federal and/or state standards. These standards are set by the U.S. Environmental Protection Agency (EPA) or California Air Resources Board (CARB) for the maximum level of a given air

pollutant that can exist in the outdoor air without unacceptable effects on human health or public welfare with a margin of safety. The project site is located within the San Francisco Bay Area Air Basin, which is designated non-attainment for the federal 8-hour ozone (O_3) and 24-hour $PM_{2.5}$ standards. The area is in attainment or unclassified for all other federal standards. The area is designated non-attainment for state standards for 1-hour and 8-hour O_3, 24-hour PM_{10}, annual PM_{10}, and annual $PM_{2.5}$ (CARB 2016; EPA 2016).

The BAAQMD adopted the Bay Area 2010 Clean Air Plan (BAAQMD 2010), in cooperation with the Metropolitan Commission and the Association of Bay Area Governments, which sets forth a plan to reach compliance with the state's 1-hour air quality O_3 standard. The 2010 Clean Air Plan is an update to the BAAQMD 2005 Ozone Strategy to comply with State air quality planning requirements. The 2010 Clean Air Plan is a comprehensive strategy to reduce air pollution from stationary and mobile sources. The plan outlines strategies to reduce O_3 precursors as well as particulate matter (PM), TACs, and greenhouse gas (GHG) emissions to meet their goal of reducing air pollution to attain air quality standards and protect public health. Currently, the BAAQMD, the Metropolitan Commission, and Association of Bay Area Governments are working on the 2016 Clean Air Plan/Regional Climate Protection Strategy, which is an update to the current 2010 Clean Air Plan.

The BAAQMD Guidelines identify a three-step methodology for determining a project's consistency with the current Clean Air Plan. If the responses to these three questions can be concluded in the affirmative and those conclusions are supported by substantial evidence, then the BAAQMD considers the project to be consistent with air quality plans prepared for the Bay Area.

The first question to be assessed in this methodology is "does the project support the goals of the Air Quality Plan" (currently the 2010 Clean Air Plan)? The BAAQMD-recommended measure for determining project support for these goals is consistency with BAAQMD thresholds of significance. If a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2010 Clean Air Plan. Under BAAQMD methodology, for consistency with the 2010 Clean Air Plan, a project must demonstrate that the population or VMT assumptions contained in the Clean Air Plan would not be exceeding and that the project implements transportation control measures (TCMs) as applicable. As indicated in the following discussion with regard to air quality impact criterion "b", the project would result in less than significant construction emissions with implementation of *Mitigation Measure AIR-1*, and would not result in long-term adverse air quality impacts. Therefore, the project would be considered to

support the primary goals of the 2010 Clean Air Plan and, therefore, consistent with the current Clean Air Plan.

The second question to be assessed in this consistency methodology is "does the project include applicable control measures from the Clean Air Plan?" The 2010 Clean Air Plan contains 55 control measures aimed at reducing air pollution in the Bay Area. Projects that incorporate all feasible air quality plan control measures are considered consistent with the Clean Air Plan. The project includes amendments to the General Plan and SAMP. The SAMP area includes 328 multifamily residential units in addition to the proposed plans for an additional 135 multifamily residential units, 34,400 sf of commercial space, a 132-room hotel, a 0.65-acre park, and a future City of Rohnert Park Public Safety and Public Works facilities. The control strategies of the 2010 Clean Air Plan include measures in the traditional categories of stationary source measures, mobile source measures, and transportation control measures. The 2010 Clean Air Plan identifies two new subcategories of control measures, including land use and local impact measures and energy and climate measures. Stationary source measures are not specifically applicable to the proposed project and therefore are not evaluated as part of this analysis.

a) Transportation and Mobile Source Control Measures: The transportation control measures are designed to reduce emissions from motor vehicles by reducing vehicle trips and vehicle miles traveled in addition to vehicle idling and traffic congestion. Measures proposed to be included in the project include providing residents and employees transit availability information, including carpool and/or car sharing parking space, electric vehicle parking and provision of bicycle parking. The proposed project would not conflict with the identified transportation and mobile source control measures of the 2010 Clean Air Plan.

b) Land Use and Local Impact Measures: The 2010 Clean Air Plan includes Land Use and Local Impacts Measures (LUMs) to achieve the following: promote mixed-use, compact development to reduce motor vehicle travel and emissions; and ensure that planned growth is focused in a way that protects people from exposure to air pollution from stationary and mobile sources of emissions. The LUMs identified by the BAAQMD are not specifically applicable to the proposed project as they relate to actions the BAAQMD will take to reduce impacts from goods movement and health risks in affected communities. Therefore, the project would not conflict with any of the LUMs of the 2010 Clean Air Plan.

c) Energy Measures: The 2010 Clean Air Plan also includes Energy and Climate Control Measures (ECM), which are designed to reduce ambient concentrations of criteria pollutants and reduce emissions of CO_2. Implementation of these measures is intended to promote energy conservation and efficiency in buildings throughout the community, promote renewable forms of energy production, reduce the "urban heat island" effect by increasing reflectivity of roofs and parking lots, and promote the planting of (low-VOC-emitting) trees to reduce biogenic emissions, lower air temperatures, provide shade, and absorb air pollutants. The proposed project would incorporate energy efficiency and green building measures (CAL Green Tier 1 standards) in compliance with state and/or local standards and would not conflict with any of the ECM measures.

The third question to be assessed in this consistency methodology is "does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?" Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path, or proposes excessive parking beyond parking requirements. The proposed project would not create any barriers or impediments to planned or future improvements to transit or bicycle facilities is the area and therefore, would not hinder implementation of Clean Air Plan control measures.

In summary, the responses to all three of the questions with regard to Clean Air Plan indicate project consistency and the proposed project, in accordance with the conclusions of the SAMP EIR, would not conflict with or obstruct implementation of the 2010 Clean Air Plan. This is a **less than significant** impact.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The California Emissions Estimator Model (CalEEMod) Version 2013.2.2 was used to estimate emissions from construction of the project, as well as operational emissions of the project plus the residential development included in the SAMP currently under construction to the north of the proposed project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with the construction and operational activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters were based on information provided by the project applicant and/or default model assumptions.

Construction. Construction emissions were estimated for the Residences at Five Creek mixed-use project (i.e., 135 multifamily residential units, 34,400 sf of commercial space, a 132-room hotel, a 0.65-acre park) and the City Public Safety and Public Works facilities. Standard construction methods would be employed for building construction. Sources of emissions would include: off-road construction equipment exhaust, on-road vehicles exhaust and entrained road dust (i.e., haul trucks, material delivery trucks, and worker vehicles), fugitive dust associated with site preparation and grading activities, and paving and architectural coating activities. Construction of the mixed-use portion of the project is anticipated to occur over approximately 29 months, from April 2017 through September 2019. Construction of the City of Rohnert Park Public Safety and Public Works development would overlap from April 2018 through April 2019. Construction would involve demolition of an existing parking lot, clearing and grubbing, and total grading of approximately 15-acres of the mixed-use and City sites. The proposed earthwork would balance on site and would not require import or export of soil. Detailed assumptions associated with project construction are included in Appendix B.

Average daily emissions were computed by dividing the total construction emissions by the number of active construction days, which were then compared to the BAAQMD construction thresholds of significance. Table 2.3-1 shows average daily construction emissions of O_3 precursors (ROG and NO_x), PM_{10} exhaust, and $PM_{2.5}$ exhaust during project construction associated with construction of the mixed-use and City facility developments.

Table 2.3-1
Average Daily Construction Emissions

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
	pounds per day			
2017-2019 Construction	12.7	42.7	2.3	2.2
BAAQMD Construction Thresholds	*54*	*54*	*82*	*54*
Exceed Threshold?	No	No	No	No

Source: Appendix B
Note: Total overall construction emissions were estimated with CalEEMod for the mixed-use site and City site, summed together, and divided by 631 active work days to estimate the average daily emissions included in this table.
ROG = reactive organic gases; NOx = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 2.3-1, construction of the proposed project would not exceed BAAQMD significance thresholds. Criteria air pollutant emissions during construction would be less than significant. In addition, by including the proposed project site in the SAMP, development of the project site and adjacent parcel would be required to implement *Mitigation Measure AIR-1* (SAMP EIR Mitigation Measure 5-2a). This would

ensure that the proposed project would meet the BAAQMD requirements for implementation of Basic Construction Emission Control Measures and construction emissions would be reduced to a **less than significant** level.

Operations. Operation of the project would generate criteria pollutant (including ROG, NO_x, PM_{10}, and $PM_{2.5}$) emissions from mobile sources (vehicular traffic), area sources (consumer products, architectural coatings, landscaping equipment), and energy sources (natural gas appliances, space and water heating). To evaluate the amendments to the SAMP, the proposed Residences at Five Creek and the Public Safety/Public Works Facilities project along with the existing multifamily residential development currently under construction to the north were included in the operational emission estimation. The following land use development was assumed in the operational emissions modeling: 463 multi-family residential units (135 units associated with the Residences at Five Creek site), 132-room hotel, 0.65 acres of park, 34,300 sf of commercial space, fire station, corporation yard, 507 parking lot spaces totaling 4.56 acres and 1.7 acres of additional parking and paved surface areas.[1]

CalEEMod was used to estimate daily emissions from the operational sources. The CalEEMod default trip rates for the land uses to be developed were adjusted to match the Traffic Impact Study for the project (W-Trans 2016). Table 2.3-2 summarizes the daily mobile, energy, and area emissions of criteria pollutants that would be generated by development of the land uses and compares the emissions to BAAQMD operational thresholds.

Table 2.3-2
Daily Operational Emissions

Source	ROG	NO_x	PM_{10}	$PM_{2.5}$
	pounds per day			
Area	23.8	0.4	0.7	0.7
Energy	0.2	1.9	0.2	0.2
Mobile	21.9	42.2	29.9	8.3
Total	45.9	44.6	30.7	9.2
BAAQMD Operational Thresholds	*54*	*54*	*82*	*54*
Exceed Threshold?	No	No	No	No

Source: Appendix B
Note: The values shown are the maximum summer or winter daily emissions results from CalEEMod.

[1] CalEEMod does not include land use categories that are specific to each of the proposed land uses, including public facilities and fire stations. As such, surrogate land uses were identified in CalEEMod to represent each of the land uses for the purposes of emissions modeling. Appendix B provides a breakdown of the land use assumptions.

ROG = reactive organic gases; NOx = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As indicated in Table 2.3-2, operational emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ from the project plus the residential uses to the north would not exceed the BAAQMD significance thresholds during operations, and thus, the would have a **less than significant** impact in relation to regional operational emissions.

In regards to localized CO concentrations, according to the BAAQMD 2011 thresholds, a project would result in a less than significant impact if the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.

2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.

3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The amendment to the SAMP necessary for the proposed project would generate minimal new traffic trips and would comply with the BAAQMD screening criteria. Accordingly, project-related traffic would not exceed CO standards and therefore, no further analysis was conducted for CO impacts. This CO emissions impact would be considered **less than significant** on a project-level and cumulative basis.

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Past, present, and future development projects may contribute to the region's adverse air quality impacts on a cumulative basis. Per BAAQMD's CEQA Guidelines, by its nature air pollution is largely a cumulative impact; no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds

the identified significance thresholds, its emissions would be considered cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, if the proposed project's emissions are below the BAAQMD thresholds or screening criteria, then the proposed project's cumulative impact can be considered to be less than significant.

As described in criterion "b" above, criteria pollutant emissions generated by short-term construction and long-term operations of the project would not exceed the BAAQMD significance thresholds. Thus, the project would have a less than significant cumulative impact in relation to regional emissions. In addition, project-related traffic would not exceed the BAAQMD CO screening criteria and would result in a **less than significant** cumulative impact in relation to localized CO.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

The BAAQMD has adopted project and cumulative thresholds for three risk-related air quality indicators for sensitive receptors: cancer risks, noncancer health effects, and increases in ambient air concentrations of $PM_{2.5}$. These impacts are addressed on a localized rather than regional basis and are specific to the sensitive receptors identified for the project. As explained in the introduction, sensitive receptors are groups of individuals, including children, the elderly, the acutely ill, and the chronically ill, that may be more susceptible to health risks due to chemical exposure and sensitive-receptor population groups are likely to be located at hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes.

Construction Impact. Project construction activities would produce diesel particulate matter (DPM) and $PM_{2.5}$ emissions due to equipment such as loaders, backhoes, and haul truck trips. These emissions could result in elevated concentrations of DPM and $PM_{2.5}$ at nearby receptors, which could lead to an increase in the risk of cancer or other health impacts. Consequently, a health risk assessment was performed to determine the extent of increased cancer risks and hazard indices at the maximally exposed receptors. The dispersion of DPM was modeled using the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) dispersion model and the resultant health risk modeled using the CARB Hot Spots Analysis and Reporting Program Version 2 (HARP2), along with meteorological data provided by the BAAQMD for the project area. The risk to nearby sensitive receptors assumes exposure would occur 8 hours per day, five days per week, to account for the active construction duration. HARP2 performs the health impact calculations based on the Office of Environmental Health Hazards Assessment's (OEHHA's) 2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015),

which include updated age sensitivity factors and daily breathing rates recommended by OEHHA. The approach recommended in the 2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments provides updated calculation procedures that factor in the increased susceptibility of infants and children to carcinogens as compared to adults.

The maximally exposed receptor would be the nearest residence currently under construction approximately 180-feet to the northeast of the project, located across Dowdell Avenue. Potential health risk at the MEI resulting from construction activities are shown in Table 2.3-3 below.

Table 2.3-3
Construction-Related Health Risk

Residential MEI	Cancer Risk (persons per million)	Chronic Impact	$PM_{2.5}$ Concentration ($\mu g/m^3$)
Unmitigated Project Construction	25.6	0.01	0.07
BAAQMD Significance Criteria	10	1	0.3
Exceed Threshold?	Yes	No	No
Mitigated Project Construction[a]	5.6	0.003	0.02
BAAQMD Significance Criteria	10	1	0.3
Exceed Threshold?	No	No	No

Source: Appendix B
Note: DPM exposure at receptors modeled with AERMOD, which were then input into HARP2 to generate health risk estimates.
MEI = Maximally Exposed Individual
[a] Mitigation includes incorporation of Level 3 Verified Diesel Emissions Control (VDEC) in equipment with engines greater than 50 horsepower.

As shown in Table 2.3-3, the incremental cancer risk at the MEI of 26 in one million (assuming exposure starts in 3rd trimester) from project construction would exceed the BAAQMD threshold of 10 in a million without mitigation. With incorporation of mitigation, the project would result in incremental cancer risk of 6 in one million. The unmitigated and mitigated chronic HI would be 0.01 and 0.003 at the MEI, respectively, which would be below the BAAQMD threshold of 1. Finally, the maximum annual $PM_{2.5}$ unmitigated and mitigated concentrations would be 0.07 $\mu g/m^3$ and 0.02 $\mu g/m^3$ for the MEI, respectively, which is below the BAAQMD threshold of 0.3 $\mu g/m^3$. Project health risk impacts would thus be less than significant after mitigation.

Implementation of *Mitigation Measures AIR-1* and *AIR-2* would ensure that project-generated fugitive dust and exhaust (criteria pollutant and TACs) during construction would be reduced to a **less than significant** level.

Operational Impact. In regards to long-term operational sources of TACs, there would be a diesel and gasoline fueling station for City vehicles at the Public Safety and Public Works site. Although the fuel station would be a source of TACs, a permit would be required from the BAAQMD in order to ensure potential health risk impacts at sensitive receptors in the vicinity would be less than significant. The City of Rohnert Park Public Safety and Public Works facility will also need an emergency generator permitted by the BAAQMD to ensure that air pollutant emissions are minimized and that any potential health risk would be **less than significant**.

Cumulative Health Risk. Cumulative health risk assessment is included in order to evaluate land use compatibility for the future sensitive residential receptors located at the project. TACs produced at distant locations do not readily combine to create concentrations at any single location that would cause health risks. The BAAQMD method for determining health risk requires the review of health risk from permitted sources, railroads, and major streets in the vicinity of a project site (i.e., within 1,000 feet of the proposed new sensitive receptors on the project site), then adding the project operational impacts to determine whether the cumulative health risk thresholds are exceeded. The primary sources of existing TACs in the project vicinity are several gas stations. BAAQMD has developed a geo-referenced database of permitted emissions sources throughout San Francisco Bay Area for estimating health risks to new sensitive receptors from existing permitted sources. Unlike for a project level assessment, for the cumulative assessment the risks from all sources within 1,000 feet of project sensitive receptors are summed and compared to a cumulative significance threshold.

Notably, no onsite stationary sources of TACs are assumed and project-generated diesel traffic would be negligible. A summary of the cumulative health impacts is found in Table 2.3-4. The cumulative MEI is assumed to be at the project site and exposed to maximum risk from all sources, which would be a conservative assessment.

Table 2.3-4
Cumulative Health Impacts

Facility	Distance from Project (feet)	Cancer Risk (persons per million)	Chronic Impact	$PM_{2.5}$ Concentration ($\mu g/m^3$)
CA Highway Patrol – Gas Station (6100 Labath Avenue)	435	1.0[a]	0.005[a]	--
Costco Gasoline	530	26.4[a]	0.09[a]	--
Kacees World of Water – Gas Station (320 Rohnert Park Expressway)	780	1.0[a]	0.005[a]	--
Total		28.4	0.1	0.0
BAAQMD Cumulative Significance Criteria		100	10	0.8

Exceed Threshold?	No	No	No

Source: Appendix B

[a] Cancer Risk and Chronic Hazard values for the source generator was adjusted using the BAAQMD Gas Station Distance Multiplier.

As shown in Table 2.3-4, the cumulative cancer risk from all sources within 1,000 feet of proposed sensitive receptors would be approximately 28 in one million, which would be below the BAAQMD cumulative threshold of 100 in one million and would be less than significant. The cumulative hazard index from all such sources would be approximately 0.1, which would be below the significance threshold of 10 and would be less than significant. The cumulative $PM_{2.5}$ concentration would be approximately 0.0 $\mu g/m^3$, which would be below the significance threshold of 0.8 $\mu g/m^3$ and hence is considered **less than significant.**

e) Would the project create objectionable odors affecting a substantial number of people?

BAAQMD has identified typical sources of odor in the CEQA Air Quality Guidelines, a few examples of which include manufacturing plants, rendering plants, coffee roasters, wastewater treatment plants, sanitary landfills, and solid waste transfer stations. While sources that generate objectionable odors must comply with air quality regulations, the public's sensitivity to locally produced odors often exceeds regulatory thresholds. The project would not include uses that have been identified by BAAQMD as potential sources of objectionable odors.

Notably, the City wastewater pump station is located on a parcel northeast of the project site. As discussed in the SAMP EIR, pump stations such as this one are not generally large sources of odors (City of Rohnert Park 2007). Since preparation of the SAMP EIR, there has been no increase in odors, nor any anticipated increases, from current or future wastewater treatment or light industrial uses. Recent discussions with City pump station staff indicate that a slight odor can occasionally be detected, depending on wind conditions, within the pump station property and immediate vicinity. The staff also indicated that the odor can occasionally be detected outside the pump station fenced area and to the east, rarely to the west (City of Rohnert Park 2013). In the event odor complaints are received by the BAAQMD from sources including the existing pump station or possible future permitted industrial uses, the agency will investigate and require odor abatement, if necessary under the provisions of BAAQMD Regulation 7, Odorous Substances. Overall, potential odor impacts would be **less than significant**.

Mitigation Measures

Mitigation Measure AIR-1 (SAMP EIR Mitigation Measure 5-2a): Each project sponsor is responsible for ensuring that the contractor reduces particulate, reactive organic

gas (ROG), oxides of nitrogen (NO_x), and carbon monoxide (CO) emissions by complying with the air pollution control strategies developed by the BAAQMD. Each project sponsor and contractor shall develop emission control strategies that implement the following control measures based on BAAQMD guidelines:

Dust Control Measures:

For all construction sites:

- Cover all trucks hauling construction and demolition debris from the site.
- Water on a continuous as-needed basis all earth surfaces during clearing, grading, earthmoving, and other site preparation activities.
- Use watering to control dust generation during demolition of structures or break-up of pavement.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved parking areas and staging areas.
- Sweep daily (with water sweepers) all paved areas and staging areas.
- Provide daily clean-up of mud and dirt carried onto paved streets from the site.
- Renovation, demolition activities, removal or disturbance of any materials that contain asbestos, lead paint or other hazardous pollutants will be conducted in accordance with BAAQMD rules and regulations.
- Properly maintain all construction equipment.

For construction sites near sensitive receptors (or if residential development occurs prior to commencement of commercial development):

- Install wheel washers for all existing trucks, or wash off the tires or tracks of trucks and equipment leaving the site.
- Suspend dust-producing activities during periods when instantaneous gusts exceed 25 miles per hour when dust control measures are unable to avoid visible dust plumes.

- Limit the area subject to excavation, grading and other construction or demolition activity at any one time.

For sites greater than four acres:

- Apply soil stabilizers to previously graded portions of the site inactive for more than ten days or cover or seed these areas.
- Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Replant vegetation in disturbed areas as soon as possible.

Construction Exhaust Mitigation Measures

The potential air quality impacts from toxic air contaminant emissions from construction equipment and operations will be reduced with compliance with BAAQMD air pollution control strategies. Construction firms shall be required to post signs of possible health risk during construction. The developer is responsible for compliance with the BAAQMD rule regarding cutback and emulsified asphalt paving materials. In addition, the construction contractors will implement a plan to use newer construction equipment that meets the NO_x emissions standard of 6.9 grams per brake-horsepower hour for work constructed within 200 feet of residences.

Mitigation Measure AIR-2: The project applicant shall ensure that construction contract specifications include a requirement that all off-road diesel-powered construction equipment used for project development with engines greater than 50 horsepower be equipped with a Level 3 Verified Diesel Emissions Control (VDEC).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

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

2.4 Biological Resources

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

As discussed in the SAMP EIR, biological studies completed in the project area did not locate special status plant species, but the area was classified as having suitable habitat for several special status animal species. The EIR determined that grasslands in the project vicinity would be suitable as foraging habitat by birds, including special status species. Although no special status species were observed to be nesting within the SAMP area, future development within the project site would be required to implement preconstruction *Mitigation Measure BIO-1* (included in the SAMP EIR as Mitigation Measure 6-4a) to ensure potential impacts to nesting birds remain less than significant.

The project area is also located within the potential range of the Sonoma County California tiger salamander (CTS) and the northwestern pond turtle (City of Rohnert Park, 2007). According to the SAMP EIR, the northwestern pond turtle, a California species of special concern, would be unlikely to occur in the project area due to existing roadways (including gutters and curbs) and surrounding development. The CTS is a federally endangered and California species of special concern. No CTS or special status plant species were found in any of the wetlands surveyed in 2001-2002 and 2005. In addition, the U.S. Department Fish and Wildlife Service (USFWS) issued a letter, included as Appendix B to the SAMP EIR, determining that development in the SAMP area, including the project site, would be unlikely to affect CTS. The SAMP EIR further concluded that neither surveys nor mitigation would be required for the CTS in the SAMP area, including the project site (City of Rohnert Park, 2007). Subsequent correspondence with the USFWS (2015) has confirmed that "the letter for this project was a determination of not likely to result in take of listed species and since ground disturbance has already occurred on the site, no additional effects to listed species are expected from the further development of the site".

Implementation of *Mitigation Measure BIO-1*, as discussed above, would ensure that future development at the project site would have a **less than significant** impact on species identified as a candidate, sensitive, or special status species.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

As noted in the SAMP EIR, there are no riparian areas located within the SAMP area (City of Rohnert Park, 2007). The Hinebaugh Creek Flood Channel is located immediately south of the City Public Safety / Public Works site, but the proposed project does not include alterations within the adjacent creek area.

A Wetland Delineation conducted by North Fork Associates for the SAMP area, including the proposed project site, found no occurrence of vernal pools or other natural wetlands (NFA, 2003). Approximately .43-acres of disturbed, low-quality seasonal wetland areas were found to occur within the SAMP along the south and east side of the Residences at Five Creek parcel. However, those wetlands were not found to support any federally listed threatened or endangered plants. To mitigate for the impact associated with development within the SAMP and the loss of .43 acres of wetlands, the City purchased 0.5 acres of wetland mitigation (City of Rohnert Park, 2007). Accordingly, impacts to wetlands on the project site have previously been mitigated.

For stormwater drainage, the project would include construction of a new offsite storm drain outfall into Hinebaugh Creek. Impacts to the bed, bank, or channel of streams adjacent to the outfall, including associated riparian habitat, would require a Streambed Alteration Agreement (Section 1602) from the California Department of Fish and Wildlife (CDFW). *Mitigation Measure BIO-3* requires the project to obtain a Streambed Alteration Agreement and comply with CDFW's specific measures to minimize or avoid impacts to any riparian areas affected.

A preliminary wetland assessment of the proposed new storm drain outfall at Hinebaugh Creek was conducted by Dudek in October 2016 (refer to Appendix D). Approximately 0.0026 acres of wetland areas were found to occur in the proposed outfall area.

Direct removal, filling, or hydrological interruption of a federally or state-protected wetlands as defined in the Clean Water Act and/or the Porter-Cologne Water Quality Control Act would be considered a significant impact. To ensure impacts to wetlands are reduced to a less than significant level, the proposed project would implement *Mitigation Measure BIO-2*. *Mitigation Measure BIO-2* requires that the project obtain required permits and fulfill compensatory mitigation requirements for wetland impacts.

Implementation of *Mitigation Measures BIO-2* and *BIO-3* would ensure that potential impacts to riparian areas would be reduced to a l**ess than significant** level.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Refer to answer provided in 'b' above.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project site is located adjacent to Hinebaugh Creek but no development activities would occur within the creek corridor. In addition, because the project site and the surrounding areas are composed of urban development the project footprint does not function as an important corridor between larger open space wildlife areas. Therefore, the impact on wildlife corridors would be **less than significant**.

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

The project site is located within the area covered by the Santa Rosa Plain Conservation Strategy (USFWS, 2005). The purpose of the Conservation Strategy is to create a long-term conservation program to assist in the recovery of CTS and four listed plant species. The project site is identified in the Conservation Strategy as "Area Within 1.3 Miles of Known CTS Breeding Area." As identified in the Conservation Strategy, impact to CTS is not likely on some lands within 1.3 miles from breeding sites that are surrounded by significant barriers or are otherwise unsuitable CTS habitat. As discussed in criterion 'a' above, no CTS have been identified on the project site and the USFWS has issued a letter stating that development in the SAMP area, including the project site, would be unlikely to affect CTS (City of Rohnert Park, 2007). Therefore, future development at the proposed project site would result in **no impact** to CTS nor result in conflicts with the Conservation Strategy.

The site is not included in any other local, regional, or state habitat conservation plan, and there are no protected trees (i.e., oaks and other native trees of significant size) located on the project site. **No impacts** to other local policies, ordinances or plans would be expected to occur from implementation of the project.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Refer to the answer in 'e' above.

Mitigation Measures

Mitigation Measure BIO-1 (SAMP Mitigation Measure 6-4a): Pre-construction surveys will be conducted for nesting raptors and bat roosts within 500 feet of construction activities a minimum of 48 and 24 hours before project construction activities. Nest searches will be conducted in December/January (if not earlier) before site construction begins and the vegetation within the construction area will be removed and/or mowed between August 31 and February 1 to minimize the potential for birds to nest within the construction areas. If nests are found with no eggs or young, the nest will be moved by a qualified biologist. If nesting birds with eggs or young are found during the surveys, one or more of the following measures may be implemented:

- An exclusion zone will be established around nests with eggs or young; the need for and size of the exclusion zone is based on factors such as species sensitivity, topography, and proximity to roads and buildings.

- Construction activities in the area will be postponed until young are fledged
- The Biological Monitor will monitor the birds on the nest and stop construction if it appears that the birds will abandon the nest or young
- In consultation with the California Department of Fish and Wildlife (CDFW), the nests could be relocated to a nearby area or to an approved wildlife rehabilitation center.

To minimize the potential for birds to nest in the construction area, nest searches can be conducted and tree removal and other vegetation removal can be done between October 1 and February 1. This shall be noted on improvement plans, grading plans and building plans.

Mitigation Measure BIO-2: For any impacts to waters of the U.S., a Section 404 permit from the Corps and a Section 401 water quality certification from the Regional Water Quality Control Board shall be obtained and compensatory mitigation shall be provided for all impacts at a minimum 1 to 1 ratio according to the Corps Standard Operating Procedure for Determination of Mitigation Ratios. As part of the wetlands permitting process, the Corps must conduct a Section 7 consultation with the U.S. Fish and Wildlife Service for any potential impacts to listed species. The terms and conditions of USFWS's Biological Opinion (or Programmatic Biological Opinion) shall be implemented as part of the project.

Mitigation Measure BIO-3: For any impacts to the bed, bank, or channel of Hinebaugh Creek, subject to regulation under Section 1602 of the Fish and Game Code, the project applicant must apply for and obtain a Streambed Alteration Agreement from the CDFW. The area regulated by CDFW is the stream zone, which is defined as the area from top-of-bank to top-of-bank or the outside edge of the riparian canopy, whichever is widest. A Streambed Alteration Agreement from CDFW will be required prior to activities that will affect these features. A permit application can be submitted concurrently with the CEQA compliance process. All mitigation measures for impacts to waters of the state and riparian areas must be implemented in accordance with the terms and conditions of the Streambed Alteration Agreement.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

2.5 Cultural Resources

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

Historical resource is a term with a defined statutory meaning. (See Public Resources Code § 21084.1 and CEQA Guidelines §§ 15064.5(a), (b)). The term embraces any resource listed or determined to be eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest. In addition, historical resources are evaluated against the CRHR criteria prior to making a finding as to the project's impacts on historical resources.

Generally, resources must be at least 50 years old to be considered for the listing in the California Register. There are no structures or built-features on the project site and as such, there are no historical resources to be impacted. The impact on historic resources would be **less than significant.**

A cultural resources survey for the SAMP area, including the project site, was conducted between October 2004 and February 2005 (City of Rohnert Park, 2007). No archeological materials were encountered as a result of the surface reconnaissance within the SAMP area. The survey indicated that prior disturbance in the project area has greatly altered the terrain, and any archeological resources that may have once existed in the area of the prior activities have most likely been destroyed (City of Rohnert Park, 2007). No further research was recommended for buildings encountered during the survey.

There are no known historic, archaeological, or paleontological resources or human remains onsite. It is unlikely that previously unknown cultural resources would be encountered during future site grading and construction. However, to ensure that impacts to cultural resources remain less than significant, should any such resources be encountered during project grading and construction, the project would be required to implement *Mitigation Measures CUL-1, CUL-2*, and *CUL-3*. These mitigation measures were identified as SAMP EIR Mitigation Measures 7.1a, 7.1b, and 7.3a, and were also included in the City of Rohnert Park General Plan EIR. With implementation of the aforementioned mitigation measures, impacts to cultural resources would be **less than significant**.

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

Refer to the answer provided in 'a' above.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Refer to the answer provided in 'a' above.

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Refer to the answer provided in 'a' above.

Mitigation Measures

Mitigation Measure CUL-1 (SAMP EIR Mitigation Measure 7.1a): If at any time during earth disturbing activities a concentration of artifacts or a cultural deposit is encountered, work shall cease in the immediate area and a qualified archeologist shall be contacted by the construction manager to evaluate the find and make further recommendations. Construction crews should be alerted to cultural resources which could consist of, but not be limited to, artifacts of stone, bone, wood, shell, or other materials; features, including hearths, structural remains, or dumps; areas of discolored soil indicating the location of fire pits, post molds, or living area surfaces.

Mitigation Measure CUL-2 (SAMP EIR Mitigation Measure 7.1b): If human remains are encountered anywhere on the project site, all work shall stop in the immediate vicinity of the discovered remains. Both the County Coroner and a qualified

archeologist shall be notified by the construction manager immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission shall be contacted by the Coroner so that a "Most Likely Descendant" can be designated and recommendations for treatment solicited pursuant to CEQA Section 15064.5(e).

Mitigation Measure CUL-3 (SAMP EIR Mitigation Measure 7.3a): Per state law, in the event that paleontological resources or unique geologic features are encountered during construction, all earthwork within a 50 meter radius of the find will be stopped, the City of Rohnert Park notified, and a paleontologist retained to examine the find and make appropriate recommendations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

2.6 Geology and Soils

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

The closest known active fault traces are those of the Rodgers Creek fault, approximately 3 miles northeast of the SAMP area and the San Andreas Fault, approximately 15 miles southwest (City of Rohnert Park, 2007).

As stated in the SAMP EIR, because the project area is about 3 miles from known traces of any potentially active fault and from known traces the nearest zoned active fault (the Rodgers Creek fault), fault-line surface rupture would not be a hazard within the project area (City of Rohnert Park, 2007). Impacts related to fault rupture potential would be **less than significant**.

ii) Strong seismic ground shaking?

As discussed in the SAMP EIR, the City of Rohnert Park will be subjected to at least one major earthquake during the useful economic life of the structures located in the SAMP area (City of Rohnert Park, 2007). Resulting vibration from a 7.1 magnitude earthquake on the Rodgers fault, which is located approximately 3 miles from the project area, could cause damage to buildings, roads and infrastructure, and could cause ground failures such as liquefaction or settlement in alluvium and poorly compacted soils (City of Rohnert Park, 2007). This would be considered a significant impact. However, as discussed in the SAMP EIR, the project would be required to implement *Mitigation Measure GEO-1* (SAMP EIR Mitigation Measure 8-2a), which requires compliance with state building code seismic requirements. This would ensure impacts related to ground shaking remain **less than significant**.

iii) Seismic-related ground failure, including liquefaction?

According to the SAMP EIR, liquefaction risk in the project area is considered to be low (City of Rohnert Park, 2007). Accordingly, impacts associated with liquefaction would be **less than significant**.

iv) Landslides?

No landslide deposits have been mapped within the SAMP area or in the immediate vicinity (City of Rohnert Park, 2007). The California Geological Survey slope stability map of southern Sonoma County categorizes the project area as being of the greatest relative stability because there are no slopes steeper than 1 percent (City of Rohnert Park, 2007). Therefore, impacts associated with landslides would be **less than significant**.

b) Would the project result in substantial soil erosion or the loss of topsoil?

The existence of expansive soils within the SAMP area makes it necessary to ensure the soils used for foundation support are sound (City of Rohnert Park, 2007). An acceptable degree of soil stability can be achieved by the required incorporation of soil treatment programs (e.g. grouting, compaction, drainage control, lime treatment) in the excavation and construction plans to address site-specific soil conditions. The site-specific analysis is necessary for foundation support design in areas where unsuitable conditions are suspected. To ensure that the future development at the project site is not adversely affected by unstable soil conditions, the project would be required to implement *Mitigation Measure GEO-2* (SAMP EIR Mitigation Measure 8-3a). Implementation of *Mitigation Measure GEO-2*, which requires preparation of a site-specific soil analysis, would ensure that impacts related to expansive soils would remain **less than significant**.

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

Refer to the answer provided in 'b' above.

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

Refer to the answer provided in 'b' above.

e) Would the project 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?

No septic tanks or alternative wastewater disposal systems are proposed and the project would have **no impact** related to these types of wastewater disposal.

Mitigation Measures

Mitigation Measure GEO-1 (SAMP EIR Mitigation Measure 8-2a): To reduce the primary and secondary risks associated with seismically induced ground shaking at the site, it is necessary to take the location and type of subsurface materials into consideration when designing foundations and structures in the Master Plan area. In the City of Rohnert Park, residential, commercial and institutional buildings, bridges, pedestrian overcrossings, and all associated infrastructure are required to reduce the exposure to potentially damaging seismic vibrations through seismic-resistant design, in conformance with Chapter 16, Structural Design Requirements, Division IV, Earthquake Design, of the California Building Code. Because the Master Plan area is in the "near-source" area (within 3.1 miles of a known active fault) of the Rodgers Creek fault, Section 1629, Criteria Selection, of the Building Code requires special seismic design factors to be applied to the project including:

- The use of California Building Code Seismic Zone 4 Standards as the minimum seismic-resistant design for all proposed facilities;
- Additional seismic-resistant earthwork and construction design criteria, based on future site-specific development projects;
- Recommendations of a California Certified Engineering Geologist in cooperation with the project's California-registered geotechnical and structural engineers;
- An engineering analysis that demonstrates satisfactory performance of alluvium or fill where either forms part or all of the support, especially where the possible occurrence of liquefiable soils exist; and
- An analysis of soil expansion potential and appropriate remediation (compaction, removal/replacement, etc.) prior to using any expansive soils for foundation support.

Mitigation Measure GEO-2 (SAMP EIR Mitigation Measure 8-3a): As part of the construction permitting process, the City requires completed reports of soil conditions at the specific construction sites to identify potentially unstable soil conditions. The evaluation must be conducted by registered soil professionals, and measures to eliminate inappropriate soils conditions must be applied, depending on the soil conditions. The design of foundation support must conform to the analysis and implementation criteria described in the City's Building Code, Chapters 16, 18,

and A33. Adherence to the City's codes and policies ensures the maximum practicable protection available for users of buildings and infrastructure and their associated trenches, slopes, and foundations.

Site-specific soil suitability analysis and stabilization procedures, and design criteria for foundations, as recommended by a California registered soil engineer during the design phase for each site where existence of unsuitable soil conditions is known or suspected, shall include, but not be limited to, the following specifications:

a. During the design phase for each site where the existence of unsuitable soil conditions is known or suspected, the developer's registered soil engineering consultant shall provide documentation to the City that:

    1. Site-specific soil suitability analyses has been conducted in the area of the proposed foundation to establish the design criteria for appropriate foundation type and support, and

    2. The recommended criteria have been incorporated in the design of the foundation.

b. During grading for the site, the registered soils professional shall be on the site:

    1. To observe areas of potential soil unsuitability,

    2. To supervise the implementation of soil remediation programs, and

    3. To verify final soil conditions prior to setting the foundations.

c. The registered soils engineering consultant shall prepare an "as built" map, to be filed with the City, showing details of the site soils, the location of foundations, sub-drains and clean-outs, the results of suitability analyses and compaction tests.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. 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?	☐	☒	☐	☐

2.7 Greenhouse Gas Emissions

Introduction

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs). The greenhouse effect traps heat in the troposphere through a threefold process: (1) short-wave radiation emitted by the Sun is absorbed by the Earth; (2) the Earth emits a portion of this energy in the form of long-wave radiation; and (3) GHGs in the upper atmosphere absorb this long-wave radiation and emit this long-wave radiation into space and back toward the Earth. This trapping of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

Principal GHGs include CO_2, methane (CH_4), nitrous oxide (N_2O), O_3, and water vapor (H_2O). Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely byproducts of fossil-fuel combustion, whereas CH_4 results mostly from off-gassing associated with agricultural practices and landfills. Man made GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3), which are associated with certain industrial products and processes (CAT 2006).

The Intergovernmental Panel on Climate Change (IPCC) developed the Global Warming Potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2E).

CalEEMod assumes that the GWP for CH_4 is 21 (which means that emissions of 1 MT of CH_4 are equivalent to emissions of 21 MT of CO_2), and the GWP for N_2O is 310, based on the IPCC Second Assessment Report. The IPCC has released subsequent Assessment Reports with updated GWPs, and statewide documents are beginning to transition to the use of the GWPs in the IPCC Fourth Assessment Report. Nonetheless, the use of the different GWPs would not substantially change the overall project-generated GHG emissions, which are primarily CO_2. As such, for the purposes of this analysis, it is appropriate to use the hardwired GWP values in CalEEMod from the IPCC Second Assessment Report.

With regard to impacts from GHGs, both BAAQMD and the California Air Pollution Control Officers Association (CAPCOA) consider GHG impacts to be exclusively cumulative impacts (BAAQMD 2012; CAPCOA 2008); therefore, assessment of significance is based on a determination of whether the GHG emissions from a project represent a cumulatively considerable contribution to the global atmosphere. This analysis uses both a quantitative and a qualitative approach. The quantitative approach is used to address the first significance criterion: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? This analysis considers that, because the quantifiable thresholds developed by BAAQMD in its 2009 Justification Report were formulated based on AB 32 and California Climate Change Scoping Plan reduction targets for which its set of strategies were developed to reduce GHG emissions statewide, a project cannot exceed a numeric BAAQMD threshold without also conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (the state Climate Change Scoping Plan). Therefore, if a project exceeds a numeric threshold and results in a significant cumulative impact, it would also result in a significant cumulative impact with respect to plan, policy, or regulation consistency, even though the project may incorporate measures and have features that would reduce its contribution to cumulative GHG emissions.

Separate thresholds of significance are established for operational emissions from stationary sources (such as generators, furnaces, and boilers) and non-stationary sources (such as on-road vehicles). As no threshold has been established for construction-related emissions, the operational emissions thresholds apply. The threshold for stationary sources is 10,000 metric tons of CO_2E per year (i.e., emissions above this level may be considered significant). For non-stationary sources, three separate thresholds have been established:

- Compliance with a Qualified Greenhouse Gas Reduction Strategy (i.e., if a project is found to be out of compliance with a Qualified Greenhouse Gas Reduction Strategy, its GHG emissions may be considered significant); or
- 1,100 metric tons of CO_2E per year (i.e., emissions above this level may be considered significant); or

- 4.6 metric tons of CO_2E per service population per year (i.e., emissions above this level may be considered significant). (Service population is the sum of residents plus employees expected for a development project.)

BAAQMD considers GHG impacts to be exclusively cumulative and, as such, assessment of significant in this Initial Study is based on a determination of whether the GHG emissions from the Project represent cumulatively considerable contribution to the global atmosphere. The quantitative threshold of 4.6 metric tons of CO_2E per service population per year proposed by BAAQMD in its 2009 Justification Report is applied to this analysis. If the project construction or operational GHG emissions would exceed this threshold then, consistent with BAAQMD Guidelines, it would be considered to have a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact on climate change.

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

CalEEMod was used to estimate GHG emissions from construction of the project, as well as operational emissions of the project plus the residential development included in the SAMP currently under construction to the north of the proposed project.

Construction. Construction of the proposed project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. Since the BAAQMD has not established construction-phase GHG thresholds, construction GHG emissions were amortized assuming a 30-year development life after completion of construction and added to operational emissions to compare to the BAAQMD operational GHG threshold. Amortized GHG emissions associated with project construction would result in annualized generation of approximately 72 MT CO_2E.

A detailed depiction of the construction schedule—including information regarding phasing, equipment utilized during each phase, haul trucks, vendor trucks, and worker vehicles—is included in Appendix B.

Operations. Long-term operational emissions would occur over the life of the project. CalEEMod was used to estimate GHG emissions from motor vehicle trips, grid electricity usage, solid waste, and other sources (including area sources, natural gas combustion, and water/wastewater conveyance). In addition to the proposed construction of the Residences at Five Creek and the Public Safety/Public Works Facilities, the project includes amendments to the General Plan and SAMP. To evaluate the GHG effects from

the entire SAMP area, the 328 multifamily residential units in the northern part of the SAMP area were also included in the operational emission estimation.

CalEEMod default mobile source data, including temperature, trip characteristics, variable start information, emission factors, and trip distances, were conservatively used for the model inputs. Project-related traffic was assumed to be comprised of a mixture of vehicles in accordance with the model defaults for traffic. The CalEEMod default trip rate was adjusted to match the Traffic Impact Study for the project (W-Trans 2016). It is assumed that the project site would be occupied and in operation in the year 2019.

CalEEMod was also used to estimate emissions from the project's area sources, which includes operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions.

The estimation of operational energy emissions was based on CalEEMod land use defaults and total area (i.e., square footage) of the proposed project. Annual natural gas (non-hearth) and electricity emissions were estimated in CalEEMod using the emissions factors for PG&E as a conservative estimate (since the Sonoma Clean Power is not included in CalEEMod and GHG intensity factors are not known) and adjusted to account for 25% Renewable Portfolio Standard (RPS) by 2016. The most recent amendments to Title 24, Part 6, referred to as the 2016 standards, will become effective on January 1, 2017. In general, residences built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and nonresidential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015). The previous amendments were referred to as the 2013 standards and are currently effective. Residential buildings constructed in accordance with the 2013 standards will use 23.3% less electricity and 3.8% less natural gas than the 2008 standards. Non-residential buildings constructed in accordance with the 2013 standards will use 21.8% less electricity and 16.8% less natural gas than the 2008 standards (CEC 2013). Based on the anticipated development schedule, the project was assumed to meet the 2016 California Building Energy Efficiency Standards (Title 24, Part 6, of the California Code of Regulations). The default CalEEMod energy use factors incorporate compliance with the 2008 Title 24 standards. These were adjusted to account for the 2016 Title 24 standards.

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the proposed project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and

associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values.

The proposed project would generate solid waste and would therefore result in CO_2E emissions associated with landfill off-gassing. The project was assumed to comply with the 75% diversion rate consistent with AB 341 (Chesbro, Chapter 476, Statutes of 2011) (25% increase from the solid waste diversion requirements of AB 939, Integrated Waste Management Act), which was accounted for in the "Mitigation" options of CalEEMod and are thus part of the mitigated scenario.

The estimated operational unmitigated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water supply, and wastewater treatment are shown in Table 2.7-1.

Table 2.7-1
Estimated Annual Unmitigated Operational Greenhouse Gas Emissions

Emission Source	CO_2E (MT/yr)
Area	21.3
Energy	1,213.0
Mobile	4,824.9
Solid Waste	163.8
Water Supply and Wastewater	133.3
Total	6,356.2
Amortized Construction Emissions	71.5
Operation + Amortized Construction Total	6,427.7
Total GHGs per Service Population per Year	5.7
BAAQMD GHG Threshold	*4.6*
Significant (Yes or No)?	Yes

Source: Appendix B
Notes: Total values may not sum due to rounding. GHG emissions are based on CalEEMod, assuming construction of the project, as well as operational emissions of the project plus the residential development included in the SAMP currently under construction to the north of the proposed project. Although they wouldn't be considered mitigation, compliance with the 2016 Title 24 standards and solid waste diversion rates consistent with AB 341 were included in the mitigated scenario. The total service population (residents plus employees) was estimated to be 1,132 persons.
CO_2E = carbon dioxide-equivalent; MT/year = metric tons per year

As shown in Table 2.7-1, unmitigated operational GHG emissions would exceed the BAAQMD efficiency metric threshold. Thus, mitigation measures would be required. The estimated operational GHG emissions with implementation of *Mitigation Measure GHG-1* are shown in Table 2.7-2.

Table 2.7-2
Estimated Annual Mitigated (Pre-Offsets) Operational Greenhouse Gas Emissions

Emission Source	CO_2E (MT/yr)
Area	21.3
Energy	1,166.6
Mobile	4,372.2
Solid Waste	40.9
Water Supply and Wastewater	84.8
Total	5,685.8
Amortized Construction Emissions	71.5
Operation + Amortized Construction Total	5,757.3
Total GHGs per Service Population per Year	5.1
BAAQMD GHG Threshold	*4.6*
Significant (Yes or No)?	Yes

Source: Appendix B
Note: Total values may not sum due to rounding. GHG emissions are based on CalEEMod, assuming construction of the project, as well as operational emissions of the project plus the residential development included in the SAMP currently under construction to the north of the proposed project. Values include implementation of Mitigation Measure GHG-1, including compliance with the 2016 Title 24 standards and solid waste diversion rates consistent with AB 341, compliance with CALGreen Tier 1, high efficiency outdoor lighting, increased diversity, and improving the pedestrian network. The total service population (residents plus employees) was estimated to be 1,132 persons.
CO_2E = carbon dioxide-equivalent; MT/year = metric tons per year

Table 2.7-2 indicates that the GHG emissions associated with the project would still exceed the BAAQMD efficiency metric of 4.6 MT CO_2E per service population per year after implementation of *Mitigation Measure GHG-1*. With a total service population of 1,132 persons (residents plus employees), the annual GHG emissions that the project plus northern residential uses would need to be below would be approximately 5,207.2 MT CO_2E per year.[2] As shown in Table 2.7-2, the operational GHG emissions would exceed this level by 550.1 MT CO_2E per year and would be significant. However, with the additional purchase of carbon credits through implementation of *Mitigation Measure GHG-2*, the project plus northern residential uses would offset excess GHG emissions and would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and this would represent a **cumulatively less-than-significant GHG impact.**

[2] Based on 4.6 MT CO_2E/year/service population * 1,132 service population = 5,207.2 MT CO_2E per year.

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

GHG emissions and climate change effects were not evaluated in the SAMP EIR. The City of Rohnert Park has a GHG reduction plan that focuses on municipal operations, which would only apply to the City of Rohnert Park Public Safety and Public Works facility component of the project. The City is working with other jurisdictions to implement the Sonoma County Community Climate Action Plan to serve all of Sonoma County; however, this plan has not yet been adopted.

The Scoping Plan, approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and meet the objectives of AB 32. The Plan requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Relatedly, in the Final Statement of Reasons for the Amendments to the CEQA Guidelines, the CNRA observed that "[t]he [Scoping Plan] may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions.

Table 2.7-3 highlights measures that have been, or will be, developed under the Scoping Plan and the project's consistency with Scoping Plan measures. To the extent that these regulations are applicable to the project, its inhabitants, or uses, the project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

Table 2.7-3
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency

Table 2.7-3
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	The project's residents and employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low Carbon Fuel Standard	T-2	Motor vehicles driven by the project's residents and employees would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	The project includes design features intended to encourage non-vehicular mobility including participation in Transportation Demand Management (TDM) program, compliance with the bicycle master plan and provision of bicycle parking, inclusion of traffic calming measures, and provision of electric vehicle spaces to supplement ongoing statewide efforts to increase fuel efficiency standards, promote electric and hybrid vehicles, and promote vehicular fuels from renewable resources.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	Motor vehicles driven by the project's residents and employees would maintain proper tire pressure when their vehicles are serviced. The project's residents and employees would replace tires in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase. Motor vehicles driven by the project's residents and employees would use low-friction oils when their vehicles are serviced. The project's residents and employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	Not applicable.
Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	Not applicable.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Project	T-8	Not applicable.
High-Speed Rail	T-9	Not applicable.
Electricity and Natural Gas Sector		

Table 2.7-3
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Energy Efficiency Measures (Electricity)	E-1	The project would comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for electrical appliances and other devices at the time of building construction. The project would use high-efficiency LED lighting for outdoor areas.
Energy Efficiency (Natural Gas)	CR-1	The project would comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for natural gas appliances and other devices at the time of building construction.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	Determined by the project applicant to not be feasible. See discussion regarding Measure E-4.
Combined Heat and Power	E-2	Not applicable.
Renewable Portfolios Standard (33% by 2020)	E-3	The electricity used by the project would benefit from reduced GHG emissions resulting from increased use of renewable energy sources.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	Based on information provided by the project applicant, on-site generation of renewable energy using solar panels is not feasible given the minimal commercial rooftop space available to provide the electricity needed to make rooftop solar economically feasible, as well as the shared rooftops but individual electricity meters of the multifamily residential uses.
Water Sector		
Water Use Efficiency	W-1	The project would comply with CALGreen Tier 1 and result in reduced indoor and outdoor water use by 20%.
Water Recycling	W-2	Recycled water is available to the site.
Water System Energy Efficiency	W-3	This is applicable for the transmission and treatment of water, but it is not applicable for the project.
Reuse Urban Runoff	W-4	Not applicable
Renewable Energy Production	W-5	Applicable for wastewater treatment systems. Not applicable for the project.
Green Buildings		
1. State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	The project would be required to be constructed in compliance with state or local green building standards in effect at the time of building construction.
2. Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	The project's buildings would meet green building standards that are in effect at the time of design and construction.
3. Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	The project would be required to be constructed in compliance with local green building standards in effect at the time of building construction.
4. Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	This is applicable for existing buildings only. It is not applicable for the project except as future standards may become applicable to existing buildings.

Table 2.7-3
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Not applicable.
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable.
Refinery Flare Recovery Process Improvements	I-4	Not applicable.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	This is not applicable based on anticipated industrial uses.
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	Not applicable.
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable.
Mandatory Commercial Recycling	RW-3	During both construction and operation of the project, the project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. During construction, all wastes would be recycled to the maximum extent possible.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable.
Anaerobic/Aerobic Digestion	RW-3	Not applicable.
Extended Producer Responsibility	RW-3	Not applicable (applicable to product designer and producers).
Environmentally Preferable Purchasing	RW-3	Not applicable (applicable to product designer and producers).
Forests Sector		
Sustainable Forest Target	F-1	Not applicable.
High GWP Gases Sector		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	The project's residents and employees would be prohibited from performing air conditioning repairs and would be required to use professional servicing.
SF_6 Limits in Non-Utility and Non-Semiconductor Applications	H-2	Not applicable.
Reduction of Perfluorocarbons in Semiconductor Manufacturing	H-3	Not applicable.
Limit High GWP Use in Consumer Products	H-4	The project's residents and employees would use consumer products that would comply with the regulations that are in effect at the time of manufacture.

Table 2.7-3
Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Motor vehicles driven by the project's residents and employees would comply with the leak test requirements during smog checks.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	Not applicable.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	Not applicable.

Source: CARB 2008.
Notes: CARB = California Air Resources Board; CCR = California Code of Regulations; GHG = greenhouse gas; GWP = global warming potential; SB = Senate Bill; SF6 = sulfur hexafluoride

Based on the analysis in Table 2.7-3, the project would be consistent with the applicable strategies and measures in the Scoping Plan.

In regards to consistency with SB 32 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and EO S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future year analysis. . However, the Project is consistent with AB 32 goals by virtue of the City's reliance on the BAAQMD's AB 32 derived per-capita efficiency metric of 4.6 MT CO_2E per service population per year (see paragraph (a) above). Since the Project's GHG emissions fall below this BAAQMD thresholds derived from AB 32 attachment goals with the implementation of Mitigation Measures GHG-1 and GHG-2, the Project would not conflict with AB 32 and its associated planning efforts.

Furthermore, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014). As discussed previously, the project would result in less than significant GHG emissions after implementation of *Mitigation Measures GHG*-1 and *GH*G-2 and would not conflict with the state's trajectory toward future GHG reductions. In addition, since the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the project would be speculative and cannot be identified at this time. With respect to future GHG

targets under SB 32 and EO S-3-05, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet the reduction targets in 2030 and in 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the state on its trajectory toward meeting these future GHG targets.

Based on the preceding considerations, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no additional mitigation is required.

Mitigation Measures

Mitigation Measure GHG-1: The project applicant shall incorporate the following GHG reduction measures into the project design:

- Compliance with the applicable Title 24 energy efficiency standards at the time of development. At a minimum, compliance with the 2016 Title 24 standards
- Compliance with state and/or local green building standards. At a minimum, implementation of CALGreen Tier 1 standards
- Install high efficiency LED lights in outdoor areas
- Participation in a TDM Program
- Improve the pedestrian network and implement traffic calming measures throughout the project
- Ensure solid waste diversion consistent with AB 341
- Include shade canopy over parking lots, where appropriate and feasible
- Provide residents and employees information regarding transit availability
- Provide carpool and/or car sharing parking spaces
- Provide electric vehicle parking
- Comply with the City bicycle master plan and provide adequate bicycle parking

Mitigation Measure GHG-2: Prior to the issuance of the occupancy permit, the project applicant shall purchase and retire voluntary carbon offsets on the Climate Action Reserve (CAR), CAPCOA Greenhouse Gas Reduction Exchange (GHG Rx), or other verified carbon registry, in order to reduce the project's emissions to below the BAAQMD threshold of significance of 4.6 MT CO_2E per service population per year. The BAAQMD requires the lead agency to ensure that offsite measures for reducing GHG emissions are feasible, measurable, and verifiable. The project proponent shall provide BAAQMD a certificate of purchase, verification opinion statement, and proof of offset retirement by the verification body from which the carbon offsets were purchased. If overall land use development changes from what has been assessed in this document, the project applicant shall be required to show consistency with the analysis conclusions herein, which may include the purchase of additional carbon offsets, if required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐

2.8 Hazards and Hazardous Materials

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

The proposed project would allow for future development of mixed uses on the Residences at Five Creek parcel and public facilities on the City Public Safety / Public Works parcel. Future construction at the proposed project site could expose construction workers, the public, or the environment to hazardous materials through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The hazardous materials anticipated to be used are hydrocarbons and their derivatives (i.e. gasoline, oils, lubricants, solvents) required

to operate the construction equipment. These materials would generally be used in excavation equipment, generators, and other construction equipment and would be contained within vessels engineered for safe storage. Only small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. Accidental releases of small quantities of these substances could contaminate soils and degrade the quality of surface water and groundwater, resulting in a significant public safety hazard.

It is anticipated that hazardous materials used during long-term operation of the Residences at Five Creek project would include building maintenance and cleaning chemicals, as well as other landscaping chemicals. These materials are commonly used across all types of land uses, and the proposed project is not expected to present any significant risks associated with their use. Any transport of these materials would be required to comply with various federal and state laws regarding hazardous materials transportation. The City Public Safety and Public Works site would include a gasoline and diesel fueling station for fire trucks and other vehicles at the Public Works corporation yard, along with chemicals associated with a vehicle maintenance facility.

The City Public Safety and Public Works development would also include a hazardous materials storage area for materials such as paints, used oil, batteries, pesticides, and cleaners.

Because the project site is located within the SAMP, the developer and City would be required to implement *Mitigation Measure HAZ-1* (SAMP EIR Mitigation Measures 9-1a, 9-1b, and 9-1c). This would ensure that potential exposure to hazardous contaminants during construction and during long term operation would be reduced through standard control measures and preparation of the appropriate safety plans. Implementation and compliance with the City's plans, requirements, and *Mitigation Measure HAZ-1* would reduce any potential impacts to ***less than significant.***

b) Would the project 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?

Refer to the answer provided in 'a' above.

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

The Bergin University of Canine Studies is located at 5860 Labath Avenue, immediately north of Carlson Avenue and the project site. However, the project would not create hazardous emissions or hazardous waste and would not handle hazardous materials or substances. The project would have **no impact** related to exposure of the project site to hazards and hazardous materials.

d) Would the project be located on a site that 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?

A search of federal, state, and local databases regarding hazardous material releases and site cleanup lists was conducted for preparation of the SAMP EIR (City of Rohnert Park, 2007). The SAMP area was not identified in any of the records, is not included on the Department of Toxic Substance Control's site cleanup list, and is not expected to be affected by any offsite spill incidents. The project would have **no impact** related to the site being included on or affected by other sites that are included on a hazardous material release site.

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

The project would have **no impact** related to airport safety.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Refer to the answer provided in 'e' above.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would not interfere with any adopted emergency or evacuation plans. The project includes development of a public safety facility. Upon completion of the public safety facility, response times in the project area would be reduced. Therefore, the project would have **no impact** related to implementation of emergency plans.

h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The City of Rohnert Park General Plan states that the potential for wildland fires varies within the City (City of Rohnert Park, 2000). The project area is developed with small areas of vacant land. The project site is surrounded by commercial and industrial development and future development of the site is not expected to expose workers or the public to wildland fire. Because the project site is located within the SAMP, the developer would be required to implement *Mitigation Measures HAZ-2a* and *HAZ-2b* (SAMP EIR Mitigation Measure 9-6a and 9-6b). Implementation of these mitigation measures would ensure that risks associated with wildland fires remain **less than significant**.

Mitigation Measures

Mitigation Measure HAZ-1 (SAMP EIR Mitigation Measures 9-1a through 9-1c):

a. The city shall require that contractors transport, store, and handle hazardous materials required for construction in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the City of Rohnert Park Department of Public Safety (DPS).

b. In the event of a spill of hazardous materials in an amount reportable to the DPS (as established by DPS guidelines), the contractor shall immediately control the source of the leak and contain the spill. If required by the DPS or other regulatory agencies, contaminated soils will be excavated and disposed of offsite at a facility approved to accept such soils.

c. The City shall require development under the Master Plan to include plans to prevent the pollution of surface water and groundwater and to promote the health and safety of workers and other people in the project vicinity. These programs shall include an operations and maintenance plan, a site-specific safety plan, and a fire prevention plan, in addition to the Storm Water Pollution Prevention Plan (SWPPP) required to prevent impacts associated with contaminated storm water. The programs are required by law and shall require approval by several responsible agencies. Required approvals are: the SWPPP shall be approved by the RWQCB; the site-specific safety plan and the operations and maintenance plan shall be approved by the Rohnert Park DPS.

   The City shall require the applicant to develop and implement a hazardous materials management plan that addresses public health and safety issues by providing safety measures, including release prevention measures; employee training, notification, and evacuation procedures; and adequate emergency response protocols and cleanup procedures.

   The City shall require project applicants and their designated contractors to comply with Cal-OSHA, as well as federal standards, for the storage and handling of fuels, flammable materials, and common construction-related hazardous materials and for fire prevention.

Mitigation Measure HAZ-2 (SAMP EIR Mitigation Measures 9-6a and 96-b):

a. Prior to construction, if dry vegetation or other fire fuels exist on or near staging areas, or any other area on which equipment will be operated, contractors shall clear the immediate area of fire fuel. To maintain a firebreak and minimize the availability of fire fuels, the City shall require contractors to maintain areas subject to construction activities clear of combustible natural materials to the extent feasible. To avoid conflicts with policies to preserve riparian habitat, areas to be cleared shall be identified with the assistance of a qualified biologist.

b. The City shall require contractors to equip construction equipment that normally includes a spark arrester with an arrester in good working order.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	HYDROLOGY AND WATER QUALITY – Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

2.9 Hydrology and Water Quality

a) Would the project violate any water quality standards or waste discharge requirements?

As noted in the SAMP EIR, the largest concentration of impervious surface in the northwest area of Rohnert Park occurs in the existing commercial/industrial areas to the west, south, and east of the SAMP. The northern portion of the SAMP area, including the project site, contains large areas of vacant or undeveloped land. As previously discussed, the project would allow for future development of a mix of land uses including commercial, residential, a park, and public facilities.

Development at the project site would include earth-disturbing activities, grading, and trenching that could expose disturbed areas and stockpiled soils to winter rainfall and stormwater runoff. Areas of exposed or stockpiled soils could be subject to sheet erosion during short periods of peak stormwater runoff, allowing temporary discharges of sediment to Hinebaugh Creek, which empties into Laguna de Santa Rosa. If not managed properly, water used for dust suppression during construction could also enter drainage systems or creeks and ultimately into Laguna de Santa Rosa. Accidental spills of construction-related contaminants (e.g., fuels, oils, paints, solvents, cleaners, and concrete) could also occur during construction, resulting in releases to nearby surface water, and thereby degrading water quality. Implementation of *Mitigation Measures HYDRO-1* (SAMP EIR Mitigation Measure 10-3a), which requires compliance with state and local regulatory permit requirements regarding the non-point pollution source control of stormwater runoff through the application of Best Management Practices, would reduce construction-related impacts on water quality to a **less than significant level**.

The proposed project could result in changes to drainage patterns and water quality associated with the altered use of the site. Stormwater that drains from the site would potentially carry different or possibly higher concentrations of pollutants into receiving waters. Water used for irrigation of landscaped areas may encounter pesticides, herbicides, and fertilizer. Water that encounters these chemicals but is not absorbed by plants and soil could enter the storm drain system and be conveyed to receiving waters. The potential discharges of contaminated urban runoff from paved and landscaped areas with implementation of the proposed project could contribute to adverse effects on aquatic organisms in receiving waters.

As discussed in the Project Description, the proposed project would require construction of a new storm drain system and outfall at Hinebaugh Creek. These improvements would be construction in compliance with the City's Storm Drain Design Standards. Water quality and stormwater runoff is regulated under a National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) stormwater permit with the North Coast Regional Water Quality Control Board (RWQCB).

As of 2014, the Storm Drain Design Standards reference the City of Santa Rosa and Sonoma County 2011 LID Manual, as required by the City's MS4 permit. The manual provides technical guidance for project designs that require the implementation of permanent LID features and stormwater BMPs. The design goal stated in the LID Manual requires that 100 percent of the design storm event (85th percentile, 24 hour) runoff generated from the developed site be treated on-site, and that any increase in runoff volume caused by development or redevelopment for the design storm be infiltrated and/or reused on-site. To meet the design goal, the project would include gravel storage zones under vegetated areas within the site. CalGreen requirements would require a certain percentage of the Residence at Five Creek apartment complex to be paved with permeable materials, potentially allowing for additional runoff storage under the parking lot. The total volume of storage required for the project would be reduced based on the use of pollution prevention measures such as interceptor trees, impervious area disconnection, and vegetated buffers.

Design and construction of drainage systems per the Sonoma County Water Agency (SCWA) Flood Control Design Criteria would ensure that storm drainage systems are adequately sized. Implementation of post-construction BMPs would reduce pollutants in stormwater runoff. With implementation of *Mitigation Measures HYDRO-1*(SAMP EIR Mitigation Measure 10-3a) , which include post-construction BMPs, as well as adherence to the City, state and local regulatory requirements, potential water quality and runoff impacts from development at the project site would be reduced to a **less than significant** level.

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

The future construction of impervious surfaces on the project site would reduce infiltration to the water table. However, as discussed in the SAMP EIR, the project area is not considered a major or important recharge zone in the City (City of Rohnert Park, 2007).

Most of the city's potable water supply wells draw from the Intermediate aquifer, with a few drawing from the Deep and Lower aquifers. These aquifers receive almost no recharge from the Shallow aquifer in the SAMP area because the intervening clay and sandy clay deposits that underlay the SAMP area prevent substantial downward percolation. The delay of recharge to the Shallow aquifer in the SAMP area would have a less than significant effect on the amount of groundwater available to the City in the other aquifers throughout the groundwater basin. There would be a **less than significant** impact regarding groundwater supply or recharge.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Future development at the project site would require vegetation removal, grading, trenching, and soil movement for the placement of new structures on-site, which would alter drainage courses and runoff patterns from existing conditions. Development of the project would also result in construction of a new storm drain system with an outfall to Hinebaugh Creek. Alterations to existing drainage patterns or flow velocities could result in a short-term increase in erosion or siltation that may have substantial adverse effects on water quality.

Once completed, the project could result in altered drainage patterns that could increase the potential for erosion, siltation, and associated adverse water quality effects on- or off-site. As previously discussed, the City requires all new development projects to design and construct storm drainage systems in accordance with the City of Rohnert Park Storm Drain Design Standards, which includes the City of Santa Rosa and Sonoma County's Manual and associated LID requirements. Adherence to the City's SWMP would provide for compliance with the City's MS4 NPDES stormwater permit requirements through the implementation of site-specific stormwater capture and treatment BMPs, as well as maintenance and inspection requirements for those BMPs. Implementation of *Mitigation Measure HYDRO-1* (SAMP EIR Mitigation Measure 10-3a), which requires compliance with state and local regulatory permit requirements regarding the non-point pollution source control of stormwater runoff through the application of Best Management Practices, would ensure that sedimentation impacts are reduced to a **less than significant** level.

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

Refer to the answer provided in 'c' above.

e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project site is primarily undeveloped, vacant land. Future development of the site would involve covering the site with impervious surfaces such as driveways, parking lots, and buildings. The surfaces would be graded to direct drainage away from structures. The impervious surfaces would reduce surface water infiltration and increase the rate and volume of surface runoff leaving the site.

The existing topography is relatively fat, gently sloping westerly toward Labath Avenue. This project was included as a tributary to the storm drain system within Labath Avenue, where the site currently drains. An existing 30-inch and 36-inch storm drains collect runoff and convey flows westerly down Martin and Carlson Avenues, respectively. These storm drains ultimately converge and outlet into Hinebaugh Creek.

As part of the Costco project, a new outfall to Hinebaugh Creek was constructed. The design of this storm drain system did not include the project site, thus, this system is at full capacity. As previously discussed, the proposed project would require the construction of a new system to drain on-site runoff. This system would require a new outfall to Hinebaugh Creek, just west of the existing Labath Avenue Bridge. The new storm drain system would be designed to accept 15.25 acres from the Residence at Five Creek parcel, the City Public Safety and Public Works parcel, and an additional adjacent parcel, for a total tributary area of 17.08 acres.

The tributary area is less than one square mile, and would be classified as a minor waterway. The storm drain system would be designed to accommodate the 10-year storm event and would require a 36-inch minimum diameter storm drain per the attached Channel Report.

Construction of new storm drain systems would be required to comply with the Stormwater Phase II regulations administered by the North Coast Regional Water Quality Control Board through permits to the City. With the stormwater detention measures in place and operative, there would be no increase in the runoff rate that leaves the site over

the existing site level. Accordingly, impacts related to surface runoff or flooding would be **less than significant**.

f) Would the project otherwise substantially degrade water quality?

Increased runoff from the construction of impermeable surfaces on the project site could lower the quality of stormwater runoff and infiltrating groundwater. The major contributor of contaminants to runoff and infiltrating groundwater is the land surface over which the water passes.

In developed areas, driveways, parking lots, sidewalks, streets and gutters are connected directly to storm drains that collect and guide stormwater runoff. Between rainstorms, materials accumulate on these surfaces from debris dropped or scattered by individuals, street sweepings, debris and other particulate matter washed into roadways from adjacent areas, wastes and dirt from construction and renovation or demolition, fecal droppings from animals, remnants of household refuse dropped during collection or scattered by animals or wind, oil and various residues contributed by automobiles, and fallout of air-borne particles.

During rainfall, stormwater may take several paths when it reaches the ground surface. As water fills surface depressions, it seeps into the ground where the ground is permeable. Where the rate of rain reaching the ground exceeds the rate of infiltration, a film of water builds up on the ground surface. Once this film is of sufficient depth (about 0.1 inch), the water collecting on the ground surface begins to flow. The initial flow of each storm often contains the highest concentrations of pollutants, but this is not always the case because the phenomenon is dependent on the duration of the preceding dry weather period, rainfall patterns, rainfall intensity, the chemistry of individual pollutants, and other site-specific conditions.

If uncontrolled, the accumulation of urban pollutants could have a detrimental cumulative effect because overland flow from paved surfaces and landscaped areas carries many of the above-listed contaminants, thereby contributing to the deterioration of the quality of stormwater runoff and infiltrating groundwater. The eventual result would be the deterioration of water quality in downstream receiving waters. Reaches of drainage-ways downstream from the project site would carry stormwater runoff to Hinebaugh Creek and Laguna de Santa Rosa and, eventually, to the Russian River, which would be subject to water quality deterioration.

The previous discussions of erosion and sedimentation control and storm-drainage system design provide documentation of the requirements to reduce turbidity and capacity

effects. The City's General Plan Policy HS-5 encourages the use of environmentally sensitive drainage improvements to ensure the protection of surface water quality and stream integrity. There would be a **less than significant** impact regarding pollution from surface water runoff.

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Section 7.2, Drainage, Erosion, Stormwater, and Flooding of the city's General Plan and Community Panel Number 060375 0860 B of FEMA's Flood Insurance Rate Maps for Sonoma County both place the SAMP and the project site outside the 500-year zone and the 100-year flood hazard area. There are no dams or levees in the vicinity of the project site. The project would not expose people or structures to significant loss related to flooding. The project site is physically removed from any large body of water and is not subject to inundation by seiche, tsunami, or mudflow. The project would have **no impact** related to flooding or other water-related hazards.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Refer to the answer provided in 'g' above.

i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Refer to the answer provided in 'g' above.

j) Inundation by seiche, tsunami, or mudflow?

Refer to the answer provided in 'g' above.

Mitigation Measures

Mitigation Measure HYDRO-1: (SAMP EIR Mitigation Measure 10-3a) Because the SAMP Project would involve grading of an area that is greater than one acre, it would be subject to the conditions of the General Construction Activity NPDES permit from the Regional Water Quality Control Board. This permit requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is required to identify the sources of sediment and other pollutants on site, and to

ensure the reduction of sediment and other pollutants in stormwater discharged from the Site. A monitoring program is required to aid the implementation of, and assure compliance with, the SWPPP.

The permit requirements of the RWQCB must be satisfied prior to project construction. As part of the SWPPP, an Erosion and Sedimentation Control Plan must be prepared for the Stadium Area Master Plan Site prior to grading. An erosion control professional, or landscape architect or civil engineer specializing in erosion control must design the Erosion and Sediment Transport Control Plan. The erosion and sediment transport control plan shall be submitted, reviewed, implemented and inspected as part of the approval process for the grading plans for each Project.

The Association of Bay Area Governments (ABAG) recommends the control plan be designed using concepts similar to those formulated by ABAG, as appropriate, based on the specific erosion and sediment transport control needs of each area in which grading, excavation, and construction is to occur. A few of the most critical techniques to be considered include, but are not limited to, the following types of erosion control methods:

- Confine grading and activities related to grading (demolition, construction, preparation and use of equipment and material storage areas, staging areas, and preparation of access roads) to the dry season, whenever possible. The dry season is generally deemed to be from April to September of each year.
- If grading or activities related to grading need to be scheduled for the wet season, ensure that structural erosion and sediment transport control measures are ready for implementation prior to the onset of the first major storm of the season.
- Locate staging areas outside major streams and drainage ways.
- Keep the lengths and gradients of constructed slopes (cut or fill) as low as possible.
- Discharge grading and construction runoff into small drainages at frequent intervals to avoid buildup of large potentially erosive flows.
- Prevent runoff from flowing over unprotected slopes.

- Keep disturbed areas (areas of grading and related activities) to the minimum necessary for demolition or construction.
- Keep runoff away from disturbed areas during grading and related activities.
- Stabilize disturbed areas as quickly as possible, either by vegetative or mechanical methods.
- Direct runoff over vegetated areas prior to discharge into public storm drainage systems, whenever possible.
- Trap sediment before it leaves the Site with techniques such as check dams, sediment ponds, or siltation fences.
- Make the contractor responsible for the removal and disposal in offsite retention ponds of all sedimentation that is generated by grading and related activities of the Project.
- Use landscaping and grading methods that lower the potential for down-stream sedimentation. Modified drainage patterns, longer flow paths, encouraging infiltration into the ground, and slower stormwater conveyance velocities are examples of effective methods.
- Control landscaping activities carefully with regard to the application of fertilizers, herbicides, pesticides or other hazardous substances.
- Provide proper instruction to all landscaping personnel on the construction team.

During the installation of the erosion and sediment transport control structures, an erosion control professional shall be on the Site to supervise the implementation of the designs, and the maintenance of the facilities throughout the grading and construction period.

The erosion control professional shall prepare an "as built" erosion and sediment control facility map, to be filed with the City, showing details of the structural elements of the plan and providing an operating and maintenance schedule throughout the operational period of the Project.

These erosion and sediment transport control structures need to be in place prior to the onset of seasonal rains. If portions of these phases extend into the wet season, sediment can be prevented from leaving the construction sites through the

use of silt fences, straw bales, perimeter ditches, water bars, temporary culverts and swales, sediment traps, minimal grading concepts, and/or similar techniques appropriate for the Site. If grading or construction is to occur during the wet season, the Project will require an erosion and sediment transport control plan, designed by an erosion control professional, landscape architect, or civil engineer specializing in erosion control, that shall meet the objectives for the grading and construction period of construction projects proposed for the Stadium Master Plan.

A Best Management Practices (BMP) program, as required by the RWQCB, describes stormwater management practices (structural and operational measures) to control the quantity and quality of stormwater runoff, and aid in erosion control. Following construction, the permit requires the implementation of long-term measures to manage runoff throughout the operational period of the Project. BMPs to prevent onsite or off-site erosion would be required in the stormwater management

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	LAND USE AND PLANNING – Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

2.10 Land Use and Planning

a) Would the project physically divide an established community?

Existing business and commercial development and other vacant land surround the proposed project site. Land uses proposed by the project would match the land uses of the surrounding SAMP area and would not physically divide an established community. The project would have **no impact** related to the physical division of an established community.

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The Residence at Five Creek parcel is designated Regional Commercial in the City's General Plan. The project would amend the site's designation to a combination of Regional Commercial, High Density Residential, and Parks/Recreation. The Public Safety / Public Works site is designated Public Institutional. Both parcels are zoned P-D "Planned Development." With approval of the proposed amendments, the project would be consistent with the City's General Plan and Zoning Map, the SAMP, and other City plans and policies, and impacts would remain **less than significant**.

Planning principles encourage consideration of separating industrial and residential uses to reduce the potential for use conflicts from noise, odors, traffic, and visual character. As discussed in other section of this Initial Study, noise, air quality and traffic impacts are mitigated by existing goals, policies, regulation, and mitigation measures, including SAMP EIR mitigation measures, which would also be applicable to future development at the project site, as identified throughout this Initial Study.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The project site is located within the area covered by the Santa Rosa Plain Conservation Strategy (USFWS, 2005). The purpose of the Conservation Strategy is to create a long-term conservation program to assist in the recovery of CTS and four listed plant species. The project site is identified in the Conservation Strategy as "Area Within 1.3 Miles of Known CTS Breeding Area." As identified in the Conservation Strategy, impact to CTS is not likely on some lands within 1.3 miles from breeding sites that are surrounded by significant barriers or are otherwise unsuitable CTS habitat. As discussed above, in Section IV Biological Resources, no CTS have been identified on the project site and the USFWS has issued a letter to the project proponents stating that development in the SAMP area, including the project site, would be unlikely to affect CTS (City of Rohnert Park, 2007). Therefore, future development at the proposed project site would result in **no impact** to CTS nor result in conflicts with the Conservation Strategy.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. 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?	☐	☐	☐	☒

2.11 Mineral Resources

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

There are no known mineral resources on the subject property and the site is not delineated on the General Plan as a mineral resource recovery site (City of Rohnert Park, 2007). Accordingly, the project would have **no impacts** related to the loss of availability of mineral resources.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Refer to answer provided in 'a' above.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

2.12 Noise

Background

Noise is simply defined as unwanted sound. Ambient environmental sound levels can be characterized by several different metrics. The Energy Equivalent Continuous Level (L_{eq}) is a single number descriptor of the average noise level over a specified period of time. L_{eq} is the most common noise metric used in regulations. Other descriptors of noise incorporate a weighting system that accounts for human's susceptibility to noise irritations at night. Community Noise Equivalent Level (CNEL) is a measure of cumulative noise exposure over a 24-hour period, with a 5 dB penalty added to evening hours (7:00 p.m. to 10:00 p.m.) and a 10 dB penalty added to night hours (10:00 p.m. to 7:00 a.m.). Since CNEL is a 24-hour average noise level, an area could have sporadic high noise levels above a limit and the CNEL may show a dramatically lower level since it could include long periods of much lower levels. The day-night average sound (DNL) is the twenty-four-hour equivalent sound level that includes the same 10 dB(A) "penalty" added to nighttime noise levels, but does not penalize the evening time like the CNEL.

Another set of useful noise metrics are the statistical levels. Long-term noise measurement systems often log measurement data every hour. Statistical levels are indicated with the L_n abbreviation, where 'n' is a percent, usually 1%, 5%, 10%, 50%, or 90%. L_n is defined as the sound pressure level exceeded for n percent of the time.

In general, a change in sound level of three (3) is just noticeable by most people, while a change of 5 dB is clearly noticeable. A change of 10 dB is perceived as a doubling (or halving) of sound

level. When measuring sound the distance from the source is an important factor. Noise levels usually decay at a rate of 6 dB(A) each time the distance from a point source is doubled. For example, particular construction activity generated equivalent continuous sound levels (L_{eq}) of 88 dBA at 50 feet, the L_{eq} would be 82 dBA at 100 feet, 76 dBA at 200 feet, 70 dBA at 400 feet, and so on.

Generally, federal and state agencies regulate mobile noise sources by establishing and enforcing noise standards on vehicle manufacturers. Local agencies generally regulate stationary noise sources and construction activities to protect neighboring land uses and the general public's health and welfare. Residences are considered a noise-sensitive land use.

Noise levels are generally considered low when they are below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss if exposure is sustained (EPA, 1971).

Existing Setting

The proposed project site is located in the City of Rohnert Park. The project site is bounded by Labath Avenue to the west, Dowdell Avenue to the east, and Carlson Avenue to the north. The Santa Rosa De Laguna Trail is immediately south of the site. A Costco, Ashley Furniture Homestore, and associated parking lots exist east of the site. Commercial developments exist across Labath Avenue, Carlson Avenue, and The Santa Rosa Trail. The nearest residences are located north of the site approximately 220 feet away. A TV station across Carlson Avenue is an especially sensitive noise receptor. Appropriate consideration should be made for the TV station's operations.

During the site visit, an existing parking lot at the corner of Carlson Avenue and Labath Avenue included a heavy truck idling. Costco and Ashley Furniture store activities were noted during the site visit to contribute to the ambient noise levels measured on the site. Traffic along Dowdell Road and parking lot noises from existing commercial establishments are the primary noise sources to the east.

A noise survey was conducted for this Initial Study to quantify existing ambient noise levels in the area using equipment meeting the requirements in the noise ordinance. The long-term (24-hour) measurements were completed using calibrated SoftDB Model Piccolo integrating sound level meters. For the long-term measurement locations, the sound level meter was positioned at approximately 5 feet above the ground when possible. Table 2.12-1 summarizes the results from the long-term measurements.

Table 2.12-1 Long-Term Measured Levels (dBA)

Measurement Location	Observed Noise Source(s)	7p.m. to 7 a.m. L_{eq}	Full Day L_{eq}	CNEL / DNL	L_5	L_{10}
Near center of the site	Traffic, Birds, Trucks in Parking Lot	50	50	57	54	52
Southern Site Boundary Next to Trail	Traffic, Birds	52	51	58	55	53
North Site Boundary Next to Carlson Avenue	Traffic, Birds, Dog Barking, Aircraft, Construction	49	53	56	57	53

The short term traffic measurements were completed with a Rion NL-62 sound level meter. The sound level meter was positioned at a height of five feet above the ground on a tripod during measurements of local traffic noise. Table 2.12-2 shows the measured average noise level and concurrent traffic volume.

Table 2.12- 2 Measured Traffic Sound Levels

Site	Description	Date/Time	L_{eq}[1]	Cars	MT[2]	LT[3]	M[4]
Labath Avenue	3 feet from the edge of the pavement of Labath Avenue	7/18/2016 2:29 to 2:39 p.m.	66.7 dBA	66	3	1	0
Carlson Avenue	3 feet from the edge of the pavement of Carlson Avenue	7/18/2016 2:53 p.m. to 3:03 p.m.	54.2 dBA	7	0	0	0
Dowdell Avenue	3 feet from the edge of the pavement of Carlson Avenue	7/18/2016 3:07 p.m. to 3:17 p.m.	59.7 dBA	7	0	0	0

Notes:
1 Equivalent Continuous Sound Level (Time-Average Sound Level)
2 Medium Trucks
3 Large Truck
4 Motorcycle
5 Traffic for Highway 101 only counted in one direction

General Notes: Temperature 74 °F, partly cloudy, 9 miles per hour east wind

Thresholds of Significance

Residences adjacent to project site are within the City of Rohnert Park, and therefore noise levels at these residential properties are governed by the City of Rohnert Park Noise Element and Noise Ordinance. Chapter 17.12 of the Rohnert Park Code of Ordinances offers performance standards. It states:

A. No uses or activities shall create noise levels which exceed the following standards:

Table 5: City of Rohnert Park Maximum Noise Levels (dBA) [1]			
Zoning District	Measured at Property Line or District Boundary	Measured at any Boundary of a Residential District	Between 7PM and 7AM measured at any boundary of a residential zone [4]
Residential	60 [2]	N.A.	50 or ambient noise level
Commercial	70	60	50 or ambient noise level
Industrial (4)	70 [3]	60	50 or ambient noise level
Mixed Use	65 [2]	60	50 or ambient noise level
Public/Institutional	65	60	50 or ambient noise level
Open Space	65	60	50 or ambient noise level

1 Levels not to be exceeded more than 5 minutes in any hour
2 The maximum interior noise level for residential uses shall be forty-five dBA with all openings closed.
3 For commercial and industrial properties, the measurement shall be at the property line of the use or activity.
4 Restricted hours may be modified through conditions of an approved conditional, administrative, or temporary use permit.

B. The noise standards above shall be modified as follows to account for the effects of time and duration on noise levels:

1) Noise that is produced for no more than a cumulative period of five minutes in any hour may exceed the above standards by five dBA except between the hours of 7:00 PM and 7:00 AM.

2) Noise that is produced for no more than a cumulative period of one minute in any hour may exceed the above standards by ten dBA except between the hours of 7:00 PM and 7:00 AM.

3) Mechanical and electrical equipment shall provide adequate shielding and baffling so that noise levels from such equipment will not exceed the above noise levels when measured at the property line.

C. Noise shall be measured with a sound level meter that meets the standards of the American National Standards Institute. Noise levels shall be measured in decibels (dBA) on a sound level meter using the A-weighted filter network. Calibrations checks of the instrument shall be made at the time any noise measurement is made. Excluded from these standards are occasional sounds generated by the movement of public safety vehicles and railroad equipment.

D. New development within existing of project sixty-five dBA noise corridors shown in the general plan shall undergo a technical acoustical analysis by a professional acoustical engineer, which shall serve as the basis for designing mitigation measures.

For a noise level not to be exceeded for more than five minutes in any hour, a statistical level can be used from the measured data. Five minutes in an hour corresponds to a L8.3. The equipment used reports L5 and L10 data.

The measurement results show that the existing vicinity encompassing the project site is within the Noise Ordinance performance standards.

The Rohnert Park Noise Element contains a table summarizing normally acceptable exterior DNLs based on each land use category identified in the land use compatibility table guidelines which the state of California has published. Table 2.12-3 lists the nearby noise sensitive receptors, distances to the project site, and Normally Acceptable DNL values based on the California land use compatibility table.

Table 2.12-3: Distances to Receivers

Receptor Description	Distance to Proposed Site	Normally Acceptable DNL (dBA)
Residential – Multi Family	220 feet	65
Church	80 feet	70
Office Buildings, Business Commercial and Professional	35 feet	70

The most stringent limit is the residential and motel areas with a normally acceptable DNL of 60 dBA. The other nearby receptors have a normally acceptable limit of 70 dBA.

Thresholds for noise increases are not explicitly stated in the Rohnert Park Noise Element. The document states “perceptible noise increases (3 dB(A) or more) resulting from traffic under the General Plan buildout.” (Rohnert Park General Plan Noise Element Revised 12/13)

Since 3 dB(A) is generally taken as a threshold for perceptible difference in noise levels, and it is mentioned in the Noise Element, we interpret a 3 dB(A) increase as a minimum threshold of significance for project-related noise sources.

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

The project is expected to generate an average of 3,809 trips per day. With average daily traffic counts already greater than 10,000 on area roadways, this project would add less than 40 percent to the traffic numbers. Existing traffic noise modeling based on the traffic data available in the noise element shows DNL/CNEL values in the project vicinity to be approximately 48 dBA. Applying expected traffic increases due to the project would increase the noise levels on site by less than 1 dBA, which represents a **less than significant** impact.

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The proposed project would not include equipment or activities capable of producing substantial groundborne vibration or groundborne noise levels. The only ground vibration potential would be associated with short-term construction of the proposed project.

During land clearing and construction activities for the proposed project ground-borne vibration would be produced by the heavy duty construction equipment. The most important equipment relative to generation of vibration, and the vibration levels produced by such equipment, is illustrated in Table 2.12-4. This information was compiled by the Federal Transit Authority for use in assessing construction vibration impacts from major transportation projects, and represents the most comprehensive data set for construction-related vibration levels.

Table 2.12-4 Vibration Velocities for Typical Construction Equipment

Equipment	PPV at 25 Feet (Inches Per Second)
Large Bulldozer	0.089
Loaded Trucks	0.076
Drill Rig / Auger	0.089
Jackhammer	0.035
Small Bulldozer	0.003

Source: Federal Transit Authority, Transit Noise and Vibration Impact Assessment Manual, May 2006

As shown in Table 2.12-4, use of heavy equipment (e.g., a large bulldozer) generates vibration levels of 0.089 inches per second PPV at a distance of 25 feet.

The nearest residential area is greater than 200 feet from the project site. Vibration levels at these receptors would be less than the vibrations building damage threshold of 0.5 inches per second. Short-term construction related vibration impacts would therefore be

less than significant. The TV station north of the site may include vibration sensitive equipment. While no heavy equipment that is known to cause excessive ground vibration would be used during construction, it is still important to take extra precautions to prevent construction efforts from negatively impacting TV station operations. The standard noise control measures included in *Mitigation Measure NOI-1* should be implemented to help protect the TV station. With implementation of *Mitigation Measure NOI-1*, this impact would be **less than significan**t.

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

The project is expected to generate an average of 3,809 trips per day. With average daily traffic counts already greater than 10,000 on area roadways, this project would add less than 40 percent to the traffic numbers. Existing traffic noise modeling based on the traffic data available in the noise element shows DNL/CNEL values in vicinity of the multifamily residential location to the north to be approximately 47 dBA. Applying expected traffic increases due to the project would increase the noise levels on existing nearby residences by less than 1 dBA.

Area noise levels would not be expected to increase significantly due to HVAC or mechanical equipment servicing the project. However, the City's Noise Ordinance specifically states that mechanical and electrical equipment shall have adequate shielding and baffling to meet the noise standards. Therefore, to ensure noise associated with mechanical noise remains less than significant, the project shall implement *Mitigation Measure NOI-2*, which requires that mechanical equipment reviewed by professional acoustical for compliance with noise standards. With implementation of *Mitigation Measure NOI-2*, this impact would be **less than significant**.

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

Short-term noise would be associated with heavy equipment used for the grading and construction of the project. Daytime construction noise levels at the closest residences to the proposed project could at times cause minor annoyance, but the City of Rohnert Park does not have construction noise level limits for construction activity occurring within the period between 8:00 AM and 6:00 PM daily. Therefore, this would be considered a **less than significant impact** provided that the standard noise control measures included in *Mitigation Measure NOI-1* are implemented.

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

The proposed project is not located near a public airport or public use airport. Petaluma Municipal Airport is the closes airport and located approximately over 10 miles away from the proposed project location. There would be **no impact** associated with airport noise.

f) Would the project be within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project is not located near a private airstrip. Graywood Ranch Airport in Santa Rosa is the closest private airstrip and located over 10 miles away from the proposed project location. Accordingly, there would be **no impact** related to airstrip noise exposure.

Mitigation Measures

Mitigation Measure NOI-1 Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the Project in any way would be restricted to the hours of 8:00 a.m. to 6:00 p.m. (Ord. 152 § 3.1, 1971).

- Use available noise suppression devices and properly maintain and muffle loud construction equipment.
- Avoid the unnecessary idling of equipment and stage construction equipment as far as reasonable from residences and radio station north of the site (preferably more than 200 feet from residences).
- Notify adjacent uses of the construction schedule.
- Designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.
- All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating

condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.

- All mobile or fixed noise-producing equipment used on the project that are regulated for noise output by a local, state, or federal agency shall comply with such regulation while in the course of project activity.
- Construction site and access road speed limits shall be established and enforced during the construction period.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners to contact the job superintendent if necessary.

Mechanical Noise is specifically listed in the noise ordinance. The following measure is required to mitigate mechanical noise impacts.

Mitigation Measure NOI-2: Prior to final approval, the mechanical equipment should be reviewed by professional acoustical engineer to ensure the equipment does not produce levels exceeding the noise standards.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

2.13 Population and Housing

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

The project would involve a General Plan amendment and SAMP Final Development Plan amendment to allow for future development of additional high-density residential units within the SAMP. Currently, the SAMP allows for a maximum of 338 housing units. Combined, the existing Fiori Estates and Reserve apartment complexes, both also within the SAMP, account for 328 of those 338 allowable units. The addition of the proposed 135 multifamily units would result in 125 units over what is currently allowed in the SAMP. Accordingly, the proposed SAMP amendment would allow for up to a total of 463 residential units.

The proposed project would generate an increase in population growth by including new residential units. The SAMP EIR, using 2.62 estimated persons per household (the average projected household size in Rohnert Park), calculated that the SAMP, at buildout, would add approximately 886 residents to the City. The EIR determined that the increased population associated with the SAMP would add approximately 12 percent of the new population between 2006 population and General Plan forecast at buildout.

Because the proposed project would add an additional 125 units to the SAMP area, there would be an increase in the total number of residents projected at SAMP buildout. As done in the EIR, assuming 2.62 estimated persons per household, the proposed project would add an additional 328 residents to the SAMP, bringing the total residential population increase associated with buildout of the SAMP to 1,214.

As stated in the EIR, because growth within the City urban boundary was anticipated in the City's General Plan, there are plans and programs to address the potential impacts from population growth. Implementation of the applicable General Plan policies and Growth Management Program would reduce population growth impacts to a **less than significant level.**

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The site does not currently support any housing or residential uses. No housing or residents would be displaced by the proposed project and the project would have **no impact** on housing or require construction of new housing.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Refer to answer provided in 'b' above.

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

2.14 Public Services

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

Fire and police protection?

The City of Rohnert Park Department of Public Safety provides police and fire protection services within the City. The increase in population resulting from development of the project site within the SAMP would result in an increase in the demand for City fire and police protection services. As discussed in the SAMP EIR, the City's acceptable response time for emergency calls is four minutes (City of Rohnert Park, 2007). The SAMP EIR found that the response time to calls in the west side of U.S. 101 is often over four minutes and concluded that additional development associated with buildout of the SAMP would be expected to increase the potential number of calls, and therefore increase response times. Mitigation included in the SAMP EIR (Mitigation Measure 14-1a) required construction of a new Department of Public Safety Station in the northwest area of the City. The proposed project would construct a new Public Safety facility at the designated site within the SAMP, as required by EIR Mitigation Measure 14-1a.

Construction of the station in the SAMP area would be consistent with the SAMP EIR and would ensure that a four-minute response time would be maintained for all areas of the City. Physical environmental impacts related to construction of the proposed project, including the proposed Public Safety facility, are discussed throughout this Initial Study. Implementation of mitigation measures identified throughout this Initial Study would mitigate all potentially significant impacts to **less than significant** levels.

Schools?

Future development of residences at the site would generate students that would attend area schools. The project site is located within the Cotati-Rohnert Park Unified School District (CRPUSD). Estimates included in the SAMP EIR indicate an average student yield of 0.4 elementary school students, 0.1 middle school students, and 0.2 high school students per household, including single and multiple family dwellings. The SAMP EIR calculated that the 338 dwelling units initially included in the Plan would be expected to generate 135 new elementary school students, 34 new middle school students, and 68 new high school students (City of Rohnert Park, 2007).

With the addition of the Residences at Five Creek project and 135 multifamily residential units within the SAMP, the total residential units within the SAMP would increase to 473. Applying the 2016 CRPUSD student generation rates of .1597 elementary school students, 0.0497 middle school students, and .0987 high school students, the expected number of students residing in the SAMP at buildout would be as follows: 76 new elementary school students, 24 new middle school students, and 47 new high school students. These totals are significantly lower than as was projected at the time of preparation of the SAMP EIR.

Currently, the CRPUSD has a current enrollment of 5,855 students and projected enrollment of 6,039 students within the next five years. The existing CRPUSD schools have capacity for up to 8,227 students (CRPUSD, 2016). Accordingly, the students generated by buildout of the SAMP would be accommodated by the existing schools within the CRPUSD.

Under current state legislation, the City cannot deny administrative or quasi-judicial approvals for a development based on the development's adverse impact on school facilities. Pursuant to this legislation, the sole mitigation for such impacts arising from administrative or quasi-judicial development approvals is fees imposed by the affected school district(s). *Mitigation Measure PUB-1* (SAMP EIR Mitigation Measure 14-2a), which requires school impact fees to be paid by developers consistent with fee schedules in place at the time development occurs. Fulfillment of the mitigation fee requirement is

considered full mitigation and would ensure that impacts of student enrollments affecting schools would remain **less than significant**.

Parks and other public facilities?

The SAMP EIR found that development within the SAMP area would not result in a demand for parks and other public facilities to exceed the accepted service standards of the City. However, the proposed project would include a greater residential population than anticipated in the SAMP EIR. To satisfy the increased demand associated with an increased residential population, the project proposes to construct a 0.65-acre neighborhood park adjacent to the proposed multifamily residences, at the corner of Carlson Avenue and Dowdell Avenue. The project also includes facilities including a pool and community building. The proposed park and recreational facilities would serve residents at the project site and would ensure that impacts to area parks would be **less than significant**. **No impacts** to other public facilities would be expected with development of the proposed project.

Mitigation Measures

Mitigation Measure PUB-1 (SAMP EIR Mitigation Measure 14-2a, slightly modified): Prior to the issuance of building permits, the City shall require proof of payment of the statutory development fee or the mitigation fee imposed by the Cotati-Rohnert Park school district that serves the SAMP area, as authorized by state law (California Government Code 65995). In accordance with Section 65996 of the State Government Code, the project sponsor shall be required to pay the current school mitigation fees at the time that building permits are issued.

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

2.15 Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Currently, the SAMP allows for a maximum of 338 housing units. The addition of the proposed 135 multifamily units would result in 125 units over what is currently allowed in the SAMP. Accordingly, the proposed SAMP amendment would allow for up to a total of 463 residential units. As was done in the EIR, assuming 2.62 estimated persons per household, the proposed project would add an additional 328 residents to the SAMP. To meet the recreational needs associated with the increased residential population, the proposed project would construct a 0.65-acre neighborhood park adjacent to the proposed multifamily residences, at the corner of Carlson Avenue and Dowdell Avenue. The project also proposes to construct additional facilities at the Residences at Five Creek site, including a pool and community building. Impacts associated with demand on existing and planned recreational facilities would be **less than significant**.

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?

As discussed in criterion 'a' above, the proposed project includes one 0.65-acre neighborhood park adjacent to the proposed Residence at Five Creek multifamily residences and recreational facilities including a pool and community building. Physical environmental impacts related to construction of the proposed project, including the park and recreational amenities, are discussed throughout this Initial Study. Implementation of mitigation measures identified in this Initial Study would mitigate all potentially significant impacts to **less than significant** levels.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☒	☐	☐

2.16 Transportation and Traffic

W-Trans prepared a Traffic Impact Study to analyze the potential traffic impacts that would be associated with the SAMP amendments associated with development of the proposed Residences at Five Creek and City Public Safety and Public Works facility to be located at 5870 Labath Avenue and 405 Martin Avenue in the City of Rohnert Park. The traffic study was completed in accordance with the criteria established by the City of Rohnert Park, and is consistent with standard traffic engineering techniques. This report, which was used to complete the assessment below, is included in Appendix C of this Initial Study.

Transportation Setting – Operational Analysis

The project study area consists of the following intersections:

1. Redwood Drive/Business Park Drive
2. Labath Avenue/Martin Avenue
3. Dowdell Avenue/Martin Avenue
4. Redwood Drive/Martin Avenue
5. Labath Avenue/Rohnert Park Expressway
6. Redwood Drive/Rohnert Park Expressway

Operating conditions during the a.m. and p.m. peak periods were evaluated to determine highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 a.m. and reflects conditions during the home to work or school commute, while the p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

Study Intersections

Redwood Drive/Business Park Drive is a signalized "tee" intersection with protected left-turn phasing on the northbound approach. The eastbound approach includes a right-turn overlap signal phase. A marked crosswalk is provided across the west leg of the intersection.

Labath Avenue/Martin Avenue is an unsignalized "tee" intersection with stop controls on the terminating eastbound approach.

Dowdell Avenue/Martin Avenue currently serves as a through street for vehicles traveling from westbound Martin Avenue to northbound Dowdell Avenue. The proposed project would extend Martin Avenue to Labath Avenue, which would add a new western leg, resulting in a four-legged, all-way stop-controlled intersection at Dowdell Avenue/Martin Avenue.

Redwood Drive/Martin Avenue is a four-legged signalized intersection with protected left-turn phasing on the northbound and southbound Redwood Drive approaches. The eastbound Martin Avenue approach includes a right-turn overlap signal phase. Marked crosswalks and pedestrian phasing are provided at each leg of the intersection.

Labath Avenue/Rohnert Park Expressway is a signalized, four-legged intersection, with protected left-turn phasing on all approaches, and right-turn overlap signal phases on the eastbound and westbound approaches. Crosswalks with pedestrian phasing are present on all legs of the intersection.

Redwood Drive/Rohnert Park Expressway is a four-legged signalized intersection with protected left-turn phasing on all approaches. The northbound and eastbound approaches include right-turn overlap signal phases. Marked crosswalks and pedestrian phasing are provided at each leg.

The locations of the study intersections and the existing lane configurations and controls are shown Figure 1 of the Traffic Impact Study (included as Appendix C of this Initial Study).

Alternative Modes

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps provide access for pedestrians in the vicinity of the proposed project site; however, sidewalk gaps, obstacles, and barriers can be found along some or all of the roadways connecting to the project site. Existing gaps and obstacles along the connecting roadways impact convenient and continuous access for pedestrians and present safety concerns in those locations where appropriate pedestrian infrastructure would address potential conflict points.

Continuous sidewalk coverage is provided on the west side of Labath Avenue, across from the project site. On the east side of Labath Avenue there are no sidewalks, apart from a small section spanning 360 feet adjacent to a parking lot on the northwest corner of the project site. Additionally, a pedestrian crosswalk exists on the south leg of the intersection of Dowdell Avenue/Carlson Avenue. Though there is one crosswalk, the intersections of Dowdell Avenue/Carlson Avenue, Labath Avenue/Carlson Avenue, and Labath Avenue/Martin Avenue have curb ramps at each leg. Street lighting is provided on Dowdell Avenue to the east of the project site, on Labath Avenue to the west, and on Carlson Avenue, which runs along the northern edge of the project site.

Bicycle Facilities

The Highway Design Manual, California Department of Transportation (Caltrans), 2012, classifies bikeways into three categories:

- Class I Multi-Use Path – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- Class II Bike Lane – a striped and signed lane for one-way bike travel on a street or highway.
- Class III Bike Route – signing only for shared use with motor vehicles within the same travel lane on a street or highway.

Guidance for Class IV Bikeways is provided in *Design Information Bulletin Number 89: Class IV Bikeway Guidance (Separated Bikeways/Cycle Tracks)*, Caltrans, 2015.

- Class IV Separated Bikeway/Cycle Track – a bikeway for the exclusive use of bicycles that requires physical separation such as grade differences, flexible posts, inflexible physical barriers, or on-street parking between the bikeway and through vehicular traffic.

In the project area, Class II bike lanes exist on Dowdell Avenue, as well as along Redwood Drive and Rohnert Park Expressway. The Hinebaugh Creek path runs along the southern boundary of the site, connecting Redwood Drive to Rohnert Park Expressway. There are no other bicycle facilities present within the study area. However, a Class II bike lane is planned for Labath Avenue, which borders the western edge of the project site.

Transit Facilities

Sonoma County Transit (SCT) provides regional transit service between Rohnert Park and surrounding Sonoma County communities. SCT Route 44 provides service to the project area and has four stops on Labath Avenue. One northbound and one southbound stop are located on Labath Avenue near the Hinebaugh Creek trailhead, southwest of the project site, and across form North Bay Industries, which is northwest of the project site.

Route 44 operates Monday through Friday with approximately one-hour headways between 5:30 a.m. and 10:30 p.m. Weekend service for Route 44 does not operate within the project area.

Two to three bicycles can be carried on most SCT buses. Bike rack space is on a first come, first served basis. Additional bicycles are allowed on SCT buses at the discretion of the driver.

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. SCT Paratransit is designed to serve the needs of individuals with disabilities within Rohnert Park and Sonoma County.

Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents

forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using methodologies published in the Highway Capacity Manual (HCM), Transportation Research Board, 2010. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The Levels of Service for the intersections with side street stop controls, or those which are unsignalized and have one or two approaches stop-controlled, were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a level of service for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

Dowdell Avenue/Martin Avenue was analyzed using the "All-Way Stop-Controlled" Intersection methodology from the HCM for all plus Project scenarios. This methodology evaluates delay for each approach based on turning movements, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole, and is then related to a Level of Service.

The study intersections that are currently controlled by a traffic signal were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether or not the signals are coordinated, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology.

The ranges of delay associated with the various levels of service are indicated in Table 2.16-1.

Table 2.16-1 Intersection Level of Service Criteria

LOS	Two-Way Stop-Controlled	Signalized
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to

	two vehicles on the side street.	stop.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Source: W-Trans (2016) citing Highway Capacity Manual, Transportation Research Board, 2000

Traffic Operation Standards

The applied thresholds of significance for intersection impacts are based on those included in Policy TR-1 of the Rohnert Park 2020 General Plan, which stipulates that LOS C is the minimum acceptable standard. Policy TR-1 also indicates that intersections operating at LOS D or lower at the time a development application is submitted are allowable, so long as the development results in no further LOS reduction, and provided that no feasible improvements exist to improve the LOS.

Existing Conditions

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the a.m. and p.m. peak periods. This condition does not include project-generated traffic volumes. Volume data was collected in June 2016 (W-Trans, 2016).

Intersection Levels of Service

Under existing conditions, all study intersections are operating in accordance with minimum acceptable standards as set forth in LOS C except Redwood Drive/Rohnert Park Expressway, which operates at LOS D during the p.m. peak hour. A summary of the existing intersection level of service calculations is contained in Table 2.16-2. The Traffic Impact Study (included in Appendix C of this Initial Study) provides the existing traffic volumes in Figure 2 and provides copies of the Level of Service calculations in Appendix A.

Table 2.16-2 Existing Peak Hour Intersection Levels of Service

Study Intersection *Approach*	AM Peak		PM Peak	
	Delay	LOS	Delay	LOS
1. Redwood Dr/Business Park Dr	6.0	A	6.4	A
2. Labath Ave/Martin Ave	2.9	A	2.7	A
Eastbound (Martin Ave) approach	*9.3*	*A*	*10.4*	*B*
3. Dowdell Ave/Martin Ave	N/A	N/A	N/A	N/A
4. Redwood Dr/Martin Ave	8.4	A	13.0	B
5. Labath Ave/Rohnert Park Exp	18.9	B	24.6	C
6. Redwood Dr/Rohnert Park Exp	32.9	C	45.9	D

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics*; **Bold** text = deficient operation.
Source: W-Trans, 2016

Baseline Conditions

Baseline operating conditions were developed to include trips from the approved project, "The Reserve," north of the project site, which includes plans for 84 apartment units, added to the existing volumes. Under these conditions, all study intersections are expected to operate acceptably, except Redwood Drive/Rohnert Park Expressway, which would continue to operate unacceptably at LOS D during the p.m. peak hour. These results are summarized in Table 2.16-3 below. Baseline volumes are shown in Figure 3 of the Traffic Impact Study (included in Appendix C to this Initial Study).

Table 2.16-3 Baseline Peak Hour Intersection Levels of Service

Study Intersection *Approach*	AM Peak		PM Peak	
	Delay	LOS	Delay	LOS
1. Redwood Dr/Business Park Dr	6.1	A	6.5	A
2. Labath Ave/Martin Ave	2.9	A	2.7	A
Eastbound (Martin Ave) approach	*9.3*	*A*	*10.4*	*B*
3. Dowdell Ave/Martin Ave	N/A	N/A	N/A	N/A
4. Redwood Dr/Martin Ave	8.6	A	13.5	B
5. Labath Ave/Rohnert Park Exp	19.0	B	24.7	C
6. Redwood Dr/Rohnert Park Exp	33.4	C	46.2	D

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics*; **Bold** text = deficient operation.
Source: W-Trans, 2016

a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in Trip Generation Manual, 9th Edition, 2012 for "Apartment" (ITE LU 220), "Hotel" (ITE LU 132), and a combination of "Specialty Retail" (ITE LU 826) and "Shopping Center" (ITE LU 820) land uses. The hotel was assumed to be at 100 percent occupancy to reflect worst-case conditions. "City Park" rates from the San Diego Association of Governments (SANDAG) 2003 Land Development Code Trip Generation Manual were used to determine park trips. For the Public Safety and Public Works uses, which are anticipated to include a fire station and public works maintenance-related uses, the "General Light Industrial" (ITE LU 181) land use rates were determined to best match the type of activities that would occur at this site.

The expected trip generation potential for the proposed project is indicated in Table 2.16-4. The project is expected to generate an average of 3,809 trips per day, including 220 trips during the a.m. peak hour and 297 during the p.m. peak hour.

Table 2.16-4 Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Residences at Five Creek Site											
Apartments	135 du	6.65	898	0.51	69	14	55	0.62	84	54	30
Hotel	132 occ. Room	8.92	1,177	0.67	88	51	37	0.70	92	45	47
Retail	34.3 ksf	44.32	1,520	0.96	33	20	13	2.71	93	41	52
Park	0.65 ac	50.0	33	6.50	4	2	2	4.50	3	2	1
Total			3,628		194	87	107		272	142	130
Public Safety/Public Works Site											
Institutional	60 emp	3.02	181	0.44	26	22	4	0.41	25	5	20
Total Trips			3,089		220	109	111		297	147	150

Note: du = dwelling unit; ksf = 1,000 square feet; occ rm = occupied room; ac = acres; emp = employees
Source: W-Trans, 2016

Stadium Area Master Plan Trip Generation Assumptions

The SAMP area consists of the proposed project site as well as the existing Fiori Estates apartment project to the north of the project site, which includes 244 apartments, and the approved 84-unit apartment complex, The Reserve, northeast of the project site. The development assumptions in the SAMP were compared to the actual and planned buildout of the SAMP planning area. The SAMP assumed the stadium area site to be comprised of a 175,000 square foot shopping center and 312 apartment units. With these assumptions applied, the total projected generation included 10,108 daily trips with 339 trips during the a.m. peak hour and 936 trips during the p.m. peak hour. A summary of the SAMP trip generation is provided in Table 15-9 of the SAMP EIR. The total buildout of the SAMP accounting for the currently-proposed project results in 5,991 total daily trips, with 387 trips in the a.m. peak hour and 500 trips during the p.m. peak hour. Therefore, the actual buildout of the site results in fewer trips than projected in the SAMP, except during the a.m. peak hour when it is projected to generate 48 more trips. However, since a.m. peak hour intersection operations are expected to be better than p.m. peak hour operations under all scenarios, the nominally-higher difference in a.m. trips is not expected to cause any impacts beyond those identified in the more critical p.m. peak hour analysis. Table 2.16-5 summarizes the net difference in trips for the original SAMP versus that associated with the SAMP area after adjusting for the proposed project.

Table 2.16-5 Trip Generation Comparison

Land Use	Daily	AM Peak Hour	PM Peak Hour
Stadium Area Master Plan	10,108	339	936
Total Buildout of proposed project	5,991	387	500
Net Difference	-4,117	48	-463

Source: W-Trans, 2016

Since future conditions were evaluated in the SAMP EIR with higher trip generation projections for overall trips and PM peak trips, the “future conditions” analysis provided in the SAMP EIR can reasonably be expected to reflect conditions with the project as currently proposed and no further analysis is required.

Trip Distribution

The pattern used to allocate new project trips to the street network was based on distributions used in the SAMP and previous traffic studies conducted for projects in the area. The applied distribution assumptions and resulting trips are shown in Table 2.16-6.

Table 2.16-6 Trip Distribution Assumptions for New Trips

Route	Percent	Daily Trips	AM Trips	PM Trips
Redwood Dr north of Business Park Dr	32%	1,219	70	95
Labath Ave north of Martin Ave	6%	229	13	18
Martin Ave west of Labath Ave	2%	76	8	6
Rohnert Park Exp west of Labath Ave	6%	229	13	18
Labath Ave south of Rohnert Park Exp	4%	152	9	12
Redwood Dr south of Rohnert Park Exp	15%	571	33	45
Rohnert Park Exp east of Redwood Dr	35%	1,333	77	104
TOTAL	100%	3,809	223	297

Source: W-Trans, 2016

Intersection Operation

Existing plus Project Conditions

Upon the addition of project-related traffic to the existing volumes, the study intersections are expected to operate in accordance with minimum acceptable standards as set forth in LOS C except Redwood Drive/Rohnert Park Expressway, which is expected to continue operating at LOS D during the p.m. peak hour. Project traffic volumes are shown in Figure 4 of the Traffic Impact Study (Appendix C to this Initial Study), and the resulting levels of service are summarized in Table 2.16-7 below.

Table 2.16-7 Existing and Existing Plus Project Peak Hour Intersection Levels of Service

Study Intersection *Approach*	Existing Conditions				Existing Plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Redwood Dr/Business Park Dr	6.0	A	6.4	A	6.3	A	6.7	A
2. Labath Ave/Martin Ave	2.9	A	2.7	A	3.0	A	3.0	A
Eastbound (Martin Ave) approach	*9.3*	*A*	*10.4*	*B*	*9.7*	*A*	*11.0*	*B*
Westbound (Martin Ave) approach	*N/A*	*N/A*	*N/A*	*N/A*	*12.9*	*B*	*13.9*	*B*
3. Dowdell Ave/Martin Ave*	N/A	N/A	N/A	N/A	8.1	A	8.6	A
4. Redwood Dr/Martin Ave	8.4	A	13.0	B	9.0	A	15.0	B
5. Labath Ave/Rohnert Park Exp	18.9	B	24.6	C	19.3	B	25.3	C
6. Redwood Dr/Rohnert Park Exp	32.9	C	45.9	D	33.9	C	46.8	D

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in italics; Bold text = deficient operation; *plus project scenario assumes all-way stop controls (see Site Access section for details on intersection configuration)
Source: W-Trans, 2016

As shown in Table 2.16-7 above, the study intersections are expected to continue operating in accordance with minimum acceptable standards as set forth in LOS C upon the addition of project-generated traffic, except for the intersection of Redwood

Drive/Rohnert Park Expressway, which would continue operating at LOS D during the p.m. peak hour. Since project-generated trips do not cause further reductions in levels of service at this intersection, impacts would be less than significant.

Baseline plus Project Conditions

With project-related traffic added to Baseline volumes, all study intersections are expected to operate in accordance with minimum acceptable standards as set forth in LOS C, except Redwood Drive/Rohnert Park Expressway, which would continue to operate at LOS D during the p.m. peak hour. These results are summarized in Table 2.16-8 below.

Table 2.16-8 Baseline and Baseline plus Project Peak Hour Intersection Levels of Service

Study Intersection *Approach*	Baseline Conditions				Baseline Plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Redwood Dr/Business Park Dr	6.0	A	6.5	A	6.4	A	6.8	A
2. Labath Ave/Martin Ave	2.9	A	2.7	A	3.0	A	3.0	A
Eastbound (Martin Ave) approach	*9.3*	*A*	*10.4*	*B*	*9.8*	*A*	*11.0*	*B*
Westbound (Martin Ave) approach	*N/A*	*N/A*	*N/A*	*N/A*	*13.2*	*B*	*14.0*	*B*
3. Dowdell Ave/Martin Ave*	N/A	N/A	N/A	N/A	8.2	A	8.8	A
4. Redwood Dr/Martin Ave	8.6	A	13.5	B	9.1	A	15.3	B
5. Labath Ave/Rohnert Park Exp	19.0	B	24.7	C	19.3	B	25.4	C
6. Redwood Dr/Rohnert Park Exp	33.4	C	46.2	D	34.2	C	46.9	D

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in italics; Bold text = deficient operation; *plus project scenario assumes all-way stop controls (see Site Access section for details on intersection configuration)
Source: W-Trans, 2016

As shown in Table 2.16-8 above, the study intersections are expected to operate in accordance with minimum acceptable standards as set forth in LOS C with the addition of project-generated trips, except Redwood Drive/Rohnert Park Expressway, which would continue operating at LOS D during the p.m. peak hour. Since the LOS at Redwood Drive/Rohnert Park Expressway is not being further reduced by the proposed project, the impacts are considered to be less than significant (W-Trans, 2016).

Pedestrian Facilities

Given the proximity of adjacent shopping centers, residential neighborhoods, and recreational facilities near the project, project residents, patrons, and employees would want to walk, bicycle, and/or use transit to reach the site. The Traffic Impact Study

prepared for the proposed project found pedestrian facilities serving the project site to be adequate (W-Trans, 2016).

Transit

The Traffic Impact Study concluded that existing transit routes are adequate to accommodate project-generated transit trips. Existing stops are within acceptable walking distance of the site (W-Trans, 2016).

Bicycle Facilities

Existing bicycle facilities, including Class II bike lanes on Dowell Avenue and the Hinebaugh Creek trail, as well as the proposed Class II lane on Labath Avenue, would provide bicycle access to the project site. Chapter 17.16.140 of Rohnert Park's Municipal Code stipulates the number of bicycle parking spaces required for new development. For multifamily residential, one bicycle per four dwelling units is required and one bicycle space for every 15 off-street vehicle parking spaces is required for commercial uses. Based on these standards, the proposed project would need to provide 34 bicycle parking spaces for the residential units. The hotel is planned to include 139 vehicle parking spaces, which results in a bicycle parking requirement of nine spaces. The proposed retail plans to provide 125 vehicle parking spaces, which equates to eight required bicycle spaces. *Mitigation Measure TRA-1*, which would require the project to include 34 onsite bicycle spaces, would ensure that the project complies with the City zoning code and this impact remains **less than significant**.

b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No applicable congestion management plan exists. Therefore, the proposed plan would not conflict with an applicable congestion management program for designated roads or highways. Therefore, this impact would be **less than significant**.

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

The proposed project would not result in a change in air traffic patterns, including either an increase in air traffic levels or a change in location that would result in substantial safety risks during construction or operation. The closest airports are the Sonoma County Airport and Petaluma Municipal Airport, both more than 10 miles from the project area.

There would be no safety risks associated with proximity to airports; therefore, **no impact** would occur.

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

The site would be accessed by new driveways along Dowdell Avenue, Carlson Avenue, Labath Avenue, and the project-constructed extension of Martin Avenue from Dowdell Avenue to Labath Avenue. All access points would be located on straight segments and/or at public intersections where clear lines of sight exist.

Martin Avenue/Dowdell Avenue Intersection

The intersection of Martin Avenue/Dowdell Avenue is currently configured such that movements between the north (Dowdell Avenue) and east (Martin Avenue) legs are uncontrolled, with the southern "leg" serving as a driveway to Ashley Furniture. The proposed project would extend Martin Avenue, creating a new west intersection leg. As a result, a new traffic control scheme would be required to assign right-of-way. The SAMP document, amended November 26, 2013, states that "the intersection of Martin and Dowdell Avenues is assumed to be a landscaped intersection also known as a modern roundabout. The final circulation plan will be reviewed upon application for a specific development" (p. 10).

Based on the Traffic Impact Study completed for the project, the intersection would be expected to operate acceptably at LOS B or better with either a roundabout or all-way stop controls, even under a tested hypothetical scenario in which "baseline plus project" traffic volumes increase by an additional 50 percent in the future. The Traffic Impact Study concluded that installation of a roundabout (or signals) would not be needed to maintain acceptable LOS; however, compared to all-way stop controls, a roundabout would provide smoother traffic flow, result in lower emissions, and better accommodate the dominant traffic flows between the north and east intersection legs (W-Trans, 2016).

Mitigation Measure TRA-2, which would require the project to install either a roundabout or all-way stop-controls at the intersection of Martin Avenue/Dowdell Avenue, would ensure potential intersection impacts remain **less than significant**.

Martin Avenue

The existing segment of Martin Avenue between Redwood Drive and Dowdell Avenue includes two lanes in each direction east of the Costco driveway, and one lane in each direction with a center turn lane to the west. The two westbound Martin Avenue lanes

merge to a single lane just beyond the Costco driveway. Once Martin Avenue is extended west beyond the Martin Avenue/Dowdell Avenue intersection, the Traffic Impact Study prepared for the project recommends that the westbound Martin Avenue merge be eliminated, and the outer through lane extended to become a right-turn lane at the Dowdell Avenue intersection (assuming that all-way stop-controls are implemented at Martin Avenue/Dowdell Avenue). The report further concluded that sufficient curb-to-curb width exists on Redwood Drive to achieve this configuration (W-Trans, 2016). *Mitigation Measure TRA-3* would require that Martin Avenue restriped to include dual westbound lanes between the Costco driveway and Dowdell Avenue, with the outer through lanes becoming a right-turn lane at the Dowdell Avenue intersection. Implementation of *Mitigation Measure TRA-3* would ensure impacts on this segment of Martin Avenue remain **less than significant**.

e) Would the project result in inadequate emergency access?

As discussed in the SAMP EIR, emergency access to the SAMP could take place via several interconnected routes including Business Park Drive, Martin Avenue, and Labath Avenue. All internal streets would be developed to the City's public street standards and would accommodate emergency vehicle circulation. The project proposes to construct a new Public Safety facility, as required in the SAMP EIR. As discussed above, in Section XIII Public Services, impacts resulting from response times to the project would be reduced to **less than significant** with construction and operation of this station.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Refer to the answer provided in 'a' above.

Mitigation Measures

Mitigation Measure TRA-1: The project shall provide a minimum of 34 onsite bicycle spaces for the residential units, 9 spaces for the hotel, and 8 spaces for the retail space.

Mitigation Measure TRA-2: As recommended in the Traffic Impact Study (W-Trans, 2016), the project shall project to install either a roundabout or all-way stop-controls at the intersection of Martin Avenue/Dowdell Avenue

Mitigation Measure TRA-3: Martin Avenue shall be restriped to include dual westbound lanes between the Costco driveway and Dowdell Avenue, with the outer through lane becoming a right-turn lane at the Dowdell Avenue intersection.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

2.17 Utilities and Service Systems

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

As discussed in Section IX Hydrology and Water Quality, wastewater treatment and disposal are provided by the Santa Rosa Subregional Water Reclamation System, which also serves the cities of Santa Rosa, Sebastopol, and Cotati. Wastewater from the Subregional System is treated at the Laguna Water Reclamation Plant, located about two miles northwest of Rohnert Park. The City owns capacity rights to 3.43 million gallons per day (MGD) at the Laguna Water Reclamation Plant and has an agreement with the City of Santa Rosa to use up to 4.46 MGD of capacity rights. Under the Subregional System's approved Incremental Recycled Water Program, the City can acquire up to 5.15 MGD of capacity (City of Santa Rosa, 2008). The City's current capacity needs are approximately 3.0 MGD, meaning that up to 2.15 MGD of capacity is available to serve new development.

As discussed in the proposed Residences at Five Creek Final Development Plan (KTGY Group, Inc., 2016), the Residences at Five Creek project site, once in operation, would generate approximately 0.15 MGD. The proposed Public Safety and Public Works site, once in operation, would generate approximately 0.08 MGD. Because the capacity required to serve the proposed project would be accommodated by the City's existing approved wastewater capacity and would not result in the need for any new off-site wastewater system expansions, this impact would be **less than significant**.

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The existing water supply facilities are expected to be sufficient to provide an adequate supply of water to meet the current and future demand of the Plan area, which includes the proposed project site. The SAMP EIR concluded that there would be no requirement for additional treatment facilities resulting from buildout of the SAMP, including the project site (City of Rohnert Park, 2007). In addition, the proposed project alone would not require SCWA to increase its existing water entitlements; as discussed in criterion 'd' below, SCWA has an adequate supply to meet the demands associated with the SAMP area. Therefore, the water supply and related facility impacts would be **less than significant**.

Wastewater treatment and disposal is provided by the Santa Rosa Subregional Water Reclamation System. Wastewater from the Subregional System is treated at the Laguna Water Reclamation Plant, located about two miles northwest of Rohnert Park. As discussed in criterion 'a' above, the capacity required to serve the SAMP, including the project site, could be accommodated by the City's existing approved wastewater capacity and would not result in the need for any new off-site wastewater system expansions. Accordingly, wastewater facility impacts would be **less than significant**.

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

The Project site is primarily undeveloped, consisting predominately of vacant land. There is a small paved parking lot in the northwestern corner of the site. The existing topography is relatively flat, gently sloping westerly toward Labath Avenue. This project was included as a tributary to the storm drain system within Labath Avenue, where the site currently drains. An existing 30-inch and 36-inch storm drains collect runoff and

convey flows westerly down Martin and Carlson Avenues, respectively. These storm drains ultimately converge and outlet into Hinebaugh Creek.

As part of the Costco development, a new outfall to Hinebaugh Creek was constructed. The design of this storm drain system did not include the project site or the adjacent Codding parcel site as tributary, thus, this system is at full capacity. The project would, therefore, require the construction of a new system to drain on-site runoff. This system would require a new outfall to Hinebaugh Creek, just west of the existing Labath Avenue Bridge. Construction of the storm water outfall area would consist of keying in riprap underneath and in front of the outfall location to dissipate high flows prior to entering the channel. Directly above the riprap and below the outfall pipe, a gravel sand substrate would be installed for low flow infiltration into the channel. Native backfill would be placed over the pipe once the outfall is constructed to return the channel to its original configuration. The small area of the creek slope that was affected by the outfall and pipe construction would have an erosion mat placed on the topsoil. Seed for grasses would be established on top of the erosion mat, bringing the area disturbed during construction back to its original state.

The new storm drain system would be designed to accept 15.25 acres from the Project, the City's parcel and the Codding parcel for a total tributary area of 17.08 acres. The tributary area is less than one square mile, and would be classified as a minor waterway. The storm drain system would be designed to accommodate the 10-year storm event and would require a 36-inch minimum diameter storm drain.

The City's General Plan Policy HS-5 requires project developers to design and construct storm drains that conform to the Sonoma County Water Agency Flood Control Design Criteria, and encourages the use of environmentally sensitive drainage improvements, including flow reduction and flood bypass systems, to ensure the protection of surface water quality and stream integrity. Construction of new storm drain systems would be required to comply with the Stormwater Phase II regulations administered by the North Coast Regional Water Quality Control Board through permits to the City. Therefore, the project would have a **less than significant** impact related to construction of new stormwater drainage facilities.

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

The City has three water sources: Sonoma County Water Agency (SCWA) supply, local groundwater, and recycled water. The City manages these supplies using a "conjunctive use" strategy, drawing on SCWA and recycled-water supplies first and using its local

groundwater to manage peak demands. The total supply available to the City through these three sources is 11,427 AFY, including 10,077 AFY of potable water and 1,350 AFY of recycled water (City of Rohnert Park, 2016).

Under its contract with SCWA, the City has access to as much as 7,500 AFY, although a number of conditions can limit the SCWA supply. Because of these limitations, the City uses 6,372 AFY as its reliable supply from SCWA under all hydrologic conditions. Over the past 10 years, the City has used between 2,500 and 5,000 AFY of SCWA supply, which is significantly less than its maximum allocation (City of Rohnert Park, 2016).

The City's local groundwater supply is from the Santa Rosa Plain Subbasin of the Santa Rosa Valley Groundwater Basin. The City manages its groundwater supply in accordance with its 2004 Water Policy Resolution, which limits groundwater pumping to 2,577 AFY. The City's 2004 City-wide Water Supply Assessment provides the technical support for this maximum pumping rate. The City participates actively in the implementation of the Santa Rosa Plain Watershed Groundwater Management Plan and is currently working with other water suppliers in the basin to implement the requirements of the Groundwater Sustainability Act of 2014. Modeling and monitoring data collected by the City and others indicate that groundwater levels are generally rising around the City's well field, an indication of stable supply. Over the past 10 years the City has used between 350 and 1,600 AFY of groundwater, significantly less than its policy limitation on groundwater use (City of Rohnert Park, 2016).

As previously discussed, the City's tertiary-treated recycled-water supply is produced by the Santa Rosa Subregional Water Reclamation System. The City and the Subregional System have recently entered into a producer/distributor agreement that provides the City with access to 1,350 AFY of recycled water. The City uses recycled water primarily for irrigation purposes; demand for recycled water has varied between 800 and 1,100 AFY over the past 10 years (City of Rohnert Park, 2016).

The City recently completed its 2015 Urban Water Management Plan Water Demand and Water Conservation Measures Update. This analysis, which is based on Association of Bay Area Governments (ABAG) population and job projections, projects the City's potable water demands through 2040. This demand is expected to range between 5,600 and 6,100 AFY, depending on the level of water conservation undertaken by the City. This projected demand is significantly less than the City's available water supplies. This analysis also indicates that the City has the potential to secure approximately 500 AFY (the difference between 5,600 and 6,100 AFY) by undertaking more aggressive water conservation activities (City of Rohnert Park, 2016).

As concluded in the SAMP EIR, the existing water supply sources are expected to be sufficient to provide an adequate supply of water to meet the SAMP area's current and future demands (City of Rohnert Park, 2007). Buildout of the Plan area, which includes the project site, would not require SCWA to increase its existing water entitlements; as discussed above, SCWA has an adequate supply to meet the demands associated with the proposed project. Impacts associated the water supply for the project would be **less than significant**.

e) Would the project 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?

Refer to the answer provided in 'b' above.

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

The North Bay Corporation provides solid waste disposal and composting of organic materials in the City. The SAMP EIR concluded that the County of Sonoma would be capable of providing the solid waste disposal services necessary to serve the entire SAMP area, including during construction. In addition, the SAMP EIR indicates that the Central Disposal Site Landfill in Sonoma County, planned operate through the year 2050, has adequate capacity to accommodate the SAMP needs (City of Rohnert Park, 2007). Although the project would include more residential units than initially planned for in the SAMP, the project would also result in a reduced amount of commercial and retail uses. Accordingly, the project would not be expected to result in impacts outside of those analyzed in the SAMP EIR and impacts associated with solid waste disposal would be **less than significant** impact.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Assembly Bill (AB) 939 requires the City to develop and implement a solid waste management program. PRC Section 41780(a)(2) also requires cities and counties to divert 50 percent of the solid waste produced within their respective jurisdictions through source reduction, recycling, and/or composting activities. Since 2007, Senate Bill 1016 has required cities to report to the California Integrated Waste Management Board (now known as CalRecycle) the amount of garbage disposed in the landfill per person per day. According to CalRecycle's jurisdiction/disposal rate detail for SCWMA for the 2011 reporting year (CalRecycle, 2013), SCWMA's residential disposal target is 7.1 pounds

per person per day. Rohnert Park's annual residential disposal rate of 3.6 pounds per person per day met this target in 2014. The employee disposal target (18.3 pounds per employee per day) was also met, with an actual employee disposal rate of 10.2 pounds per employee per day. Waste reduction and disposal framework developed by the City and SCWMA would guide any future development in the Plan area. The project would not contain features that would generate waste flows at rates that would exceed typical disposal rates for the City; therefore, this impact would be **less than significant**.

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

2.18 Mandatory Findings of Significance

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

To ensure that the project does not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal, this Initial Study has identified applicable mitigation. Implementation of *Mitigation Measure BIO-1*, which would comply with the federal Migratory Bird Treaty Act and require a nesting bird survey prior the start of any construction, would ensure impacts to special status and migratory birds would be less than significant. *Mitigation Measure BIO-2* would ensure that impacts to water of the US are reduced to a less than significant level as a result of the construction new storm drain outfall in Hinebaugh Creek.

Though there have been no important historic or prehistoric resources identified on the project site, implementation of *Mitigation Measures CUL-1*, *CUL-2*, and *CUL-3* would ensure that the project has a less than significant impact on cultural resources.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The analysis provided throughout this Initial Study demonstrates that the project's contribution to cumulative impacts would be reduced to less than significant levels through mitigation. As such, a finding of "less than significant impact with mitigation," is appropriate for mandatory findings of significance.

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

The analysis provided throughout this Initial Study identifies project impacts that may be potentially significant and identifies mitigation measures that would reduce each impact to a less than significant level. As such, a finding of "less than significant impact with mitigation," is appropriate for mandatory findings of significance.

3 REFERENCES AND PREPARERS

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APPENDIX A

Residences at Five Creek Final Development Plan

APPENDIX B

Air Quality and Greenhouse Gas Emissions Calculations

APPENDIX C

Traffic Impact Study

APPENDIX D

Preliminary Jurisdictional Delineation