**Initial Study/Mitigated Negative Declaration (Draft) for the**

# Permanent Fire Station 5 Rebuild Project

Fire Station on a Vacant Property

Northwestern portion of 1400 Fountaingrove Parkway
City of Santa Rosa, California
October 2021

Prepared by MIG, Inc., Berkeley, CA

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# 1. Project Information

**1.1 Project Title**
Permanent Fire Station 5 Rebuild

**1.2 Lead Agency Name and Address**
City of Santa Rosa, Transportation and Public Works Department
69 Stony Circle
Santa Rosa, CA 95401

**1.3 Contact Person and Phone Number**
Lisa Welsh, Associate Civil Engineer
(707) 543-3909 | lwelsh@srcity.org

**1.4 Project Sponsor Name and Address**
City of Santa Rosa, Transportation and Public Works Department
69 Stony Circle
Santa Rosa, CA 95401

**1.5 General Plan Designation**
Light Industry (IL)

**1.6 Zoning**
Planned Development (PD), Resilient City (RC)

**1.7 Introduction**
This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Public Resources Code section 21000 et. seq. - California Environmental Quality Act (CEQA Statutes), the California Code of Regulations section 15000 et. seq. (CEQA Guidelines), and the regulations and policies of the City of Santa Rosa. The report is intended to inform City of Santa Rosa (City) decision-makers, responsible agencies, and the general public of the Permanent Fire Station 5 Rebuild Project (Project) and its environmental consequences. The City of Santa Rosa is the Lead Agency under CEQA and has prepared this Initial Study to address the environmental impacts of implementing the proposed project. The primary objective of the project is to rebuild a fire station for the Santa Rosa Fire Department, replacing the previous station (in another location) that burned down in 2017 due to the Tubbs Fire.

**1.8 Project Location and Context**
The following section describes the project site location, characteristics, surrounding land uses, and land use designations.

*Location:* See Figure 1. The project site is located in central Sonoma County in the northeastern part of the City of Santa Rosa. The project site is currently undeveloped and does not have a numbered street address. The site is in the northwestern portion of 1400 Fountaingrove Parkway (APN 173-670-022), located at the southeastern corner of the intersection of Fountaingrove Parkway and Stagecoach Road.

*Surrounding Land Uses:* The site has a General Plan designation of Light Industry and is zoned Planned Development (PD) - Resilient City (RC). The RC combining district is intended to facilitate the reconstruction and resilience of areas impacted by the Tubbs and Nuns fires of October 2017 and

the Glass Fire of 2020. The property is bordered by Stagecoach Road on the north and Fountaingrove Parkway to the west. The area surrounding the parcel also burned in the 2017 Tubbs Fire, and rebuilding efforts are underway. North of the project site, a residential neighborhood is being rebuilt. The retirement community called Oakmont of Varenna and a golf club called the Fountaingrove Club are adjacent to the east. Undeveloped land lies adjacent to the south.

*Site Characteristics:* The site totals approximately 2.11 acres and is irregularly shaped, with a rectangular western portion, plus a "panhandle" along Stagecoach Road where a public parking lot is proposed. The proposed fire station would be located in the western, rectangular portion of the project site. Portions of the site were impacted by the 2017 Tubbs Fire which burned several trees that have since been removed.

The site slopes downward from the southern border of the site to Stagecoach Road (northern border), ranging from 528 to 454 feet above mean sea level (MSL), as shown on Figure 2. The only relatively level portion of the site is the northwest corner where the new fire station is proposed. The site slopes down and away from the intersection (southeast) to an unnamed drainage that flows south to north across the northwest corner of the project site before flowing into a culvert under Stagecoach Road and connecting to the West Fork of Paulin Creek downstream of the site. A wetland delineation identified federal and state jurisdictional features that total 0.072 acres, including a perennial stream and in-channel wetlands.

Existing onsite facilities include a gravel access road, a pad-mounted Pacific Gas and Electric (PG&E) transformer, and a drainage ditch with outflow near the panhandle portion of the site.

**1.9 Project Description**

The approximately 2.11-acre project site is in the northwest portion of a larger property located at 1400 Fountaingrove Parkway (APN 173-670-022). The site is currently undeveloped and does not have a separate address listed by the City. The proposed project is called the Permanent Fire Station 5 Rebuild Project (Project). The project rebuilds a former fire station that was located on Newgate Court, approximately 4,000 feet northeast of the project site which burned in 2017 Tubbs Fires. The project is a replacement of a temporary facility located approximately 4,000 feet southeast from the proposed project site at 3480 Parker Hill Road. Development would occur in two areas of the parcel. The western portion of the site would be developed with a new 10,763 square-foot, two-story, fire station building. At its tallest point, the fire station would be 29 feet tall. Additional ground disturbance of up to 1.9 acres of previously disturbed and developed public right of way adjacent to the site for utility connections, and intersection and frontage improvements is also proposed. On the east side of the site (in the panhandle), a paved parking lot with approximately 20 spaces would be developed. Trees and landscaping destroyed by the Tubbs Fire would be removed. Other proposed improvements to support the new fire station include road median and striping improvements, light signalization changes, and relocation of an aboveground PG&E transformer. The existing aboveground PG&E transformer is located the west side of the site along Fountaingrove Parkway. This transformer serves the AT&T Switch Gear Building south of the site, along the existing gravel access road. Project construction would necessitate moving the transformer to a location yet to be determined by PG&E. The site plan is shown on Figures 3 through 5.

The project proposes a new permanent fire station for the Santa Rosa Fire Department that meets the latest design standards for fire safety to provide maximum fire resilience. The new Fire Station 5 is proposed to have the following components:

- Three (3) paved drive through apparatus bays to accommodate a minimum of one (1) Type-1 structural fire engine, one (1) Type-3 wildland fire engine, and one (1) utility vehicle/ hazardous materials response unit.

- Six (6) dorm rooms, with the ability to upstaff firefighters during times of emergency.

- A kitchen, dining area, living room, gym facility, and an office space with three (3) workstations.

- A public lobby area with a multipurpose room to host community meetings, training, and act as a command post during emergencies in the northern area of Santa Rosa.

- A rooftop solar panel array consisting of approximately 36 panels to provide renewable energy; all excess power produced would be circulated back to the grid. The project architect has estimated that this system would produce an average of 21,612 kW hours per year.

- An approximately 11,400 square-foot, paved, visually-screened exterior operations yard which would provide secure vehicle parking, including ten (10) staff parking spaces with two electric vehicle charging spaces, and a staging area. The operations yard would house an above-ground 200-kilowatt emergency diesel generator, a 500-gallon fuel storage tank for fueling fire apparatus with secondary containment, a 1500-gallon fuel storage tank for the emergency generator, a hose drying rack, trash and recycling, security fence/gates, vehicle washing station, and an exhaust removal system. A fitness room would connect outside for outdoor training activities.

*Construction:* Construction is anticipated to begin in January 2023, and last approximately 12 months in total. The project would hire an average of 12 workers per construction phase, with 17 workers during the peak. The phases and approximate durations of construction are estimated below, with equipment:

- Site Preparation: 1 Scraper, 1 excavator, 1 dump truck (4 Days)

- Excavation and Grading: 1 excavator, 4 dump trucks (running in a loop) (10 Days)

- Perimeter Retaining Wall: 1 excavator, 1 dump struck, 2 concrete trucks (50 Days, included with Foundations/Site Walls below)

- Site Utilities: 1 excavator, 1 trencher (10 Days)

- Foundations/Site Walls: 1 roller, 1 plate compactor, 2 concrete trucks (50 Days, included with Perimeter Retaining Wall)

- Preliminary Paving: 2 concrete trucks (10 Days, included with Final Paving)

- Building Construction: 1 crane, 1 forklift, 2 air compressors, 2 generators (150 days)

- Final Paving: 1 paver, 1 dump truck, 1 roller, 1 sweeper (10 Days, included with Preliminary Paving)

*Circulation and Parking*: Fire truck/emergency vehicle ingress and egress would be on the north side of the site onto Stagecoach Road. The project proposes a new cut-through in the existing median to allow vehicles to turn left onto Stagecoach Road. The Santa Rosa Fire Department would control the intersection traffic signal and install new warning lights to alert traffic during emergency calls and

emergency vehicle movement. Returning vehicles would enter the site from Stagecoach Road. The station's east apparatus bay would be back-in only from Stagecoach Road. The truck turning movements are shown on Figure 4, as well as page C4.0 of the site plans (BKF, 2021).

The project would provide four public parking spaces in the southwest corner of the site adjacent to the station, with access from northbound Fountaingrove Parkway. This entrance also would provide access to a service road easement at the southwest of the project site. The parking lot would have an ADA path leading to the sidewalk along Fountaingrove Parkway. The public entry plaza would be located on the corner of Stagecoach Road and Fountaingrove Parkway. Additional public parking with approximately 20 spaces would be located on the eastern portion of the site (panhandle) and would be accessed from Stagecoach Road. Staff parking would be located in the operations yard and would be accessed from Stagecoach Road on a two-way driveway along the eastern edge of the fire station.

*Landscape and Open Space:* The project site has sensitive habitats onsite, including California bay and oak woodland in the southwest corner and a perennial stream through the center portion of the site. The project proposes no development in the wetland area and would avoid the area as explained in the wetland delineation prepared for the project (see section 6.4, Biological Resources, of this Initial Study). The project proposes removal of the sensitive California bay and oak woodland habitat, consisting of approximately 14 trees and would provide a replacement of 70 trees based on the City of Santa Rosa Tree Ordinance requirements. Based on tree diameter thresholds listed in the Tree Ordinance, between four to eleven trees proposed to be removed could be defined as heritage trees. The 70 trees would be planted onsite or offsite at other City properties as needed.

The project includes plans for a new exterior public entry plaza at the corner of Fountaingrove Parkway and Stagecoach Road. The plaza would include a mix of hardscape, street furniture, lighting, and landscape plantings. All landscaping would be low-water-use native plants, where appropriate and feasible, and would also be planted along the road frontages for screening. The existing sensitive habitat area would be avoided by setbacks. The architectural renderings are shown in section 6.1, Aesthetics on Figure 6.

*Grading:* Grading to modify the existing topography is required to facilitate the movement of fire vehicles, and to provide a level foundation for the station. The site has a service road easement at its southwest corner, which would need to be maintained under the proposed project. The project proposes total grading to be approximately 9,000 cubic yards (CY), with cut of approximately 8,500 CY and fill of 500 CY for the entire site. Approximately 250 CY of tree debris would be hauled offsite from tree and stump removal.

*Utilities and Infrastructure:* The site is undeveloped and would require connection to all utilities. The project would connect to the City's existing stormwater drain system and would include Low Impact Development (LID) elements onsite as part of project design, as shown on Figure 5. The project would connect to City water and sewer systems, natural gas, and electricity through the City's grid. Solid waste recycling and trash removal would be provided through City-contracted haulers. Water, waste treatment, storm drainage, PG&E electricity, natural gas, and telecommunication infrastructure would be trenched and connected onsite.

*City Actions/Approvals*: The proposed project would require the following City of Santa Rosa approvals:

- Adoption of the Mitigated Negative Declaration - City Council
- Design Review -Design Review Board prior to Building Permit

- Building/Fire Permits and Plan Check - City of Santa Rosa Planning and Economic Development Department and Santa Rosa Fire Department
- Improvement Plans – City of Santa Rosa Planning and Economic Development Department
- Tree Removal Permit – City of Santa Rosa Planning and Economic Development Department
- Grading Permit – City of Santa Rosa Planning and Economic Development Department
- Land Acquisition – City Council
- Backup Generator Permit – Bay Area Air Quality Management District (BAAQMD)
- Spill Prevention, Control, and Countermeasure Plan (SPCC) Permit – County of Sonoma
- Construction General Permit Order 2009-0009-DWQ – Regional Water Quality Control Board

**Figure 1: Site Location and Vicinity Map**


**Figure 1. Site Location and Vicinity Map**

*Santa Rosa Fire Station 5*

**Figure 2: 3D Model Diagram with Topography**

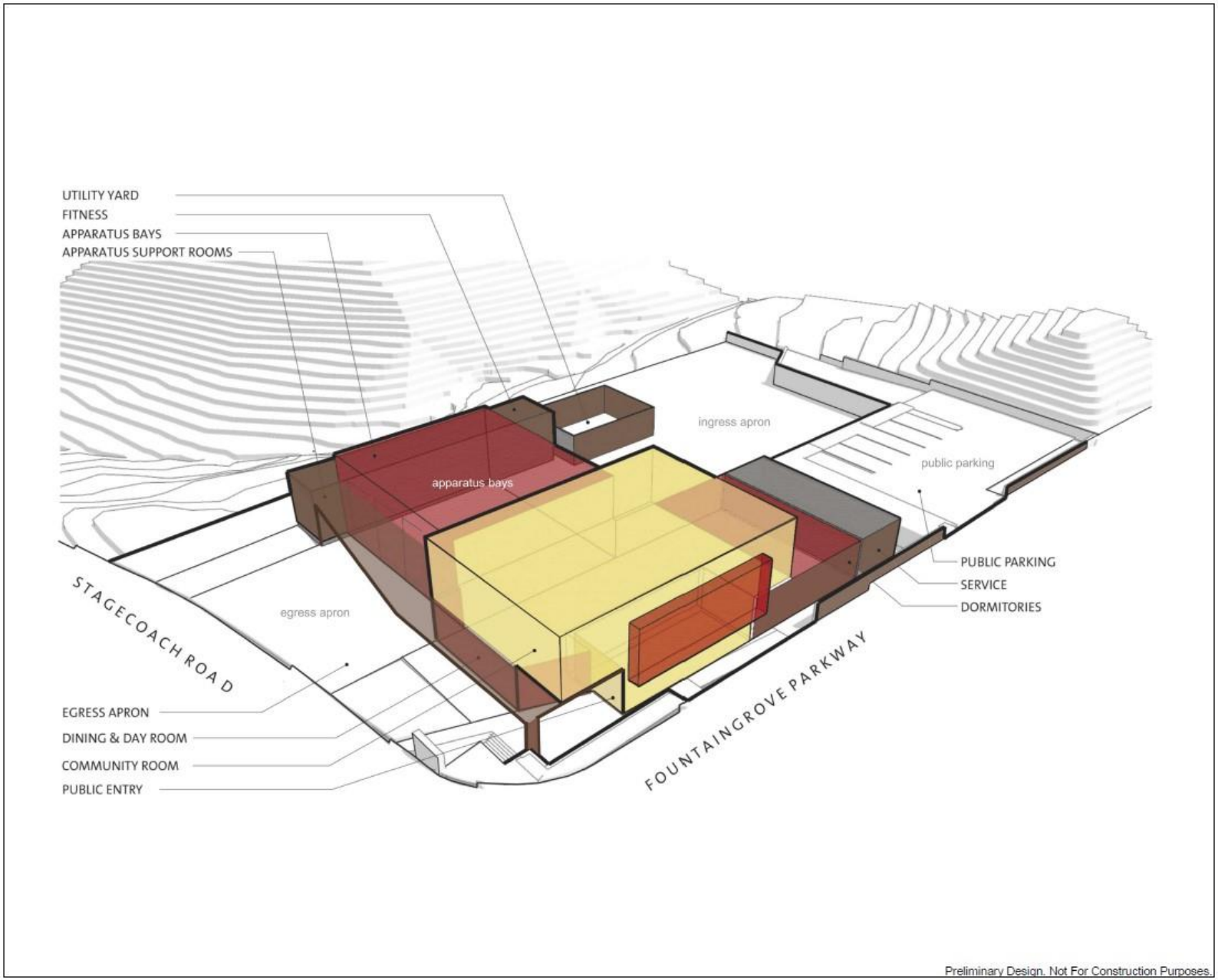


**Figure 3: Overall Site Plan**

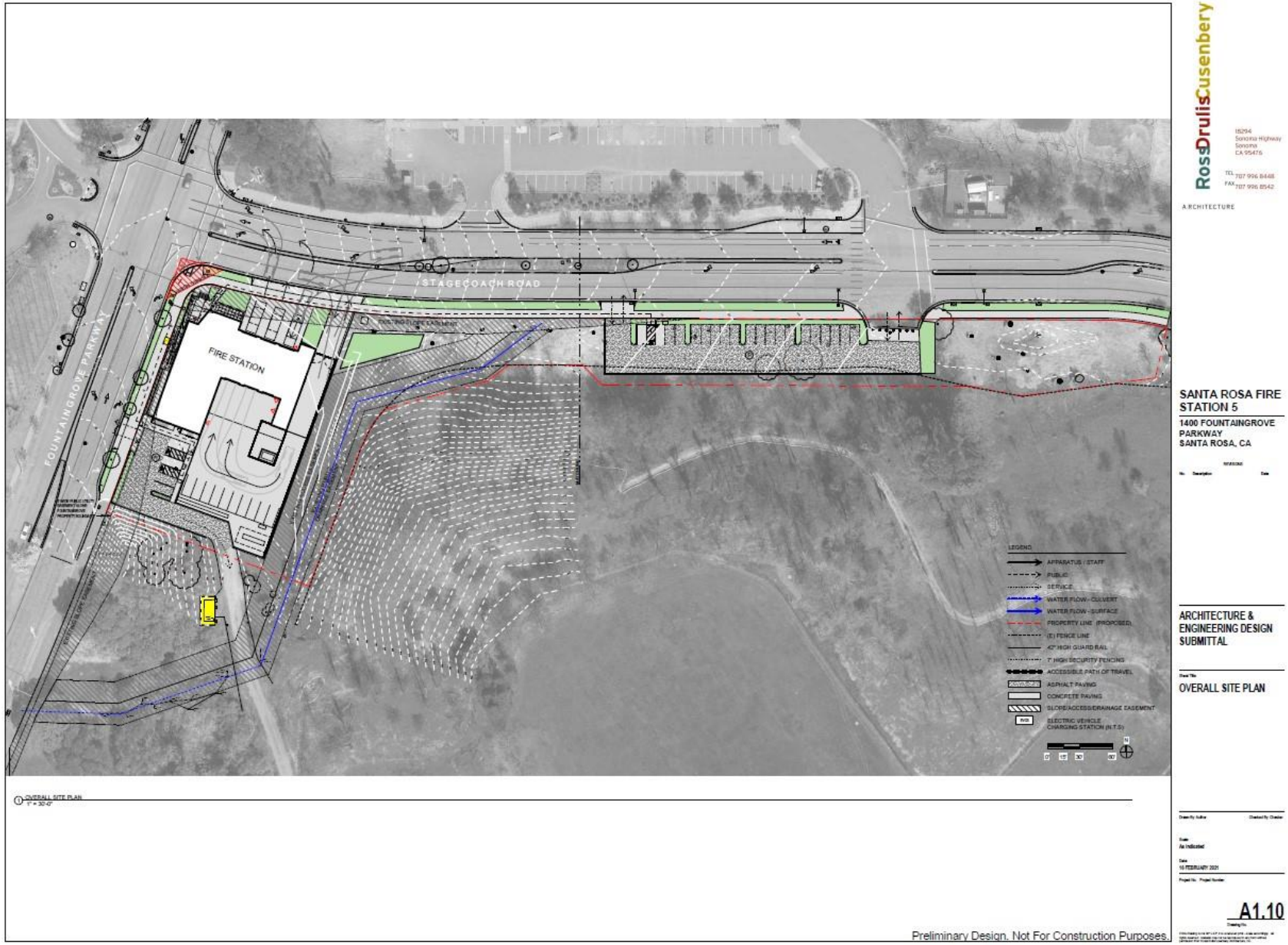


**Figure 4: Overall Site Plan – West**

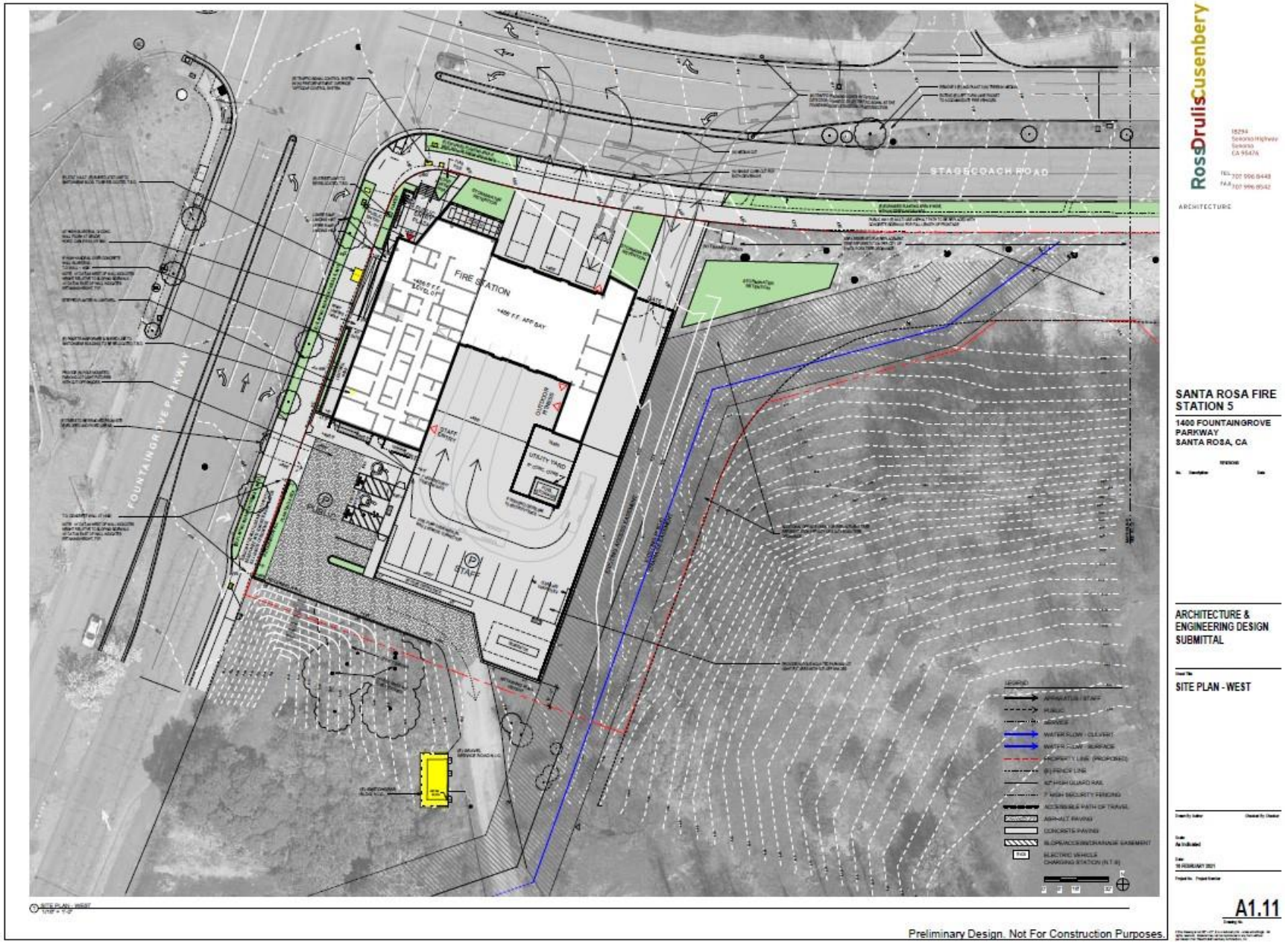


**Figure 5: Overall Site Plan – East**

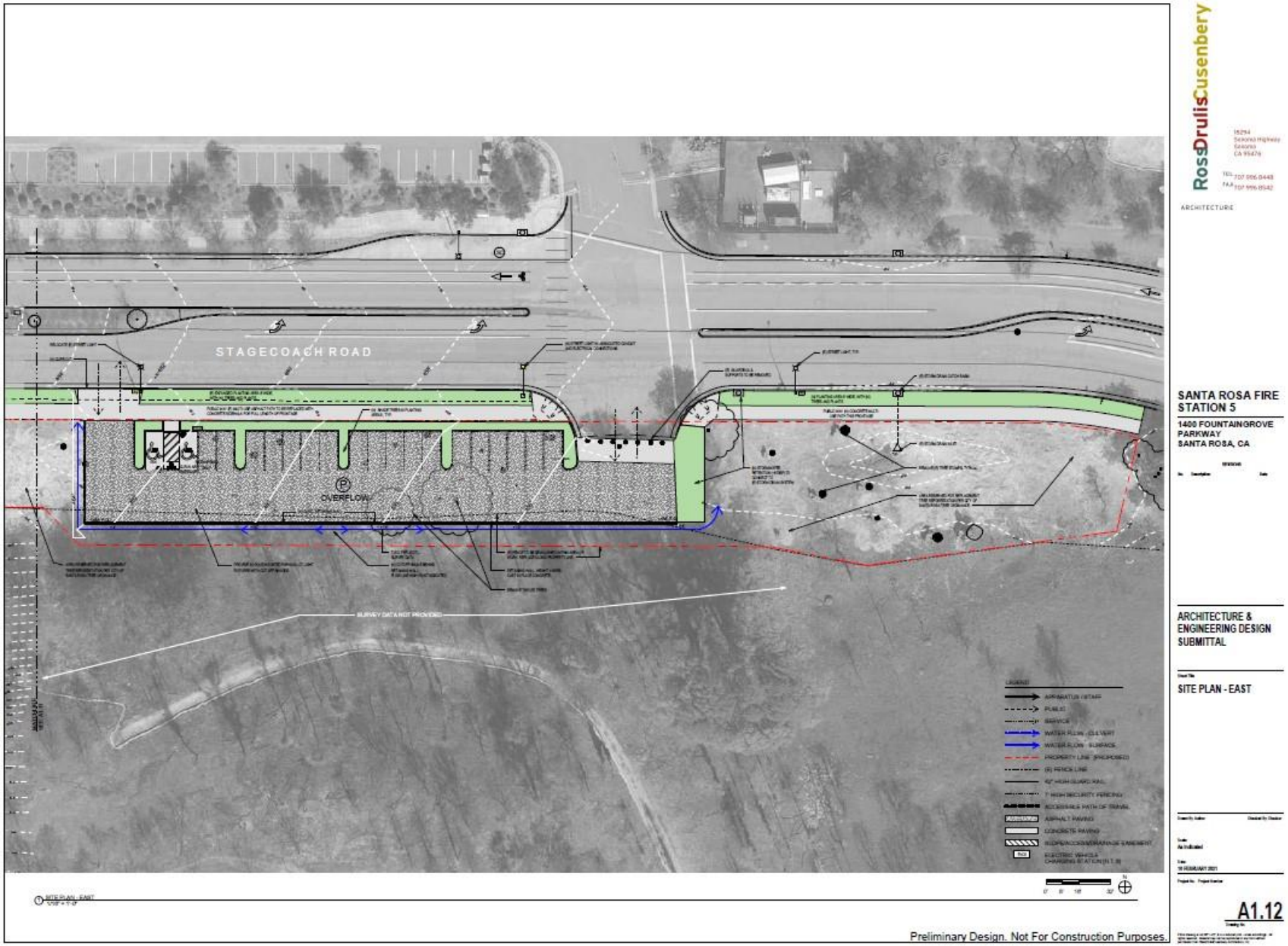


**Figure 6: Truck Turning Movements**

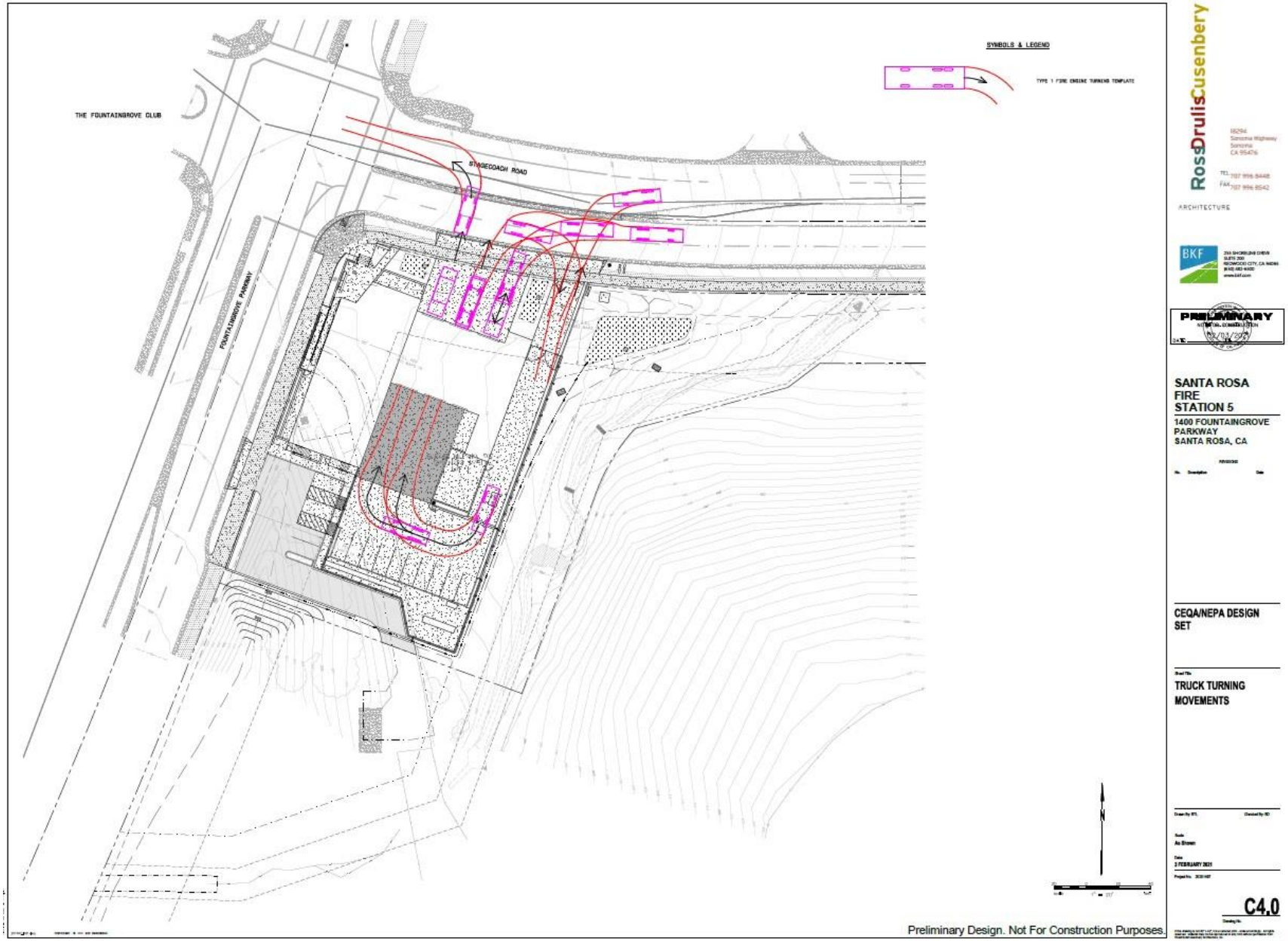
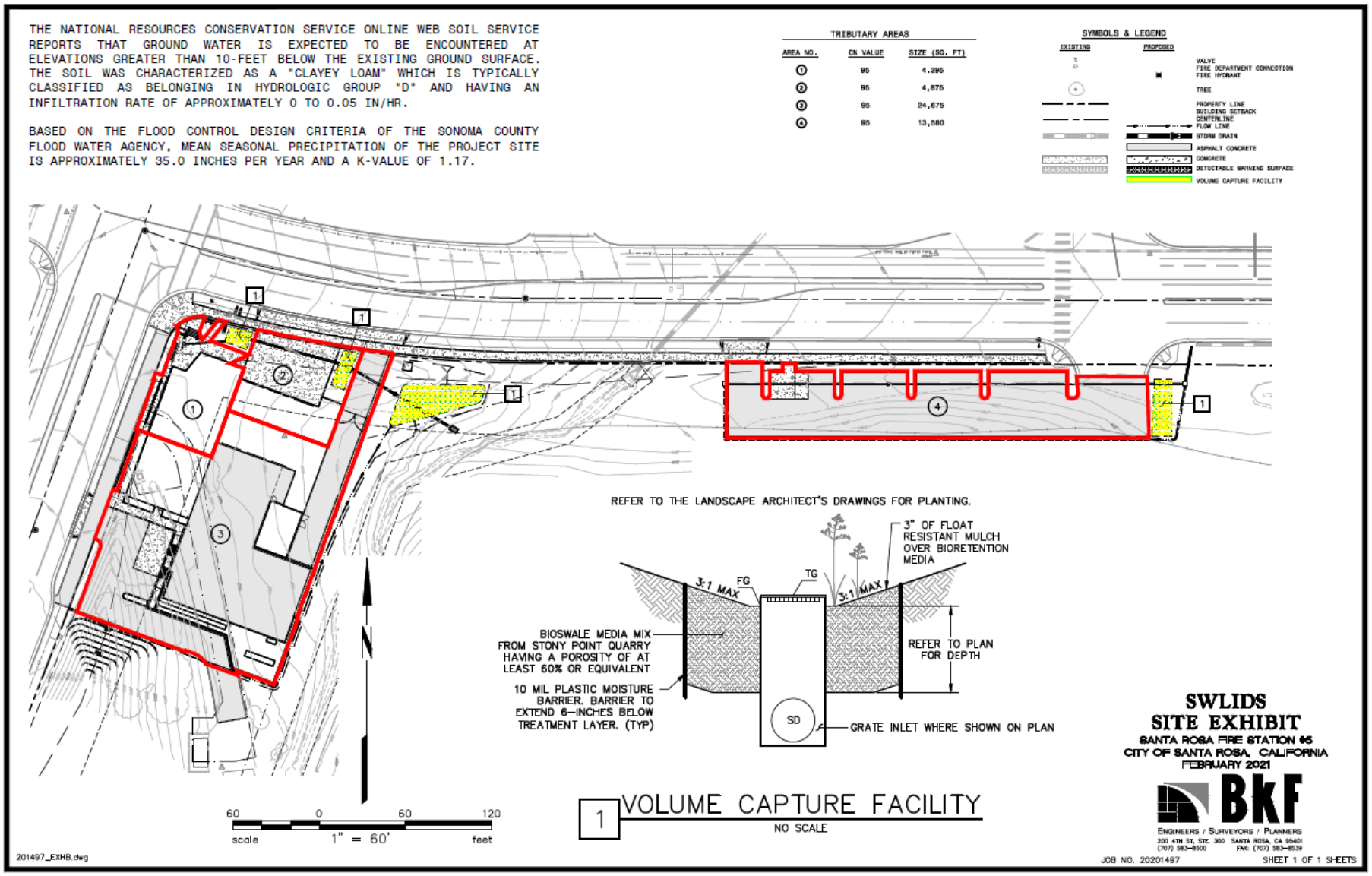


**Figure 7: Low Impact Development (LID) Capture Facilities**



# 2. Summary of Findings: Impacts and Mitigations

Impact findings and mitigation measures identified in the Initial Study checklist and narrative are summarized below. The mitigations listed below are required to reduce potential environmental impacts to less than significant levels and shall be included in the Mitigation Monitoring and Reporting Program prepared for the Project and attached to the Initial Study/Mitigated Negative Declaration for the proposed project.

**Aesthetics**
No significant impacts have been identified; no mitigation is necessary.

**Agricultural and Forestry Resources**
No significant impacts have been identified; no mitigation is necessary.

**Air Quality**
Implementation of the following mitigation measures would ensure impacts are less than significant.

> **Mitigation Measure AIR-1:** To reduce fugitive dust that would be generated during project construction activities, the City and/or its designated contractors, contractor's representatives, or other appropriate personnel to implement the following BAAQMD basic dust control measures.
>
> - Water all exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads) two times per day during construction and adequately wet demolition surfaces to limit visible dust emissions.
> - Cover all haul trucks transporting soil, sand, or other loose materials off the project site.
> - Use wet power vacuum street sweepers at least once per day to remove all visible mud or dirt track-out onto adjacent public roads (dry power sweeping is prohibited) during construction of the proposed project.
> - Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour.
> - Complete all areas to be paved as soon as possible and lay building pads as soon as possible after grading unless seeding or soil binders are used.
> - Minimize idling time of diesel-powered construction equipment to five minutes and post signs reminding workers of this idling restriction at access points and equipment staging areas during construction of the proposed project.
> - Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site.
> - Post a publicly visible sign with the name and telephone number of the construction contractor and City staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the BAAQMD to ensure compliance with applicable regulations.

**Biological Resources**
Implementation of the following mitigation measures would ensure impacts are less than significant.

> **Mitigation Measure BIO-1: Employee Education Program.** An employee education program shall be conducted, consisting of a brief presentation to explain biological resources concerns to

contractors, their employees, and any other personnel involved in construction of the project. The program shall include the following: a description of relevant special-status species and nesting birds along with their habitat needs as they pertain to the project; a report of the occurrence of these species in the vicinity of the project site, as applicable; an explanation of the status of these species and their protection under the federal and state regulations; a list of measures being taken to reduce potential impacts to natural resources, including environmentally sensitive habitats, during project construction and implementation; and instructions if a special-status species is found onsite. A fact sheet conveying this information shall be prepared for distribution to the above-mentioned people and anyone else who may enter the project site. Upon completion of training, employees shall sign a form stating that they attended the training and agree to the conservation and protection measures.

**Mitigation Measure BIO-2: Pre-Construction Survey for Nesting Birds.** To avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (that is, prior to February 1 or after September 15). If construction and construction noise occurs within the avian nesting season (from February 1 to September 15), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000-foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is building a nest, sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented.

If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, as appropriate, until the chicks have fledged. Monitoring shall be required to ensure compliance with relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

**Mitigation Measure BIO-3: General Environmental Protections During Project Construction. (Also see Mitigation Measure GEO-3)**

- During construction staging, travel and parking of vehicles and equipment shall be limited to pavement, existing roads, and previously disturbed areas. Ground disturbance and vegetation removal shall not exceed the minimum amount necessary to complete work at the site.
- Temporary work areas shall be restored with respect to pre-existing contours and conditions upon completion of work. The need for restoration work including re-vegetation and soil stabilization shall be evaluated upon completion of work and performed as needed.

a) The potential for adverse effects to water quality in aquatic habitat within the project site shall be avoided by implementing Best Management Practices (BMPs), and the project shall require a Stormwater Pollution and Prevention Plan (SWPPP) for construction. These BMPs shall be used to minimize any erosion or other sources of water pollution during construction. These suggested BMPs shall be coordinated with standard CASQA regulations required under City of Santa Rosa construction contracts, as administered by, and at the discretion of

the City. Store, handle, and dispose of construction materials and wastes properly to prevent their contact with stormwater.

b) Control and prevent the discharge of all potential pollutants - including solid wastes, paints, concrete, petroleum products, chemicals, wash water, sediment, and non-stormwater discharges - to storm drains and water courses.
c) Avoid cleaning, fueling, or maintaining vehicles on site, except in a designated area in which run-off is contained and treated.
d) Perform clearing and earth moving activities during dry weather to the maximum extent practical.
e) Delineate clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and discharge courses with field markers.
f) Remove spoils promptly and avoid stockpiling fill materials when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.
g) Limit construction access routes and stabilize designated access points.
h) Deposit trash and construction related solid wastes into a covered receptacle to prevent contamination and dispersal by wind.
i) Maintain sanitary facilities on the project site at all times.
j) Take measures to collect or clean any accumulation or deposit of dirt, mud, sand, rocks, gravel, and debris on the surface of any street, alley, or public place or in public storm drain systems. The removal of aforesaid shall be done by street sweeping or hand sweeping. Water shall not be used to wash sediments into public or private drainage facilities.
k) Cease all grading work immediately in the event of rain.
l) Prepare and implement an erosion control plan during the wet season (September 15 through April 15). The following measures are suggested to be included in the plan:
    - During the rainy season, the project site shall be maintained to minimize sediment-laden run-off to any storm drainage system, including existing drainage swales and water courses.
    - Inlet protection shall be installed to prevent sediment from entering the storm drain system where applicable.
    - Weed and net/filament free straw rolls shall be placed at the toe of barren slopes and along the down slope perimeter of the project site to capture sediment in storm runoff.

- Develop a hazardous spill plan prior to construction. The plan shall describe what actions would be taken in the event of a spill. The plan shall also incorporate preventative measures to be implemented, such as vehicle and equipment staging, cleaning, maintenance, and refueling; and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site shall immediately cease until the contractor has contained and mitigated the spill. The contractor shall immediately notify appropriate authorities. Adequate spill containment materials, such as oil diapers and hydrocarbon cleanup kits, shall always be available on site. Containers for storage, transportation, and disposal of contaminated absorbent materials shall be provided at the project site.
- A SWPPP that complies with the statewide General Permit administered by the State Water Board for the National Pollutant Discharge Elimination System shall be developed and implemented to protect the water quality of aquatic habitats that lie in or adjacent to the project site. Appropriate erosion and sediment control and non-sediment pollution control (i.e., sources of pollution generated by construction equipment and material) BMPs shall be prescribed in the SWPPP, and erosion and sediment control material included in the SWPPP shall be certified as weed-free.

- After construction is completed, a final cleanup shall include removal of all stakes, temporary fencing, flagging, and other refuse generated by construction.

**Mitigation Measure BIO-4: General Biological Resource Protections During Project Construction.**

- Tree Protection. Tree protection shall be implemented in compliance with the City's Tree ordinance(s).
- Designation of Work Area. Prior to project activities, a qualified biologist shall clearly delineate any vegetation and/or habitat areas to be avoided near planned project work. Any trees to be preserved must have protective fencing installed in accordance with recommendations of a qualified arborist or biologist.
- Construction Site Sanitation. Food items may attract wildlife onto the construction site, which would expose them to construction-related hazards. The construction site shall be maintained in a clean condition. All trash (e.g., food scraps, cans, bottles, containers, wrappers, and other discarded items) shall be placed in closed containers and properly disposed of.
- Wildlife Entrapment. The contractor shall avoid the use of monofilament netting, including its use in temporary and permanent erosion control materials. All holes greater than one-foot deep must be covered overnight to prevent the entrapment of wildlife. Where holes or trenches cannot be sealed, escape ramps that are no greater than 30 percent slope shall be positioned such that entrapped wildlife shall be able to escape. The escape ramps should be at least one-foot wide and covered/fitted with a material that provides traction.
- Species Discovery. If an animal is found at the work site and is believed to be a protected species, work must halt, and the project biologist shall be contacted for guidance. Care must be taken not to harm or harass the species. No wildlife species shall be handled and/or removed from the project site by anyone except a qualified biologist.

**Cultural Resources**

Implementation of the following mitigation measures would ensure impacts are less than significant.

**Mitigation Measure CUL-1: Conduct Archaeological Sensitivity Training for Construction Personnel.** A qualified professional archaeologist shall be retained who meets U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct an archaeological sensitivity training for construction personnel prior to commencement of excavation activities. The training session shall be carried out by a cultural resource professional with expertise in archaeology, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. The City and/or qualified professional archaeologist shall propose a date for scheduling the training at the pre-construction meeting with City staff. The City shall notify the construction personnel at least 48 hours before holding the training and keep a log of all attendees. The training session shall include a handout and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities, the procedures to be followed in such an event; the duties of archaeological monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation, if one is necessary. The archaeologist shall coordinate with the Federated Indians of Graton Rancheria on the training schedule and content.

**Mitigation Measure CUL-2: Prepare a Cultural Resources Treatment Plan.** Prior to any ground disturbing activities for the proposed project, a qualified archaeologist shall prepare a Cultural Resources Treatment Plan for review by and in consultation with the Federated Indians

of Graton Rancheria and approval by the City. The plan shall address the treatment of any discovered resource, along with subsequent laboratory processing and analysis.

**Mitigation Measure CUL-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered.** In the event archaeological resources are unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated. Ground moving activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. This examination shall be done in coordination with the Tribal Cultural Monitor(s), Tribal Heritage Preservation Officer(s) (THPO). All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. In the event that the newly discovered artifacts are determined to be prehistoric, the Federated Indians of Graton Rancheria and Lytton Rancheria shall be contacted and consulted.

The discovery of prehistoric artifacts shall require that a Tribal Cultural Monitor be present for ground disturbing activities to resume. The specifications for this requirement shall be described in the Cultural Resources Treatment Plan listed in Mitigation Measure **CUL-2.**

A lead agency engages in Consultation with the Local Native American Tribes to identify Tribal Cultural Resources, the significance of Tribal Cultural Resources, and to determine how any resources are to be protected. All Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 and the Treatment Plan described in **CUL-2** shall be followed if any tribal finds are discovered. If appropriate, the archaeologist and THPO may introduce archaeological and Tribal Cultural monitoring on the site. An archaeological report shall be written detailing all archaeological finds and submitted to the City and the Northwest Information Center This shall be done in consultation with the Tribe's THPO.

**Energy**

No significant impacts have been identified; no mitigation is necessary.

**Geology and Soils**

Implementation of the following mitigation measure would ensure impacts are less than significant.

**Mitigation Measure GEO-1: Compliance with California Building Code (CBC).** All construction activities shall meet the CBC regulations as adopted by the City of Santa Rosa. Construction plans shall be subject to review and approval of the City prior to the issuance of grading and building permits, and actual construction shall be subject to inspection by the City.

**Mitigation Measure GEO-2: Submit a Geotechnical Investigation.** A registered engineering geologist or geotechnical engineer shall be retained to prepare detailed, construction-level geotechnical investigations, prior to City issuance of grading permits, to guide the construction of all project grading and excavation activities. The detailed, construction-level geotechnical investigations shall be performed for the development site. Subsurface conditions shall be explored, and laboratory tests conducted on selected soil samples to establish parameters for the design of excavations, foundations, shoring, and waterproofing. Recommendations from the investigations shall be incorporated into all plans for project grading, excavation, soil support (both temporary and long-term), and utility construction, to the satisfaction of the City Engineer.

**Mitigation Measure GEO-3: Erosion and Sediment Control Plan or Stormwater Pollution Prevention Plan. (Also see Mitigation Measure BIO-3)** The Contractor or Design Build Entity shall submit an Erosion and Sediment Control Plan, or Stormwater Pollution Prevention Plan (SWPPP) prepared by a registered professional engineer or qualified stormwater pollution prevention plan developer as an integral part of the grading plan. The Plan shall be subject to review and approval of the City prior to the issuance of a grading permit. The Plan shall include all erosion control measures to be used during project construction and operation, including runoff control, sediment control, and pollution control measures for the entire site to prevent discharge of sediment and contaminants into the drainage system. Post-construction measures include maintenance of the bioretention areas, and vegetative landscaping. The Plan shall include the following measures as applicable:

a) Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas, and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
b) All drainage ways, wetland areas, and stream areas shall be protected from silt and sediment in storm runoff using appropriate Best Management Practices (BMPs) such as silt fences, diversion berms, and check dams. Fill slopes shall be stabilized and covered when appropriate. All exposed surface areas shall be mulched and reseeded. All cut and fill slopes shall be protected with hay mulch and/or erosion control blankets, as appropriate.
c) During construction, all erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15. Construction erosion control measures shall remain in place until the end of the rainy season but may not be removed before April 15. The City and/or Design Build Entity shall be responsible for notifying construction contractors about erosion control requirements.
d) Example design standards for erosion and sediment control include, but are not limited to, the following: avoiding disturbance in especially erodible areas; minimizing disturbance on slopes; using berms, swales, ditches, vegetative filter strips, and catch basins to prevent the escape of sediment from the site; conducting development in increments; and planting bare soils to restore vegetative cover.
e) The City shall also develop an inspection program to evaluate if there is any significant onsite erosion as a result of rainfall. If problems arise at the site after rainfall, the Contractor or Design Build Entity shall enhance methods to manage onsite erosion.

**Mitigation Measure GEO-4: Conduct Paleontological Sensitivity Training for Construction Personnel.** A professional paleontologist who meets the qualifications set forth by the Society of Vertebrate Paleontology shall be retained and shall conduct a paleontological sensitivity training for construction personnel prior to commencement of excavation activities. The City and/or qualified professional paleontologist shall propose a date for scheduling the training at the pre-construction meeting with City staff. The City shall notify construction personnel at least 48 hours before holding the training and keep a log of all attendees. The training shall include a handout and focus on how to identify paleontological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of paleontological monitors, notification, and other procedures to follow upon discovery of resources, and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.

**Mitigation Measure GEO-5: Cease Ground-Disturbing Activities and Implement Treatment**

**Plan if Paleontological Resources Are Encountered.** If paleontological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the City. Work shall be allowed to continue outside of the buffer area. The City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource, along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Paleontological monitoring may be required as part of the treatment plan.

**Greenhouse Gas Emissions**
No significant impacts have been identified; no mitigation is necessary.

**Hazards and Hazardous Materials**
No significant impacts have been identified; no mitigation is necessary.

**Hydrology and Water Quality**
Implementation of **Mitigation Measure GEO-3** would result in less than significant impacts with respect to hydrology and water quality.

**Land Use and Planning**
No significant impacts have been identified; no mitigation is necessary.

**Mineral Resources**
No significant impacts have been identified; no mitigation is necessary.

**Noise**
Implementation of the following mitigation measure would ensure impacts are less than significant.

**Mitigation Measure NOISE-1: Construction Noise Control Best Management Practices:** The City and Design Build Entity shall incorporate the following construction noise best management practices into all applicable project bid, design, and engineering documents:

1) Construction work hours shall be limited to the hours of 7 AM to 7 PM, Monday through Friday, and 8 AM to 6 PM on Saturdays. No construction shall be permitted on Sundays and Federal and state holidays.
2) Heavy equipment engines shall be covered, and exhaust pipes shall include a muffler in good working condition.
3) Stationary equipment such as compressors, generators, and welder machines shall be located as far away from surrounding residential land uses as possible. The project shall connect to existing electrical service at the site to avoid the use of stationary, diesel- or other alternatively-fueled power generators, if feasible.
4) Impact tools such as jack hammers shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. When use of pneumatic tools is unavoidable, it shall be ensured the tool will not exceed a decibel limit of 85 dBA at a distance of 50 feet. Pneumatic tools shall also include a noise

suppression device on the compressed air exhaust.

5) No radios or other amplified sound devices shall be audible beyond the property line of the construction site.

**Population and Housing**

No significant impacts have been identified; no mitigation is necessary.

**Public Services**

No significant impacts have been identified; no mitigation is necessary.

**Recreation**

No significant impacts have been identified; no mitigation is necessary.

**Transportation**

Implementation of the following mitigation measure would ensure impacts are less than significant.

**Mitigation Measure TRANS-1**: The City and Design Build Entity shall review the detailed design plans for the fire station to ensure consistency with General Plan transportation policies T-J-1, T-J-4, T-K-3, T-K-4, T-L-1, T-L-4, T-L-5, and T-L-8.

**Tribal Cultural Resources**

Implementation of **Mitigation Measures CUL-1, CUL-2**, **CUL-3,** and the following mitigation measures would result in less than significant impacts with respect to tribal cultural resources.

**Mitigation Measure TCR-1:** The Design/Build Entity shall provide a weekly construction update to the Tribal Historic Preservation Officer of the Federal Indians of Graton Rancheria during any ground disturbing activities. This update shall include a photo log of the construction.

**Mitigation Measure TCR-2:** An archaeologist on the Federated Indians of Graton Rancheria's preferred list shall be retained to provide spot monitoring of ground disturbing activities.

**Utilities and Service Systems**

No significant impacts have been identified; no mitigation is necessary.

**Wildfire**

No significant impacts have been identified; no mitigation is necessary.

## 3. 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" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist below. No significant impacts would result after mitigation.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Greenhouse Gas Emissions | ☐ Public Services |
| ☐ Agriculture and Forestry | ☐ Hazards & Hazardous Material | ☐ Recreation |
| ☒ Air Quality | ☒ Hydrology/Water Quality | ☒ Transportation/Traffic |
| ☒ Biological Resources | ☐ Land Use/Planning | ☒ Tribal Cultural Resources |
| ☒ Cultural Resources | ☐ Mineral Resources | ☐ Utilities/Service Systems |
| ☐ Energy Resources | ☒ Noise | ☐ Wildfire |
| ☒ Geology and Soils | ☐ Population/Housing | ☒ Man. Findings of Sig |

## 4. Determination

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.

| | |
|---|---|
| Signature | Date |
| Jason Nutt,<br>Assistant City Manager | |
| Printed Name | Date |

# 5. Evaluation of Environmental Impacts

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

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

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

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

*It is noted that many potential environmental impacts can be avoided or reduced through implementation of uniformly applied development policies, standards, or regulations – such as building and fire codes, design guidelines, a noise ordinance, a historic resource ordinance, a tree preservation ordinance, and other requirements that the lead agency applies uniformly toward all project proposals. Consistent with CEQA streamlining provisions (e.g., section 15183), these uniformly applied requirements are not distinguished as project-specific "mitigation measures," primarily because they have already been adopted to avoid or reduce potential environmental impacts of all future project proposals, not only the particular project being evaluated at the moment.*

(5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (CEQA Guidelines section 15063[b][1][c]). 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 Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

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

(9) The explanation of each issue should identify:

(a) The significance criteria or threshold, if any, used to evaluate each question; and

(b) The mitigation measure identified, if any, to reduce the impact to less than significant.

# 6. Issues

### 6.1 Aesthetics

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Except as provided in Public Resources Code Section 21099, 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) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | ✓ | |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ("Glare" is defined in this Initial Study) as the reflection of harsh bright light sufficient to cause physical discomfort or loss in visual performance and visibility.) | | | ✓ | |

**Conclusion:** Regarding aesthetics, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Have a substantial adverse effect on a scenic vista?*** **Less than Significant Impact.** The project site is located in a suburban area of mixed topography, with sloping hills. The site is bordered on the south by private undeveloped property, with suburban single and multifamily residential development to the north, west, and east. The proposed fire station would be bordered by Fountaingrove Parkway on the west, with Stagecoach Road adjacent to the north. The project site is not located near any City- or State-identified scenic vista.

The fire station would be visible from public vantage points along Fountaingrove Parkway and Stagecoach Road. Because the project is not near an identified scenic vista, the project impact would be less than significant.

**b.** ***Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?*** **Less than Significant Impact.** The project site is not located near a State Scenic Highway, but the 2035 Santa Rosa General Plan Transportation Element has recognized the scenic character of Fountaingrove Parkway by designating the highway as a Scenic Route. Per Goal T-G, the City shall "Identify, preserve, and enhance scenic roads throughout Santa Rosa in both rural and developed areas."

State Scenic Highways are designated by the California Department of Transportation (Caltrans) to promote the protection and enhancement of the natural scenic beauty of California's highways and adjacent corridors. There are no State Scenic Highways within City limits. The closest State Scenic Highway is Sonoma Highway, or State Route (SR) 12, about two and a half miles southeast of the project site. While the proposed station would not be visible from a State Scenic Highway, the project site itself is located along a City-designated Scenic Road. The Santa Rosa General Plan defines scenic roads as a highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and man-made scenic resources. The proposed project construction and operation would not interrupt or realign the scenic route, as the fire station would be characteristic of the suburban surroundings, and would include a vegetation buffer, as shown in the figures below. The impact would be less than significant.

**Figure 8. Public Viewpoint Renderings**


View from Stagecoach Road, looking south.

View from Stagecoach Road, looking west.

View from Fountaingrove Parkway, looking north.


View from Stagecoach Road, looking east.

Source: RDC Architecture, 2021.

**c.** ***In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly***

***accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*** **Less than Significant Impact.** See Figure 8. The proposed fire station is located in a suburban area and would be visible from public vantage points along Fountaingrove Parkway and Stagecoach Road. Project construction and operation would not substantially degrade the area's visual character or public views, due to the project's developed, suburban surroundings, relatively low building elevations, and new landscaping.

The proposed project would construct a two-story fire station with a community/training room on the second floor. At its tallest point, the fire station would be 29 feet tall from the exterior finish grade/paving to the top of the parapet above the community/ training room at the northwest corner of the building. The project architect has provided a landscaping plan for the project site, including the planting of native plants, trees, and shrubs to provide screening of the fire station, while allowing sightlines to remain at the intersection of Fountaingrove Parkway and Stagecoach Road. The proposed project design and landscaping will be reviewed by the Design Review Board (DRB) prior to construction. The role of the DRB is to provide design advice for City projects.

The 2035 Santa Rosa General Plan has several elements that include the following goals and policies that guide development and apply to the project site.

- **Open Space and Conservation Element Policy: OSC-H-4** Require incorporation of native plants into landscape plans for new development, where appropriate and feasible, especially in areas adjacent to open space areas or along waterways. (*Project plans include native plants)*
- **Urban Design Element Policy: UD-A-12** Promote green building design and low impact development projects.
- **Circulation Element Goal: T-G** Identify, preserve, and enhance scenic roads throughout Santa Rosa in both rural and developed areas.
    - **Policy: T-G-11** Underground utility lines along scenic roads.

As described in this Aesthetics section, the project would result in less than significant aesthetic impacts, would include project plans and a landscaping plan subject to City review and approval, and is consistent with applicable Santa Rosa General Plan goals and policies. The Planned Development (PD) zoning includes development standards. The project does not comply with development standards in the policy statement, which is permitted per subsection G of the Municipal Code, "The provisions of this Zoning Code shall apply to any County, special district, and State or Federal government or agency to the maximum extent allowed by law. The provisions of this Zoning Code shall not apply to any public project of the City except to the minimum extent required by law." The Resilient City (RC) combining district is intended to facilitate the reconstruction and resilience of areas impacted by the Tubbs and Nuns fires of October 2017 and does not regulate land uses. The project would not substantially degrade the existing visual character or quality of the site and its surroundings, and the impact would be less than significant.

**d.** ***Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*** **Less than Significant Impact.** Excessive or inappropriately directed lighting can adversely impact night-time views by reducing the ability to see the night sky and stars. Glare can be caused by unshielded or misdirected lighting sources, or by reflective surfaces (e.g., polished metal, window treatments).

Although the project would increase overall light in the project vicinity, it is not anticipated to create readily detectable glare along the adjacent roads or surrounding residential uses because the fire

station would be screened by vegetation along the public frontages. Subject to City review and approval as a standard development review requirement, the applicant shall provide a photometric plan and descriptions/illustrations of outdoor fixtures and demonstrate, for example, that no lighting would spill over onto roadways, with lighting shielded downwards, per City Code 20-30.080 Outdoor lighting. Project compliance with these standards ensure that there would be no new source of substantial light or glare which would adversely affect day or nighttime views in the area. The impact would be less than significant.

**References:**

Caltrans. Map Viewer website, "California Scenic Highways," Available at: https://www.arcgis.com/home/webmap/viewer.html?layers=f0259b1ad0fe4093a5604c9b838a486a (accessed March 11, 2021).

City of Santa Rosa, 2009. *Santa Rosa General Plan 2035*, November 3, 2009. Available at: https://srcity.org/DocumentCenter/View/3095/Santa-Rosa-2035-General-Plan-PDF (Accessed March 11, 2021)

RossDrulisCusenbery Architecture, Inc. (RDC), 2021. Conceptual Drawings. February 16, 2021. Included as Appendix J

## 6.2 Agriculture and Forest Resources

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assess in 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 51140 (g))? | | | | ✓ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | ✓ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | | ✓ |

**Conclusion:** Regarding agricultural and forest resources, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*** **No Impact.** The property is bordered by Stagecoach Road on the north and Fountaingrove Parkway on the west. The area surrounding the parcel burned in the 2017 Tubbs Fire, and rebuilding efforts are underway. A suburban residential neighborhood is being rebuilt approximately 350 feet north of the eastern project boundary on the other side of Stagecoach Road. The Oakmont of Varenna retirement community is approximately 350 feet west of the project site, across from Fountaingrove Parkway. Undeveloped land lies adjacent to the south. The map of Important Farmland in California (2016) prepared by the Department of

Conservation does not identify the project site as being Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The site is classified as "Other Land" which is described as "Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing." Because the project site is classified as Other Land, the project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a nonagricultural use.

**b.** ***Conflict with existing zoning for agricultural use, or a Williamson Act contract?*** **No Impact.** The site has a General Plan designation of Light Industry, and is zoned Planned Development, Resilient City (RC). The RC combining district is intended to facilitate the reconstruction and resilience of areas impacted by the Tubbs fire in October 2017. The project is not under a Williamson Act contract, nor would the project impact any lands under Williamson Act contracts. The proposed project would not impact any existing land zoned 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 51140 (g))?*** **No Impact.** There is no area zoned forest land or timberland on or near the project site. The project site is surrounded by Resilient City zoning, single and multifamily housing, and vacant land. The project would not conflict with forest or timberland zoning.

**d.** ***Result in the loss of forest land or conversion of forest land to non-forest use?*** **No Impact.** Refer to 6.2.c. There is no area zoned forest land or timberland on or near the project site. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses.

**e.** ***Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*** **No Impact.** Refer to 6.2.a. The project site is currently undeveloped on a parcel adjacent to vacant lands. The proposed project would not change the existing environment in a manner that would result in the conversion of forest land to a non-forest land use or designated Farmland to non-agricultural use. Therefore, no impact would occur.

**References:**

California Department of Conservation, 2016. California Important Farmland Finder. Accessed February 24, 2021. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/

## 6.3 Air Quality

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | ✓ |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | | ✓ | | |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | ✓ | |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | ✓ | |

**Conclusion:** Regarding air quality, the proposed project would not result in any significant environmental impacts after mitigation.

**Documentation:**

**a.** ***Conflict with or obstruct implementation of the applicable air quality plan?*** **No Impact.** The proposed project would not conflict with nor obstruct implementation of the Bay Area Air Quality Management District (BAAQMD) *2017 Clean Air Plan*. The *2017 Clean Air Plan* includes increases in regional construction, area, mobile, and stationary source activities, and operations in its emission inventories and plans for achieving attainment of air quality standards. Chapter 5 of the *2017 Clean Air Plan* contains the BAAQMD's strategy for achieving the plan's climate and air quality goals. This control strategy is the backbone of the *2017 Clean Air Plan* (BAAQMD, 2017a).

The project proposes development of a new 10,763 square-foot, two-story, fire station. Site improvements to support the new fire station include a new paved parking lot, and median and roadway changes to improve firetrucks' movements on- and off-site. The proposed project would not exceed the level of population or housing foreseen in the City of Santa Rosa or regional planning efforts; therefore, it would not have the potential to substantially affect housing, employment, and population projections within the region, which are the basis of the *2017 Clean Air Plan* projections. The project is a replacement of a temporary facility located approximately 4,000 feet southeast from the proposed project site at 3480 Parker Hill Road. The project also rebuilds a former fire station that was located on Newgate Court, approximately 4,000 feet northeast of the project site which burned in 2017 Tubbs Fires that was part of the existing conditions when the *Clean Air Plan* was developed. The project would not result in growth or exceed a planning projection and would not conflict with the control measures in the *2017 Clean Air Plan*. The proposed project would not conflict with the *2017 Clean Air Plan*. Furthermore, as described under b), below, the increase in regional operational

emissions generated by the proposed project would be less than the BAAQMD's emissions thresholds. No impact relevant to the *2017 Clean Air Plan* would occur.

**b.** ***Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*** **Less than Significant Impact with Mitigation Incorporated.** The proposed project would generate both short-term construction emissions and long-term operational emissions through onsite operations associated with the fire station. As described in more detail below, the proposed project would not generate short-term or long-term emissions that exceed BAAQMD-recommended criteria air pollutant thresholds after the implementation of Mitigation Measure AIR-1.

The proposed project is located within the San Francisco Bay Area Air Basin (Basin), where efforts to attain state and federal air quality standards are governed by the BAAQMD. Both the State of California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as criteria pollutants). These pollutants include ozone ($O_3$), carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), inhalable particulate matter with a diameter of 10 microns or less ($PM_{10}$), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The state has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS (CAAQS) are more stringent than the national AAQS (NAAQS). The U.S. Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and BAAQMD assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

- **Attainment.** A region is "in attainment" if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a "maintenance area" for 10 years to ensure that the air quality improvements are sustained.

- **Nonattainment.** If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.

- **Unclassified.** An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment.

Air pollution levels are measured at monitoring stations located throughout the air basin. Table 1, *San Francisco Bay Area Air Basin Attainment Status*, summarizes the Basin's attainment status for the CAAQS and NAAQS.

**Table 1. San Francisco Bay Area Air Basin Attainment Status**

| Pollutant | Averaging Time | Attainment Status(A) | |
|---|---|---|---|
| | | CAAQS | NAAQS |
| $O_3$ | 1-Hour | N | -- |
| | 8-Hour | N | N |
| $PM_{10}$ | 24-Hour | N | U |
| | Annual Average | N | -- |
| $PM_{2.5}$ | 24-Hour | -- | N |
| | Annual Average | N | A |
| CO | 1-Hour | A | A |
| | 8-Hour | A | A |
| $NO_2$ | 1-Hour | A | U |
| | Annual Average | -- | A |
| $SO_2$ | 1-Hour | A | U |
| | 24-Hour | A | -- |
| Sulfates | 24-Hour | A | -- |
| Lead | 1-Hour | U | -- |
| Visibility Reducing Particles | 24-Hour | -- | -- |

Source: BAAQMD, 2017b, U.S. EPA, 2020

(A) A= Attainment, N= Nonattainment, U=Unclassified.

The proposed project would generate both short-term construction emissions and long-term operational emissions. The project's potential emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2.

**Construction Emissions:** The proposed project involves development of the site with a new two-story fire station and parking lot over approximately 12-months, anticipated to begin in January 2023. Construction activities are anticipated to disturb approximately 2.11 acres, and include: site clearing and grubbing, grading, utility infrastructure (e.g., sewer, water, electricity, etc.) installation, foundation and base placement, paving, vertical development of a new fire station and associated amenities, and architectural coating work. Additional ground disturbance of up to 1.9 acres of previously disturbed and developed public right of way adjacent to the site for utility connections, and intersection and frontage improvements is also proposed. Soil and earthwork quantities total approximately 9,000 Cubic Yards (CY) of grading, including an approximate cut of 8,500 CY with 500 CY of fill. In addition to the soil, trees would be removed from the site and chipped, which would total approximately 250 CY of woodchips, requiring off-haul of approximately 8,250 CY of total material (soil and woodchips). Air quality modeling assumes these hauling trips would be approximately 25 miles per trip.

The proposed project's potential construction emissions were estimated using CalEEMod, based on construction phasing and equipment runtime estimates provided by the project architect and supplemented with CalEEMod defaults assumptions, as shown in Table 2, *Construction Activity, Duration, and Typical Equipment.*

**Table 2. Construction Activity, Duration, and Typical Equipment**

| Construction Activity | Duration (days)(A) | Typical Equipment Used |
|---|---|---|
| Site Preparation, Clearing, and Grubbing | 4 | Bulldozer, Loader, and Water Truck |
| Grading | 10 | Bulldozers, Graders, and Water Truck |
| Fire Station Utility Trenching and Foundation Concrete | 10 | Concrete Mixers |
| Station Framing, Electrical, Plumbing, Mechanical, Roofing, Windows, and Finishing | 150 | Pettibone and Forklift |
| Road Base and Pavement, Fire Station Foundation | 60 | Graders, Paving Machine, Vibratory Rollers |
| Architectural Coating | 10 | Air Compressor |

Source: RDC, 2021, and MIG, 2021 (See Appendix A).
(A) Days refer to total active workdays in the construction phase, not calendar days.

The proposed project's daily unmitigated annual and average daily construction emissions are shown in Table 3, *Estimated Project Construction Criteria Air Pollutant Emissions*. Please refer to Appendix A for CalEEMod output files and detailed construction emissions assumptions. Air quality monitoring assumes an all-electric facility, and accounts for the increase usage. If the facility uses natural gas, there would be no substantial change in emissions.

**Table 3. Estimated Project Construction Criteria Air Pollutant Emissions**

| Year | Pollutant Emissions (Tons per Year) | | | | | | |
|---|---|---|---|---|---|---|---|
| | ROG | NOx | CO | $PM_{10}$ | | $PM_{2.5}$ | |
| | | | | Dust | Exhaust | Dust | Exhaust |
| Year 1(A) | 0.3 | 1.7 | 1.7 | 0.1 | 0.1 | 0.0 | 0.1 |
| **Year** | **Pollutant Emissions (Average Pounds per Day)(B)** | | | | | | |
| | **ROG** | **NOx** | **CO** | **$PM_{10}$** | | **$PM_{2.5}$** | |
| | | | | **Dust** | **Exhaust** | **Dust** | **Exhaust** |
| Year 1(A) | 2.27 | 12.9 | 12.9 | 0.8 | 0.8 | 0.0 | 0.8 |
| **BAAQMD CEQA Threshold** | **54** | **54** | **--** | **--** | **82** | **--** | **54** |
| **Potentially Significant Impact?** | **No** | **No** | **No(C)** | **Yes(D)** | **No** | **Yes(D)** | **No** |

BAAQMD 2017c and MIG 2021. See Appendix A.
(A) Emissions for "Year 1" reflects the emissions for year 2023, since project construction is anticipated to last approximately 12 months and the BAAQMD's CEQA thresholds are based on an average daily emissions performance standard.
(B) Average daily emissions reflect 264 total construction days (22 construction days per month for seven months).
(C) The BAAQMD does not maintain construction-related thresholds of significance for CO; however, the project would be of relatively short duration (i.e., 12 months) and located in a suburban environment, giving pollutants ample time to disperse. The proposed project's construction-related CO emissions would not result in a significant impact.
(D) For all projects, the BAAQMD recommends implementing eight basic construction best management practices (BMPs) to control fugitive dust from construction activities. As described below, Mitigation Measure AIR-1 would be incorporated into the project to address potentially significant fugitive dust emissions during project construction.

As shown in Table 3, construction emissions associated with the proposed project would be below all BAAQMD significance thresholds for criteria air pollutant emissions; however, as indicated in the

BAAQMD's *CEQA Guidelines*, fugitive dust emissions are considered potentially significant, regardless of the quantity of $PM_{10}$ or $PM_{2.5}$ emitted unless the BAAQMD's eight recommended fugitive dust BMPs are implemented during construction activities (BAAQMD 2017c, pg. 8-4). Accordingly, Mitigation Measure AIR-1, is presented below to reduce fugitive dust emissions from the proposed project's construction activities.

**Impact AIR-1:** Project construction would result in fugitive dust emissions which, if not controlled pursuant to BAAQMD Guidance, could be significant.

> **Mitigation Measure AIR-1:** To reduce fugitive dust that would be generated during project construction activities, the City and/or its designated contractors, contractor's representatives, or other appropriate personnel shall implement the following BAAQMD basic dust control measures.
>
> - Water all exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads) two times per day during construction and adequately wet demolition surfaces to limit visible dust emissions.
> - Cover all haul trucks transporting soil, sand, or other loose materials off the project site.
> - Use wet power vacuum street sweepers at least once per day to remove all visible mud or dirt track-out onto adjacent public roads (dry power sweeping is prohibited) during construction of the proposed project.
> - Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour.
> - Complete all areas to be paved as soon as possible and lay building pads as soon as possible after grading unless seeding or soil binders are used.
> - Minimize idling time of diesel-powered construction equipment to five minutes and post signs reminding workers of this idling restriction at access points and equipment staging areas during construction of the proposed project.
> - Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site.
> - Post a publicly visible sign with the name and telephone number of the construction contractor and City staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the BAAQMD to ensure compliance with applicable regulations.

After the implementation of Mitigation Measure AIR-1, the proposed project's construction fugitive dust emissions would be less than significant.

**Operational Emissions:** Upon completion of construction activities, the proposed project would function as a new fire station. The operation of this land use would generate emissions of regulated air pollutants from:

- **"Area" Sources.** The proposed land use would generate emissions from small area sources, including landscaping equipment, and the use of consumer products (e.g., paints, cleaners, and fertilizers) that result in the evaporation of chemicals into the atmosphere during product use.
- **Energy Use and Consumption.** The proposed land use would generate emissions from the use of electricity and utilities (i.e., sewer, water, and power) that would be available at the station.

- **Mobile Sources.** The proposed project site would generate emissions from vehicles traveling to and from the project site.
- **Stationary Sources:** The proposed project includes a 200-kilowatt (kW) diesel-fueled emergency backup generator. For the purposes of this analysis, the generator was assumed to be tested approximately 24 hours per day and run up 250 hours per year during emergency conditions (e.g., wildfire, planned power outages due to high winds).

The proposed project's operational emissions were estimated using CalEEMod.[1] The operational emissions generated in CalEEMod are based on the project's full first year of operation (presumed to be 2024) using default data assumptions provided by CalEEMod, with the following project-specific modification:

- **Mobile Source Emissions**. Although the proposed project would generate emissions from mobile sources (i.e., trips to and from the site), the trips associated with project buildout would replace the trips generated by the former fire station that was located on Newgate Court, approximately 4,000 feet northeast of the project site which burned in 2017 Tubbs Fires and the temporary station located approximately 4,000 feet southeast from the proposed project site at 3480 Parker Hill Road. Only the community room, which is the only part of the new fire station that is not a replacement for the station that was lost, was considered in evaluating VMT. Using the rates published by the Institute of Transportation Engineers (ITE) in the Trip Generation Manual for the "Community Center" (Land Use 495), it was estimated that the new community center would generate an average of 51 new trips per day. Per the W-Trans transportation analysis, the project would be expected to generate fewer than 110 new trips per day and can be assumed to have a less than significant impact on VMT (W-Trans 2021). Consistent with these findings, no changes in mobile source emissions were anticipated to occur.

The proposed project's maximum daily unmitigated operational emissions are shown in Table 4, *Estimated Project Operational Criteria Air Pollutant Emissions*. As shown in Table 4, operational criteria air pollutant emissions associated with the proposed project would be well below the BAAQMD regional thresholds. Therefore, operation of the proposed project would not generate emissions that exceed BAAQMD thresholds, and impacts would be less than significant.

[1] Estimated operational emissions include emissions from operation of the station and proposed emergency generator.

**Table 4. Estimated Project Operational Criteria Air Pollutant Emissions**

| Source | Pollutant Emissions (Tons per Year) | | | | |
|---|---|---|---|---|---|
| | **ROG** | **NOx** | **CO** | **$PM_{10}$** | **$PM_{2.5}$** |
| Area Sources | 0.1 | <0.0[A] | <0.0[A] | 0.0 | 0.0 |
| Mobile | <0.0[A] | <0.0[A] | 0.1 | <0.0[A] | <0.0[A] |
| Stationary | 0.1 | 0.2 | 0.1 | <0.0[A] | <0.0[A] |
| Total[B] | 0.1 | 0.2 | 0.2 | <0.0[A] | <0.0[A] |
| **BAAQMD CEQA Threshold** | **10** | **10** | **--** | **15** | **10** |
| **Potentially Significant Impact?** | **No** | **No** | **No** | **No** | **No** |
| **Source** | **Pollutant Emissions (Average Pounds per Day)** | | | | |
| | **ROG** | **NOx** | **CO** | **$PM_{10}$** | **$PM_{2.5}$** |
| Area Sources | 0.4 | <0.0[A] | <0.0[A] | <0.0[A] | <0.0[A] |
| Mobile | <0.0[A] | 0.3 | 0.7 | 0.2 | <0.0[A] |
| Stationary | 0.5 | 1.5 | 1.1 | <0.0[A] | <0.0[A] |
| Total[B] | 0.9 | 1.8 | 1.8 | 0.2 | <0.0[A] |
| **BAAQMD CEQA Threshold** | **54** | **54** | **--** | **82** | **54** |
| **Potentially Significant Impact?** | **No** | **No** | **No** | **No** | **No** |

BAAQMD 2017c and MIG 2020. See Appendix A.
A. <0.0 does not mean emissions are zero; rather, it means emissions are greater than zero, but less than 0.05.
B. Totals may not equal due to rounding.
C. Average daily emissions are based on a 365-day calendar year.

**c. Less than Significant Impact.** Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive air quality receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The sensitive air quality receptors adjacent or in close proximity to the perimeter of the project include:

- Single-family residential receptors, approximately 350 feet north of the eastern project boundary on Vintage Circle (across Stagecoach Road);
- Future, single-family residences under construction that would be located north and northeast of the project site, on Vintage Circle, Parker Hill Road, etc.; and
- The retirement community, approximately 240 feet southwest of the project site, across Fountaingrove Parkway

In addition to criteria air pollutants such as NOx (an ozone precursor), CO, $PM_{10}$, and $PM_{2.5}$, the U.S. EPA and CARB have classified certain pollutants as hazardous air pollutants (HAPs) and toxic air contaminants (TACs), respectively. These pollutants can cause severe health effects at very low concentrations, and many are suspected or confirmed carcinogens. The U.S. EPA has identified 187 HAPs, including such substances as arsenic and chlorine; CARB considers all U.S. EPA-designated

HAPS, as well as diesel particulate matter (DPM) emissions from diesel-fueled engines and other substances, to be TACs.

During project construction, the heavy-duty, diesel-powered, off-road construction equipment, as well as diesel-powered vendor and haul tucks, would emit DPM as part of their exhaust emissions; however, these emissions would not result in pollutant concentrations that could generate substantial adverse health risks to adjacent sensitive receptors for several reasons. First, as shown in Table 3.

**Estimated Project Construction Criteria Air Pollutant Emissions**

| Year | Pollutant Emissions (Tons per Year) | | | | | | |
|---|---|---|---|---|---|---|---|
| | ROG | NOx | CO | $PM_{10}$ | | $PM_{2.5}$ | |
| | | | | Dust | Exhaust | Dust | Exhaust |
| Year 1[(A)] | 0.3 | 1.7 | 1.7 | 0.1 | 0.1 | 0.0 | 0.1 |
| **Year** | **Pollutant Emissions (Average Pounds per Day)[(B)]** | | | | | | |
| | **ROG** | **NOx** | **CO** | **$PM_{10}$** | | **$PM_{2.5}$** | |
| | | | | **Dust** | **Exhaust** | **Dust** | **Exhaust** |
| Year 1[(A)] | 2.27 | 12.9 | 12.9 | 0.8 | 0.8 | 0.0 | 0.8 |
| **BAAQMD CEQA Threshold** | **54** | **54** | **--** | **--** | **82** | **--** | **54** |
| **Potentially Significant Impact?** | **No** | **No** | **No[(C)]** | **Yes[(D)]** | **No** | **Yes[(D)]** | **No** |

BAAQMD 2017c and MIG 2021. See Appendix A.

(E) Emissions for "Year 1" reflects the emissions for year 2023, since project construction is anticipated to last approximately 12 months and the BAAQMD's CEQA thresholds are based on an average daily emissions performance standard.

(F) Average daily emissions reflect 264 total construction days (22 construction days per month for seven months).

(G) The BAAQMD does not maintain construction-related thresholds of significance for CO; however, the project would be of relatively short duration (i.e., 12 months) and located in a suburban environment, giving pollutants ample time to disperse. The proposed project's construction-related CO emissions would not result in a significant impact.

(H) For all projects, the BAAQMD recommends implementing eight basic construction best management practices (BMPs) to control fugitive dust from construction activities. As described below, Mitigation Measure AIR-1 would be incorporated into the project to address potentially significant fugitive dust emissions during project construction.

the proposed project's emissions would be below all BAAQMD construction emissions thresholds. Second, project construction emission activities would only occur intermittently, between the hours of 7 AM and 7 PM, Monday through Friday, and between the hours of 10 AM and 6 PM on Saturday, in accordance with Mitigation Measure NOISE-1. The intermittent nature of project construction activities would provide time for emitted pollutants to disperse on an hourly and daily basis according to the prevailing wind in the area. Given the mobile nature of construction equipment, and the distance from where emissions would be emitted in relation to sensitive receptors, emissions would not expose the same receptor to pollutant concentrations continuously throughout the day, week, or construction period as a whole. The proposed project would implement mitigation measures for air quality and noise, which would help reduce fugitive dust emissions, and would require construction equipment be staged as far away from residential receptors as possible, thus reducing the quantity of exhaust emitted in proximity to sensitive receptors. For these reasons, emission sources would be temporary, intermittent, and pollutants would have time and space to disperse before potentially reaching receptor locations. This impact would be less than significant.

Once operational, the fire station would continue to generate emissions from diesel-powered heavy-duty vehicles and the back-up generator. A fire engine generates exhaust when entering or exiting the station. Large amounts of this exhaust are captured to protect worker health by diesel particulate filters on the vehicles. Fire engines must comply with California Code of Regulations Title 13 §2025 to reduce emissions of DPM, NOx, and other criteria pollutants from in-use diesel-fueled vehicles. In addition, the proposed back-up generator would require a permit to operate from the BAAQMD,

which would comply with CARB's Portable Diesel Engine ATCM, ensuring that the generator does not result in unacceptable adverse health risks at sensitive receptor locations. For these reasons, the proposed project would not result in operations that could generate substantial pollutant concentrations and/or unacceptable adverse health risks at sensitive receptor locations.

**d. Less than Significant Impact.** Construction of the project would generate typical odors associated with construction activities, such as fuel and oil odors, asphalt paving odors, and painting/coating odors. The odors generated by the project would be intermittent and localized in nature and would disperse quickly.

Once operational, the proposed project could generate typical odors associated with operation of the fire station, such as: the unanticipated, but potential, infrequent use of generators; diesel pumping for fire trucks and refuse collection. The trash pickup location would be located in the center of the project site in the utility yard. Trash would be taken to this location from receptacles throughout the station. Most waste activities would occur approximately 400 feet or more from sensitive receptor locations (single family homes and a retirement community) and, similar to construction emissions, have ample time to disperse. Due to the distances between the sources of odors and the sensitive receptors, these potential sources of odors would not affect a substantial number of people. Therefore, the project would not create objectionable odors affecting a substantial number of people. This impact would be less than significant.

**References:**

BAAQMD 2017a. *2017 Clean Air Plan: Spare the Air, Cool the Climate*. BAAQMD, Planning, Rules, and Research Division. April 19, 2017.

Bay Area Air Quality Management District (BAAQMD). 2017b. "Air Quality Standards and Attainment Status". BAAQMD, Research & Data, Air Quality Standards & Attainment Status. January 5, 2017. Available at: http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status. (Accessed April 2, 2021)

BAAQMD. 2017c. *California Environmental Quality Act Air Quality Guidelines*. San Francisco, CA. June 2010, updated May 2017.

United States Environmental Protection Agency (U.S. EPA) 2020. *Green Book*. "PM-2.5 (2012) Designated Area / State Information.". Current as of September 30, 2020. Available at: https://www3.epa.gov/airquality/greenbook/kbtc.html (Accessed April 2, 2021)

W-Trans, February 1, 2021. CEQA Initial Study Checklist for the Santa Rosa Fire Station 5 Project. Included as Appendix H

## 6.4 Biological Resources

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
| 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 Wildlife or U.S. Fish and Wildlife Service? | | ✓ | | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | | | ✓ | |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | ✓ | |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | ✓ | | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as 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? | | | | ✓ |

**Conclusion:** Regarding biological resources, implementation of Mitigation Measures BIO-1 through BIO-4 would reduce potentially significant impacts to less than significant levels.

**Federal Regulatory Framework**

Federal Endangered Species Act (FESA): The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under FESA. FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NOAA Fisheries), (3) prohibitions against "taking" (i.e., harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental "take." Recovery plans and the designation of critical habitat for listed species are defined in FESA.

Under Section 7 of FESA, any federal agency that is authorizing, funding, or carrying out an action that may jeopardize the continued existence of federally listed threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species must consult with the federal agency that oversees the protection of that species, typically the USFWS and/or NOAA Fisheries, depending on the species that may be affected. Non-federal agencies and private entities can seek authorization for take of federally listed species under Section 10 of FESA, which requires the preparation of a Habitat Conservation Plan (HCP).

Migratory Bird Treaty Act of 1918 (MBTA):The United States Migratory Bird Treaty Act (MBTA; 16 USC §§ 703 et seq., Title 50 Code of Federal Regulations [CFR] Part 10) states it is "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill; attempt to take, capture or kill; possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or in part, of any such bird or any part, nest or egg thereof…" In short, under the MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird, destroying a nest, or destroying an egg. The USFWS enforces MBTA. The MBTA does not protect birds that are non-native or human-introduced or that belong to families that are not covered by any of the conventions implemented by MBTA.

In 2017, the USFWS issued a memorandum stating that the MBTA does not prohibit incidental take; therefore, the MBTA is currently limited to purposeful actions, such as directly and knowingly removing a nest to construct a project, hunting, and poaching. However, the California Fish and Game Code (CFGC) also protects nesting birds (see below).

Clean Water Act: The Clean Water Act (CWA) is the primary federal law regulating water quality. The implementation of the CWA is the responsibility of the United States Environmental Protection Agency (EPA). However, the EPA depends on other agencies, such as the individual states and the United States Army Corps of Engineers (USACE), to assist in implementing the CWA. The objective of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Sections 404 and 401 of the CWA apply to activities that would impact waters of the United States. The USACE enforces Section 404 of the CWA and the California State Water Resources Control Board (SWRCB) enforces Section 401, as well as state water laws.

*Section 404:* As part of its mandate under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into "waters of the U.S.", which include territorial seas, tidal waters, and non-tidal waters in addition to wetlands and drainages that support wetland vegetation, exhibit ponding or scouring, show obvious signs of channeling, or have discernible banks and high-water marks. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3(b)).

The discharge of dredged or fill material into waters of the United States is prohibited under the CWA except when it is in compliance with Section 404 of the CWA. Enforcement authority for Section 404 was given to the USACE, which it accomplishes under its regulatory branch. The EPA has veto authority over the USACE's administration of the Section 404 program and may override a USACE decision with respect to permitting.

Projects that minimally affect waters of the United States may meet the conditions of one of the existing Nationwide Permits, provided that certain conditions are satisfied. Substantial impacts to waters of the United States may require an Individual Permit, which, among other requirements, involves an alternatives analysis to demonstrate why impacts cannot be avoided. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions (see below).

*Section 401:* Any applicant for a federal permit to impact waters of the United States under Section 404 of the CWA, including Nationwide Permits where pre-construction notification is required, must also provide to the USACE a certification or waiver from the State of California. The "401 Certification" is provided by the SWRCB through the local Regional Water Quality Control Board (RWQCB).

The RWQCB issues and enforces permits for discharge of treated water, landfills, storm-water runoff, filling of any surface waters or wetlands, dredging, agricultural activities and wastewater recycling. The RWQCB recommends the "401 Certification" application be made at the same time that any applications are provided to other agencies, such as the USACE, USFWS, or NOAA Fisheries. The application is not final until completion of environmental review under CEQA. The application to the RWQCB must include:

- a description of the habitat that is being impacted,
- how much habitat is being impacted temporarily and permanently,
- a description of how the impact is proposed to be minimized, and
- mitigation measures with goals, schedules, and performance standards. Mitigation must include a replacement of functions and values, and replacement of wetland at a minimum ratio of 2:1, or twice as many acres of wetlands provided as are removed, is often required. The RWQCB looks for mitigation that is on site and in-kind, with functions and values as good as or better than the water-based habitat that is being removed.

Porter-Cologne Water Quality Act: The intent of the Porter-Cologne Water Quality Control Act (Porter-Cologne) is to protect water quality and the beneficial uses of water, and it applies to both surface and ground water. Under this law, the SWRCB develops statewide water quality plans, and the RWQCBs develop basin plans, which identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of both statewide and basin plans. Waters regulated under Porter-Cologne, referred to as "waters of the State," include isolated waters that are not regulated by the USACE. Projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, any person discharging, or proposing to discharge, waste (e.g., dirt) to waters of the State must file a Report of Waste Discharge and receive either waste discharge requirements (WDRs) or a waiver to WDRs before beginning the discharge.

**State of California Regulatory Framework**

California Endangered Species Act (CESA): The California Endangered Species Act (CESA; CFGC 2050 et seq.) generally parallels the FESA. It establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. Section 2080 of the CFGC prohibits the take, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or by the regulations. "Take" is defined in Section 86 of the CFGC as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." This definition differs from the definition of "take" under FESA. CESA is administered by CDFW. CESA allows for take incidental to otherwise lawful projects but mandates that State lead

agencies consult with the CDFW to ensure that a project would not jeopardize the continued existence of threatened or endangered species.

California Fully Protected Species and Species of Special Concern: The classification of California fully protected (CFP) species was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The CFGC Code sections (§5515 for fish, §5050 for amphibian and reptiles, §3511 for birds, §4700 for mammals) deal with CFP species and state that these species "…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species" (CDFW Fish and Game Commission 1998). "Take" of these species may be authorized for necessary scientific research. This language makes the CFP designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with CFP species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

California species of special concern (CSSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

California Fish and Game Code Sections 3503 and 3513: Nesting birds, including raptors, are protected under CFGC Section 3503, which reads, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." In addition, under CFGC Section 3503.5, "it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Passerines and non-passerine land birds are further protected under CFGC 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFW.

California Fish and Game Code Sections 4150-4155: Sections 4150-4155 of the CFGC protects non-game mammals, including bats. Section 4150 states, "A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A non-game mammal may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission." The non-game mammals that may be taken or possessed are

primarily those that cause crop or property damage. Bats are classified as a non-game mammal and are protected under CFGC.

California Migratory Bird Protection Act: CFGC Section 3513 states that Federal authorization of take or possession is no longer lawful under the state CFGC if the federal rules or regulations are inconsistent with state law. The California Migratory Bird Protection Act (MBPA) was passed in September 2019 to provide a level of protection to migratory birds in California consistent with the United States MBTA prior to the 2017 rule change limiting protection of migratory birds under the United States MBTA to purposeful actions (i.e., directly and knowingly removing a nest to construct a project, hunting, and poaching). Thus, the MBPA protections for migratory birds in California are consistent with rules and regulations adopted by the United States Secretary of the Interior under the United States MBTA before January 1, 2017, or those adopted subsequent to that date as long as they are consistent with the CFGC. The MBPA reverts to existing provisions of the United States MBTA on January 20, 2025.

Native Plant Protection Act: The Native Plant Protection Act (NPPA) was created in 1977 with the intent to preserve, protect, and enhance rare and endangered plants in California (CFGC sections 1900 to 1913). The NPPA is administered by CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take." CDFW maintains a list of plant species that have been officially classified as endangered, threatened, or rare. These special-status plants have special protection under California law and projects that directly impact them may not qualify for a categorical exemption under CEQA guidelines.

Sensitive Vegetation Communities: Sensitive vegetation communities are natural communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies, or regulations, or by the CDFW (i.e., CNDDB) or the USFWS. The CNDDB identifies a number of natural communities as rare, which are given the highest inventory priority (Holland 1986; CDFW 2016).

Other Sensitive Plants—California Native Plant Society: The CNPS is a non-profit plant conservation organization that publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (http://www.rareplants.cnps.org/).
The Inventory assigns plants to the following categories:

1A Presumed extinct in California;
1B Rare, threatened, or endangered in California and elsewhere;
2 Rare, threatened, or endangered in California, but more common elsewhere;
3 Plants for which more information is needed – A review list; and
4 Plants of limited distribution – A watch list.

Additional endangerment codes are assigned to each taxon as follows:

1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).
2 Fairly endangered in California (20-80% occurrences threatened).
3 Not very endangered in California (<20% of occurrences threatened or no current threats known).

Plants that are Rank 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing by the CDFW, as well as other state agencies (e.g., California Department of Forestry and Fire Protection). As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the CFGC. California Rare Plant Rank (CRPR) 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such

plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents.

**Local Regulatory Framework**

City of Santa Rosa General Plan (and Citywide Creek Master Plan): State law requires each California city and county to prepare a general plan. A general plan is defined as "a comprehensive, long-term plan for the physical development of the county or city, and any land outside its boundaries which in the planning agency's judgment bears relation to its planning." Within the Open Space and Conservation Element of the Santa Rosa General Plan, the following policies apply to the project site:

- **OSC-B-2**: Minimize alteration of the topography, drainage patterns and vegetation of land with slopes of ten percent or more. Prohibit alteration of slopes greater than 25 percent.
- **OSC-B-4:** Require that graded areas within new developments be revegetated.
- **OSC-D-1:** Utilize existing regulations and procedures, including Subdivision Guidelines, Zoning, Design Review, and environmental law, to conserve wetlands and rare plants. Comply with the federal policy of no net loss of wetlands using mitigation measures such as:
  - Avoidance of sensitive habitat;
  - Clustered development;
  - Transfer of development rights; and/or
  - Compensatory mitigation, such as restoration or creation.
- **OSC-H-1:** Preserve trees and other vegetation, including wildflowers, both as individual specimens and as parts of larger plant communities.
- **OSC-H-2:** Preserve and regenerate native oak trees.
- **OSC-H-4:** Require incorporation of native plants into landscape plans for new development, where appropriate and feasible, especially in areas adjacent to open space areas or along waterways.
- **OSC-H-5:** Plant trees on public property including park strips, open space and park areas and encourage tree planting on private property to help offset carbon emissions.

City of Santa Rosa Tree Ordinance: Section 17-24.050 of the Santa Rosa City Code outlines requirements for tree alteration, removal, or relocation on properties proposed for development. A heritage tree is a tree or grove of trees designated by the Planning Commission as having a special significance requiring review before removal may be permitted. The following trees are native to Sonoma County and are considered heritage trees when their diameter or circumference is of a size specified in the ordinance:

- *Quercus lobata*—valley oak
- *Quercus agrifolia*—live oak
- *Quercus kelloggii*—black oak
- *Quercus garryana*—Oregon or white oak
- *Quercus chrysolepis*—canyon oak
- *Quercus douglasii*—blue oak
- *Quercus wislizenii*—interior live oak
- *Sequoia sempervirens*—redwood
- *Umbelluloria californica*—California bay
- *Arbutus menziesii*—madrone
- *Aesculus californica*—buckeye
- *Pseudotsugas menzesii*—Douglas fir
- *Alnus oregona*—red alder
- *Alnus rhombifolia*—white alder
- *Acer macrophyllum*—big leaf maple

Requirements for alteration, removal, or relocation of heritage trees on property proposed for development are as follows:

A. All development proposals and subdivision applications shall clearly designate all trees and heritage trees on the property by trunk location and an accurate outline of each tree's drip line and shall

indicate those trees which are proposed to be altered, removed, or relocated and those trees proposed to be designated protected trees. The reasons for the proposed removal of any tree shall be stated in writing. The development plan or tentative subdivision map shall indicate the genus and species, the shape, the drip line and the trunk circumference of each tree and heritage tree. These tree delineations must also be shown on every page of the development and improvement plans where any work is proposed within the root zone of any tree. The owner of the property and the person in control of the proposed development shall protect and preserve each tree and heritage tree situated within the site of the proposed development during the period the application(s) for the proposed development is being considered by the City. The proposed development shall be designed so that:

1. The proposed lots and/or improvements preserve and protect any heritage trees to the greatest extent possible.
2. The road and lot grades protect heritage trees to the greatest extent possible and the existing grade shall be maintained within each such tree's root zone.

B. If the proposed project is approved, the recordation of the final map or issuance of a grading permit or building permit for the project shall constitute a permit to alter, remove, or relocate any trees designated for alteration, removal, or relocation upon the project's approved plans. Any change in the trees to be altered, removed, or relocated as designated on the approved development plan or tentative map shall only be permitted upon the written approval of the City's Department of Community Development (now Planning & Economic Development) or, when the Department of Community Development determines that the proposed change may be substantial, by the Planning Commission.

C. **Tree Replacement Program**. A person owning or controlling a development project shall be required to replace trees and heritage trees approved for removal as part of the approval of the project in accordance with subdivision 1; each protected tree removed or damaged shall be replaced in accordance with subdivision 2.

1. For each six inches or fraction thereof of the diameter of a tree which was approved for removal, two trees of the same genus and species as the removed tree (or another species, if approved by the Department of Community Development), each of a minimum 15-gallon container size, shall be planted on the project site, provided however, that an increased number of smaller size trees of the same genus and species may be planted if approved by the Department of Community Development, or a fewer number of such trees of a larger size if approved by the Department of Community Development.

D. For each six inches or fraction thereof of the diameter of a tree which was not approved for removal, four trees of the same genus and species as the removed tree (or another species, if approved by the Department of Community Development), each of a minimum 15-gallon container size, shall be planted on the project site, provided however, that an increased number of smaller size trees of the same genus and species may be planted if approved, or a fewer number of such trees of a larger size if approved by the Department of Community Development.

E. If the development site is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the Transportation and Public Works Department. Upon the request of the developer and the approval of the Transportation and Public Works Department, the City may accept an in-lieu payment of $100.00 per 15-gallon replacement tree on condition that all such payments shall be used for tree-related educational projects and/or planting programs of the City.

F. **Protected Trees.** The following requirements shall apply to every person who develops any property upon which a protected tree is located:

G. Before the start of any clearing, excavation, construction or other work on the site, every protected tree shall be securely fenced off at the "protected perimeter," which shall be either the root zone or other limit as may be established by the City. Such fences shall remain continuously in place for the

duration of all work undertaken in connection with the development. The area so fenced off shall not be used as a storage area or altered or disturbed except as may be permitted under this subsection.

H. If the proposed development, including any site work for the development, will encroach upon the protected perimeter of a protected tree, special measures shall be utilized, as approved by the Department of Community Development or the Planning Commission, to allow the roots to obtain oxygen, water, and nutrients as needed. Any excavation, cutting, filling, or compaction of the existing ground surface within the protected perimeter, if authorized at all by the Department of Community Development, shall be minimized and subject to such conditions as may be imposed. No significant change in existing ground level shall be made within the drip line of a protected tree. No burning or use of equipment with an open flame shall occur near or within the protected perimeter. All brush, earth and other debris shall be removed in a manner which prevents injury to the protected tree.
I. No oil, gas, chemicals, or other substances that may be harmful to trees shall be stored or dumped within the protected perimeter of any protected tree, or at any other location on the site from which such substances might enter the perimeter of a protected tree. No construction materials shall be stored within the protected perimeter of a protected tree.
J. Underground trenching for utilities shall avoid major support and absorbing tree roots of protected trees. If avoidance is impractical, tunnels shall be made below the roots. Trenches shall be consolidated to service as many units as possible. Trenching within the drip line of protected trees shall be avoided to the greatest extent possible and shall only be done under the at-site directions of a certified arborist.
K. No concrete or asphalt paving shall be placed over the root zones of protected trees. No artificial irrigation shall occur within the root zone of oaks.
L. No compaction of the soil within the root zone of protected trees shall occur.
M. If the trees proposed to be removed can be economically relocated, the developer shall move the trees to a suitable location on the site shown on the approved plans.

An assessment of biological resources within the project site involved a review of available background information pertaining to sensitive species and habitats on the site and in the nearby vicinity, and a field survey. MIG biologists Melinda Mohamed and Tay Peterson conducted a reconnaissance-level survey of the project site on November 11, 2020. Biologists traversed the project site on foot, examining habitat within the project boundary and within line-of-sight up to approximately 100 feet. Plant and wildlife species observed were recorded and identified to the lowest taxonomic level possible. The methods of the background review and field survey are summarized within the Biological Resources Assessment (MIG 2021), and included as Appendix B.

**Documentation:**

**a.** ***Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*** **Less than Significant Impact for Special-Status Plant Species.** Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened, or endangered, (2) federal and state candidates for listing, (3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in CEQA, Section 15380.A table of special-status plant species with the potential to occur on the project site is provided in the Biological Resources Assessment (Appendix B). According to the CNPS Inventory and CDFW's CNDDB, a total of 89 special-status plant species have been documented within the project site vicinity (Santa Rosa USGS 7.5 center quadrangle and eight surrounding). A table of special-status

plant species with the potential to occur on the project site is provided in an appendix of the Biological Resources Assessment.

The project site was determined to have no to low potential to support any of the 89 special-status plant species that were evaluated for their potential presence. Most of these plants occur in specialized habitats such as chaparral, vernal pools, freshwater marshes, coastal prairie and scrub, and coniferous forest habitats which do not occur on or near the project site. Special-status plants that could occur in grassland habitat are not expected to occur within the project site due to ongoing land management (landscaping, pesticide use, etc.), including that observed during an MIG wetland delineation on December 9, 2020. These activities within the project site have resulted in a high cover and frequency of non-native and invasive plant species that have outcompeted native grasses and forbs, resulting in reduced species richness and disturbed habitat conditions.

**Less than Significant with Mitigation Incorporated for Special-Status Wildlife.** Special-status wildlife species include: those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; species of special concern to the CDFW; and CDFW fully protected species. A list of all special-status wildlife species with the potential to occur in the project site is provided in Appendix B. A total of 34 special-status wildlife species were reported to have potential to occur within vicinity of the project site (Santa Rosa USGS 7.5 center quadrangle and eight surrounding), based on a search of the CNDDB and IPaC databases. Thirty-three (33) species are not expected to occur within the project site. Four (4) species were determined to have low potential to occur within the project site:

Western pond turtle *(Actinemys marmorata [also Emys marmorata];* California Species of Special Concern). Western pond turtle (WPT) is a small to medium-sized freshwater turtle and the only freshwater turtle native to California. Adult WPT can range from 3.5–8.5 inches in shell length, with a plastron (underside of the shell) lacking hinges and containing six pairs of cream or yellowish shields. Shields may either have large dark markings or be unmarked completely. Adults' legs and heads have black "freckling" and may appear cream or yellow overall. Adults are also sexually dimorphic, with males having a lighter throat typically with no markings, a flatter overall shell, and a concave plastron. In contrast, females typically show markings on their throats, have a taller relative shell, and have a flat or convex plastron compared with males. Hatchlings are approximately one (1) inch in shell length and have tails much longer relative to their overall size, often measuring almost as long as the shell itself.

WPT mating occurs in April and May. Between April and August, female turtles climb out of waterbodies in search of nesting habitat near water margins, though individuals have been known to travel over 300 feet from water edges in search of suitable nesting substrate (Stebbins 2003). Nests are in small openings and nesting substrate can vary widely, though most notably the soil at a nesting site must be friable to about 4 inches in depth. Females typically lay clutches of 2–11 eggs, sometimes laying two clutches per year. Hatchlings emerge approximately 70–84 days after deposition, though they overwinter in their nests and emerge in search of aquatic habitat in March or April of the following year.

Cooper's hawk *(Accipiter cooperii;* CDFW Watch List*).* Cooper's hawks are crow-sized and breed in forests and woodland throughout the United States, southern Canada, and northern Mexico. Males and females are highly sexually dimorphic, with females up to 33% larger than males. This species often utilizes urban and suburban landscapes for nesting, showing adaptation

to human disturbance. Prey includes medium-sized wildlife including doves, jays, robins, and smaller rodents (Rosenfeld et al 2019).

White-tailed kite *(Elanus leucurus;* California Fully Protected Species). The white-tailed kite is a light-colored medium-sized raptor that is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas, and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities (Dunk 1995). Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall (Dunk 1995). This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates.

Sharp-shinned Hawk (*Accipiter striatus*, CDFW Watch List). The sharp-shinned hawk is a bird-hunting Accipiter hawks, and is also the most migratory, breeding north to treeline in Alaska and Canada and wintering south to Panama. It is during migration that the Sharp-shin is most likely to be seen in numbers, with dozens or even hundreds passing at some favored points on coastlines, lake shores, and mountain ridges. At other seasons, the hawks lurk in the woods, ambushing songbirds and generally staying out of sight.

These "low potential" determinations above for special-status wildlife were based on the lack of suitable habitat, including freshwater stream and other aquatic features (i.e., permanently inundated riparian corridors and/or vernal pools), poor or no nesting habitat, and/or the lack of interconnectivity to areas of occupied habitat due to development within and surrounding the site.

Nesting birds within and near the project site may be directly and indirectly impacted by construction activities, including vegetation grubbing, human disturbance, and equipment noise. Most actively nesting birds are protected under the CFGC, MBTA, and MBPA; eagles are protected under the Bald and Golden Eagle Protection Act. Construction activities, including vegetation clearing, and noise and vibration have a potential to result in direct (i.e., loss of viable eggs and death or injury of young) and indirect (i.e., nest abandonment) impacts to nesting songbirds and raptors. The loss of an active nest of common or special-status bird species would be considered a violation of CFGC Sections 3503, 3503.5, 3513.

The following mitigation measures would reduce potential impacts on special-status wildlife to less than significant levels.

**Mitigation Measure BIO-1: Employee Education Program.** An employee education program shall be conducted by a qualified biologist, consisting of a brief presentation to explain biological resources concerns to contractors, their employees, and any other personnel involved in construction of the project. The program shall include the following: a description of relevant special-status species and nesting birds along with their habitat needs as they pertain to the project; a report of the occurrence of these species in the vicinity of the project site, as applicable; an explanation of the status of these species and their protection under the federal and state regulations; a list of measures being taken to reduce potential impacts to natural resources, including environmentally sensitive habitats, during project construction and implementation; and instructions if a special-status species is found onsite. A fact sheet conveying this information shall be prepared for distribution to the above-mentioned people and anyone else who may enter

the project site. Upon completion of training, employees shall sign a form stating that they attended the training and agree to the conservation and protection measures.

**Mitigation Measure BIO-2: Pre-Construction Survey for Nesting Birds.** To avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (that is, prior to February 1 or after September 15). If construction and construction noise occurs within the avian nesting season (from February 1 to September 15), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000-foot (raptor nests) buffer around these areas shall be thoroughly surveyed for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is building a nest, sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented.

If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, as appropriate, until the chicks have fledged. Monitoring shall be required to ensure compliance with relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

**b.** ***Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*** **Less than Significant Impact.** Sensitive vegetation communities are natural communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies, or regulations, or by the CDFW (i.e., CNDDB) or the USFWS. The project site contains both sensitive and non-sensitive plant communities. The habitat types are defined by the California Wildlife Habitat Relationships System (CDFW 2021b) and are shown in Figure 9 below, and in the Biological Resources Assessment (MIG 2021) (included as Appendix B). Total acreage may not add up due to rounding.

**Figure 9. Vegetation Map**


Non-sensitive Plant Community (totals may not add up due to rounding):
Developed/Mediterranean Scrub and Grassland Formation (1.87 acres): Developed land includes commercial and industrial land uses and paved and dirt parking lots, driveways, and access roads. These areas are generally devoid of vegetation or are very sparsely vegetated. Interspersed with developed areas, including access roads and driveways, is Mediterranean scrub and grassland formation as defined by the Classification of the Vegetation Alliances and Associations of Sonoma County, California (CDFW et al 2015). Most of the project site is Mediterranean Scrub and Grassland Formation, which typically includes species belonging to the genuses: *Adenostoma, Arctostaphylos, Ceanothus, Quercus, Artemisia, Eriodictyon, Heterotheca, Baccharis, Gaultheria, Toxicodendron, Eschscholzia, Lasthenia, Plagiobothrys, Elymus, Nassella, Avena, Brassica, Centaurea, Cynosurus*, among many others.

There are also individual coast live oak and valley oak trees onsite.

Sensitive Plant Communities and Waters (totals may not add up due to rounding): The following are habitat features within the project site that are considered "sensitive" and are regulated by the resource agencies.

California Bay Forest and Woodland (0.15 acres) CDFW Sensitive Natural Community. Coast live oak (Quercus agrifolia) alliance stands in Sonoma County cover the range from mesic woodlands (in which coast live oak mixes with Umbellularia and Arbutus), to relatively dry, open woodlands with grassy understories. The alliance typically occurs in alluvial benches, streamsides, valley bottoms, coastal bluffs, inland ridges, steep north-facing slopes, and rocky outcrops and in soils that are shallow to deep, sandy to clay loams (CNPS 2020b).

Potentially Federal Jurisdictional Waters (0.05 acres) CDFW Sensitive Natural Community. Potentially jurisdictional areas are found onsite and include the perennial drainage and culvert area. All construction would be set back from these areas by a minimum of 30 feet from the stream centerline. The proposed project would not impact the perennial (listed as intermittent in Figure 9 above) drainage or associated potentially jurisdictional areas on the site. In accordance with the City of Santa Rosa General Plan OSC-D-1 and the federal policy of no net loss of wetlands, the project would avoid all potentially jurisdictional areas. As determined by the City's biological resources consultant (MIG), the project would not have a significant impact on jurisdictional waters, and no permits would be required. Project plans show a setback of at least 30 feet from the stream centerline.

Above-ground storage tanks (ASTs) would be utilized in the project and associated fueling stations would pose a risk to potentially jurisdictional waters. The project includes secondary containment at the ASTs and fueling stations. Indirect impacts to potentially jurisdictional waters would be avoided by best management practices (BMPs) including proper storage, handling, and disposal of construction materials and all potential pollutants - including solid wastes, paints, concrete, petroleum products, chemicals, - to avoid storm drains and water courses. Other BMPs include avoiding cleaning, fueling, or maintaining vehicles on site, and performing clearing and earth moving activities during dry weather to the maximum extent practical. These BMPs would ensure water quality protection and prevention of erosion and sedimentation during and following construction. A stormwater pollution prevention plan (SWPPP) would be required for the project and implemented during construction. The project design utilizes low impact development (LID) strategies including limiting impervious surfaces, and creation of stormwater detainment areas. To ensure there is no net increase in stormwater runoff from the site after project construction, and stormwater from the new impervious surface area would be treated and retained onsite. Impacts on riparian habitat would be less than significant.

**c.** ***Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*** **Less than Significant Impact.** The majority of the city of Santa Rosa is located within the Santa Rosa Creek watershed, which originates from Hood Mountain in the Mayacamas Mountains to the east and discharges to Laguna de Santa Rosa, a large wetland complex downstream of the Santa Rosa urban area. Tributary basins to Santa Rosa Creek that lie primarily in the city are Brush Creek, Matanzas Creek, Paulin Creek, and Piner/Peterson Creek. All these tributaries ultimately drain to the Laguna de Santa Rosa which drains into the Russian River and out to the Pacific Ocean (ESA 2009).

According to the Preliminary Delineation of Wetlands Report, approximately 0.062 acre of potentially USACE and RWQCB jurisdictional features were identified on the project site. These include approximately 0.025 acre of Sections 401 and 404 waters situated below the ordinary high-water mark in a perennial, unnamed tributary to West Fork of Paulin Creek. Section 401 waters of the state extend farther up to the top of the banks of the perennial stream for an additional 0.025-acre of riparian habitat (mostly unvegetated). Additionally, Section 404 and 401 waters include approximately 0.022 acre of in-channel wetlands and a 0.015-acre potential wetland at a storm drain outlet. CDFW jurisdictional features as defined by bed and bank topography (perennial stream) were identified in the project area and total 0.072 acres, including a perennial stream and in-channel wetlands.

The potentially jurisdictional perennial drainage on the project site is unnamed and is not shown on the National Wetland Inventory (USFWS 2020b) or on creek maps in the Santa Rosa Citywide Creek

Master Plan (City of Santa Rosa 2013). The unnamed drainage flows from south to north across the northwest corner of the project site before flowing into a culvert under Stagecoach Road and connecting to the West Fork of Paulin Creek downstream of the site. The unnamed drainage is approximately two feet wide and one to two feet deep. It appears to be perennial, based on a flowing condition observed in November and December 2020, after months with little rain and no recent rainstorms.

There are three wetlands associated with the potentially jurisdictional perennial drainage, located adjacent to where the drainage flows under the existing chain link fence to the southern side of the fence, and adjacent to the culvert on each side of the existing access road. Wetlands were identified in a preliminary delineation of jurisdictional features based on hydrophytic vegetation, hydric soils, and hydrology. The dominant plant species associated with the wetlands is tall flatsedge (*Cyperus eragrostis*). The potentially jurisdictional areas, including the mapped, isolated culvert area on the east portion of the site, total 0.05 acre. The project does not propose direct removal, filling, or hydrological interruption of federally protected wetlands or other sensitive hydrological features. In addition, during project construction, sensitive habitat would be fenced, and all construction would be set back from these features by a minimum of 30 feet from the stream centerline. The impact would be less than significant.

**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?*** **Less than Significant with Mitigation Incorporated.** Fountaingrove Parkway and Stagecoach Road are both heavily trafficked and adjacent and the small, fragmented characteristic of the habitat on the project site create sub-optimal corridor conditions for common and special-status terrestrial wildlife species. The project site is expected to be primarily utilized by common wildlife and urban/suburban-adapted wildlife species, rarely utilized by special-status wildlife for foraging, and very rarely utilized for nesting birds. The project site is not considered a formal wildlife corridor, although habitat surrounding the project site may provide corridor habitat. The project site is in an urban area, and the new fire station would not include new public roads or fences that would create a barrier to wildlife movement. No significant impacts to wildlife movement and corridors are anticipated from the proposed project.

The following mitigation measures would reduce potentially significant construction impacts on wildlife to less than significant levels.

**Mitigation Measure BIO-3: General Environmental Protections During Project Construction. (Also see Mitigation Measure GEO-3)**

- During construction staging, travel and parking of vehicles and equipment shall be limited to pavement, existing roads, and previously disturbed areas. Ground disturbance and vegetation removal shall not exceed the minimum amount necessary to complete work at the site.
- Temporary work areas shall be restored with respect to pre-existing contours and conditions upon completion of work. The need for restoration work including re-vegetation and soil stabilization shall be evaluated upon completion of work and performed as needed.
- The potential for adverse effects to water quality in aquatic habitat within the project site shall be avoided by implementing Best Management Practices (BMPs), and the project shall require a Stormwater Pollution and Prevention Plan (SWPPP) for construction. These BMPs shall be used to minimize any erosion or other sources of water pollution during construction. These suggested BMPs shall be coordinated with standard CASQA regulations required under City of Santa Rosa

construction contracts, as administered by, and at the discretion of, the City. The following BMPs are suggested:

a) Store, handle, and dispose of construction materials and wastes properly to prevent their contact with stormwater.
b) Control and prevent the discharge of all potential pollutants - including solid wastes, paints, concrete, petroleum products, chemicals, wash water, sediment, and non-stormwater discharges - to storm drains and water courses.
c) Avoid cleaning, fueling, or maintaining vehicles on site, except in a designated area in which run-off is contained and treated.
d) Perform clearing and earth moving activities during dry weather to the maximum extent practical.
e) Delineate clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and discharge courses with field markers.
f) Remove spoils promptly and avoid stockpiling fill materials when rain is forecast. If rain threatens, stockpiled soils and other materials shall be covered with a tarp or other waterproof material.
g) Limit construction access routes and stabilize designated access points.
h) Deposit trash and construction related solid wastes into a covered receptacle to prevent contamination and dispersal by wind.
i) Maintain sanitary facilities on the project site at all times.
j) Take measures to collect or clean any accumulation or deposit of dirt, mud, sand, rocks, gravel, and debris on the surface of any street, alley, or public place or in public storm drain systems. The removal of aforesaid shall be done by street sweeping or hand sweeping. Water shall not be used to wash sediments into public or private drainage facilities.
k) Cease all grading work immediately in the event of rain.
l) Prepare and implement an erosion control plan during the wet season (September 15 through April 15). The following measures are suggested to be included in the plan:
    - During the rainy season, the project site shall be maintained to minimize sediment-laden run-off to any storm drainage system, including existing drainage swales and water courses.
    - Inlet protection shall be installed to prevent sediment from entering the storm drain system where applicable.
    - Weed and net/filament free straw rolls shall be placed at the toe of barren slopes and along the down slope perimeter of the project site to capture sediment in storm runoff.

- Develop a hazardous spill plan prior to construction. The plan shall describe what actions would be taken in the event of a spill. The plan shall also incorporate preventative measures to be implemented, such as vehicle and equipment staging, cleaning, maintenance, and refueling; and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site shall immediately cease until the contractor has contained and mitigated the spill. The contractor shall immediately notify appropriate authorities. Adequate spill containment materials, such as oil diapers and hydrocarbon cleanup kits, shall always be available on site. Containers for storage, transportation, and disposal of contaminated absorbent materials shall be provided at the project site.
- A SWPPP that complies with the statewide General Permit administered by the State Water Board for the National Pollutant Discharge Elimination System shall be developed and implemented to protect the water quality of aquatic habitats that lie in or adjacent to the project site. Appropriate erosion and sediment control and non-sediment pollution control (i.e., sources of pollution generated by construction equipment and material) BMPs shall be prescribed in the

SWPPP, and erosion and sediment control material included in the SWPPP shall be certified as weed-free.

- After construction is completed, a final cleanup shall include removal of all stakes, temporary fencing, flagging, and other refuse generated by construction.

**Mitigation Measure BIO-4: General Biological Resource Protections During Project Construction.**

- Tree Protection. Tree protection shall be implemented in compliance with the City's Tree ordinance(s).
- Designation of Work Area. Prior to project activities, a qualified biologist shall clearly delineate any vegetation and/or habitat areas to be avoided near planned project work. Any trees to be preserved must have protective fencing installed in accordance with the City of Santa Rosa Tree ordinance and under the direction of a qualified arborist or biologist.
- Construction Site Sanitation. Food items may attract wildlife onto the construction site, which would expose them to construction-related hazards. The construction site shall be maintained in a clean condition. All trash (e.g., food scraps, cans, bottles, containers, wrappers, and other discarded items) shall be placed in closed containers and properly disposed of.
- Wildlife Entrapment. The contractor shall avoid the use of monofilament netting, including its use in temporary and permanent erosion control materials. All holes greater than one-foot deep must be covered overnight to prevent the entrapment of wildlife. Where holes or trenches cannot be sealed, escape ramps that are no greater than 30 percent slope shall be positioned such that entrapped wildlife shall be able to escape. The escape ramps should be at least one-foot wide and covered/fitted with a material that provides traction.
- Species Discovery. If an animal is found at the work site and is believed to be a protected species, work must halt, and the project biologist shall be contacted for guidance. Care must be taken not to harm or harass the species. No wildlife species shall be handled and/or removed from the project site by anyone except a qualified biologist.

***Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*** **Less than Significant Impact.** The project proposes to comply with the City's Tree Removal Ordinance by planting the replacement of 70 trees for the removal of approximately 14 trees removed due to construction or by funding the tree replacement program. In addition, approximately 40 existing tree stumps would be removed from the site. Onsite planting would be provided along the street frontages per City standards, would be low-water use native species, and would provide bio-filtration for the project. Plantings would also create a defensible space and firebreak around the facility. The project would comply with all local policies and regulations outlined in the Regulatory Setting. Based on tree diameter thresholds listed in the Tree Ordinance, between four to eleven trees proposed to be removed could be defined as heritage trees. Impacts related to conflicts with local policies or ordinances would be less than significant.

**e.** ***Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*** **No Impact**. The project site is not located within the plan area of any adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state Habitat Conservation Plan.

**References:**

Beir, P. and Loe, S., 1992. In my experience: a checklist for evaluating impacts to wildlife movement

corridors. Wildlife Society Bulletin, Vol. 20, No. 4. (Winter 1992), pp. 434-440.

CDFW Vegetation Classification and Mapping Program and California Native Plant Society Vegetation Program, 2015. Classification of the Vegetation Alliances and Associations of Sonoma County, California: Volume 1 of 2—Introduction, Methods, and Results. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=115807&inline [Accessed December 2020].

CDFW, 1998. Fish and Game Code. January 1, 1998.

CDFW, 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155 [Accessed December 2020].

CDFW, 2020a. California Natural Diversity Database RareFind. Available at: https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx [Accessed November 2020].

CDFW, 2020b. Vegetation Classification and Mapping Program. Available at: https://wildlife.ca.gov/Data/VegCAMP [Accessed December 2020].

City of Santa Rosa, County of Sonoma, and Sonoma County Water Agency, 2013. Santa Rosa Citywide Creek Master Plan. Available at: https://srcity.org/DocumentCenter/View/13792/Santa-Rosa-Citywide-Creek-Master-Plan-PDF [Accessed December 2020].

CNPS, 2020a. Inventory of Rare and Endangered Plants. Available at: http://www.rareplants.cnps.org [Accessed November 2020].

CNPS, 2020b. Umbellularia californica Forest & Woodland Alliance: California bay forest and woodland. Available at: https://vegetation.cnps.org/alliance/97 [Accessed December 2020].

ESA, 2009. Santa Rosa General Plan 2035 Final Environmental Impact Report. Available at: https://srcity.org/DocumentCenter/View/3093/General-Plan-Environmental-Impact-Report-Santa-Rosa-2035-PDF [Accessed December 2020].

Holland, Robert F., 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=75893 [Accessed December 2020].

MIG, Inc. 2021. General Biological Resources Assessment for the Permanent Fire Station 5 Rebuild. February 2021. (Included as Appendix B)

MIG, Inc. 2021. Preliminary Delineation of Wetlands, Other Waters, and Jurisdictional Habitats. March 2021. (Included as Appendix C)

USFWS, 2020a. Information for Planning and Conservation (IPaC). Website https://ecos.fws.gov/ipac/ [Accessed November 2020].

USFWS, 2020b. National Wetlands Inventory (NWI): Wetland Mapper. Available at:

https://www.fws.gov/wetlands/Data/Mapper.html [Accessed December 2020].

## 6.5 Cultural Resources

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5? | | | | ✓ |
| b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines §15064.5? | | ✓ | | |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | | | ✓ | |

**Conclusion:** Implementation of Mitigation Measures CUL-1, CUL-2, CUL-3, TCR-1 and TCR-2 would reduce potential impacts to less than significant levels. Regarding cultural resources, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a)** ***Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?*** **No Impact.** A cultural resources report was completed on February 12, 2021, by Origer & Associates. The Origer study included archival research, inspection of the project location, and contact with the Native American community. The study concludes that, per field surveys, the property has no cultural resources or historic properties. Additionally, a review of 19th and 20th century maps shows no past buildings on the currently undeveloped project site (Origer 2021).

Origer & Associates concluded that the buildings and structures in the project vicinity are less than 50 years old, are modern in style, and have no distinct historical characteristics. Because there are no known historic buildings or structures eligible for inclusion on a historic register, as defined by CEQA Guidelines section 15064.5, on the site or in the project vicinity, the proposed project would not result in any impacts known historic resources or built environments.

**b)** ***Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines §15064.5?*** **Less than Significant with Mitigation Incorporated.** The cultural resources records search reported by Origer & Associates indicates that the project site was included in five previous cultural resources studies, which are summarized in the Confidential Cultural Resources Appendix I, in accordance with State and Federal law. However, there are no recorded resources within the project site.

In the event that project ground-disturbing activities disturb, damage, or destroy previously unknown buried prehistoric features, sites or artifacts, a significant impact could occur. Implementation of Mitigation Measure CUL-1, CUL-2, CUL-3, TCR-1 and TCR-2 would reduce potential impacts to undiscovered archeological resources to a less than significant level.

**Mitigation Measure CUL-1: Conduct Archaeological Sensitivity Training for Construction Personnel.** A qualified professional archaeologist shall be retained who meets U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct an archaeological sensitivity training for construction personnel prior to commencement of excavation activities. The training session shall be carried out by a cultural resource professional with expertise in archaeology, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. The City and/or qualified professional archaeologist shall propose a date for scheduling the training at the pre-construction meeting with City staff. The City shall notify the construction personnel at least 48 hours before holding the training and keep a log of all attendees. The training session shall include a handout and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities, the procedures to be followed in such an event; the duties of archaeological monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation, if one is necessary. The archaeologist shall coordinate with the Federated Indians of Graton Rancheria on the training schedule and content.

**Mitigation Measure CUL-2: Prepare a Cultural Resources Treatment Plan.** Prior to any ground disturbing activities for the proposed project, a qualified archaeologist shall prepare a Cultural Resources Treatment Plan for review by and in consultation with the Federated Indians of Graton Rancheria and approval by the City. The plan shall address the treatment of any discovered resource, along with subsequent laboratory processing and analysis.

**Mitigation Measure CUL-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered.** In the event archaeological resources are unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated. Ground moving activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. This examination shall be done in coordination with the Tribal Cultural Monitor(s), Tribal Heritage Preservation Officer(s) (THPO). All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. In the event that the newly discovered artifacts are determined to be prehistoric, the Federated Indians of Graton Rancheria and Lytton Rancheria shall be contacted and consulted.

The discovery of prehistoric artifacts shall require that a Tribal Cultural Monitor be present for ground disturbing activities to resume. The specifications for this requirement shall be described in the Cultural Resources Treatment Plan listed in Mitigation Measure CUL-2.

A lead agency engages in Consultation with the Local Native American Tribes to identify Tribal Cultural Resources, the significance of Tribal Cultural Resources, and to determine how any resources are to be protected. All Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 and the Treatment Plan described in CUL-2 shall be followed if any tribal finds are discovered. If appropriate, the archaeologist and THPO may introduce archaeological and Tribal Cultural monitoring on the site. An archaeological report shall be written detailing all archaeological finds and submitted to the City and the Northwest Information Center This shall be done in consultation with the Tribe's THPO.

**Mitigation Measure TCR-1:** The Design/Build Entity shall provide a weekly construction update to the Tribal Historic Preservation Officer of the Federal Indians of Graton Rancheria during any ground disturbing activities. This update shall include a photo log of the construction.

**Mitigation Measure TCR-2:** An archaeologist on the Federated Indians of Graton Rancheria's preferred list shall be retained to provide spot monitoring of ground disturbing activities.

**c.** ***Disturb any human remains, including those interred outside of formal cemeteries?*** **Less than Significant Impact.** There are no known burial sites within the project boundary or the proposed area of disturbance. However, there is the possibility of as-yet undiscovered remains or burials within the project's area of disturbance. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make their determination within two working days from the time the person responsible for the excavation, or their authorized representative, notifies the coroner of the discovery or recognition of the human remains.

If the coroner determines that the remains are not subject to their authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, they shall contact the NAHC by telephone within 24 hours. These existing laws and regulations would ensure impacts are less than significant.

**References:**

Tom Origer & Associates, 2021. *Cultural Resources Study for the City of Santa Rosa Fire Station 5 Rebuild Project Santa Rosa, Sonoma County, California*. February 12, 2021. (Included as Appendix I. Confidential per AB52, on file with the City)

## 6.6 Energy Resources

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | ✓ | |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | ✓ | |

**Conclusion:** Regarding energy resources, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*** **Less than Significant Impact.** Construction activities associated with the proposed project would require the use of heavy-duty, off-road equipment and construction-related vehicle trips that would combust fuel, primarily diesel and gasoline. Heavy-duty construction equipment would be required to comply with CARB's airborne toxic control measures, which restrict heavy-duty diesel vehicle idling to five minutes. Since petroleum use during construction would be temporary and required to conduct development activities, it would not be wasteful or inefficient. Due to energy efficiency standards being improved over time, the new fire station developed at the project site would be more efficient than the temporary facility used by the department located almost 4,000 feet southeast along Stagecoach Road, which turns in Parker Hill Road. Improvements to energy efficiency are in large part related to updates to the California Green Building Standards Code (2019). As estimated in CalEEMod, the proposed project is estimated to consume approximately 225,705 kWh of electricity on an annual basis. Although more electricity would be consumed on an annual basis compared to the nearby temporary station, the proposed structures would use the energy in a more efficient manner and would rely on electricity produced by the solar array. The proposed project's energy consumption would not be wasteful, inefficient, or unnecessary. This impact would be less than significant.

**b.** ***Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*** **Less than Significant Impact.** The proposed project would not conflict with nor obstruct a state or local plan adopted for the purposes of increasing the amount of renewable energy or energy efficiency. As discussed under response a), the newly proposed fire station would be constructed to the latest CalGreen Code and incorporate a solar array, which would provide electricity and make the building more energy efficient than the existing temporary fire station. This impact would be less than significant.

**References:**

California Green Building Standards Commission (CalGreen), 2019. Division 5.2. Available at: https://up.codes/viewer/california/ca-green-code-2019/chapter/5/nonresidential-mandatory-measures#divider_5.2 (Accessed March 31, 2021)

## 6.7 Geology and Soils

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | ✓ | |
| ii) Strong seismic ground shaking? | | ✓ | | |
| iii) Seismic-related ground failure, including liquefaction? | | ✓ | | |
| iv) Landslides? | | ✓ | | |
| b) Result in substantial soil erosion or the loss of topsoil? | | ✓ | | |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and 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 direct or indirect risks to life or property? | | ✓ | | |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | | | | ✓ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | ✓ | | |

**Conclusion:** Regarding geology and soils, the implementation of Mitigation Measures GEO-1 through GEO-3 would reduce potential impacts to less than significant levels.

**Documentation:**

**ai.** ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving…Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*** **Less than Significant Impact.** Per the Ninyo and Moore Geologic Impact Analysis (2020) (Appendix D), the project site is not located in an Alquist-Priolo fault zone, and the impact would be less than significant.

**aii.** ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving…Strong seismic ground shaking?*** **Less than Significant with Mitigation Incorporated.** The Rodgers Creek Fault lies east of the San Andreas Fault and is the main strand of the North American-Pacific Plate boundary north of the San Francisco Bay. The Rodgers Creek Fault runs north/south approximately 3,000 feet southwest of the project site (Department of Conservation, 2021). Per the Association of Bay Area Governments (ABAG) Hazard Viewer, the project vicinity would be subject to severe or violent shaking in the event of a moderate to severe earthquake.

Predicting seismic events is not possible, nor is providing mitigation that can entirely reduce the potential for injury and damage that could occur during a seismic event. However, by applying geotechnical evaluation techniques and appropriate engineering practices, potential injury and damage from seismic activity can be diminished by exposing fewer people and less property to the effects of a major earthquake. The project proposes construction of onsite employee accommodations on the second level of the fire station. The design and construction of new structures are subject to engineering standards of the California Building Code (CBC), which consider soil properties, seismic shaking, and foundation type. Per the Geologic Impact Analysis, the impact of strong ground shaking would be mitigated by designing and constructing the improvements in accordance with the CBC to resist the anticipated strong ground shaking by adding the appropriate connections and lateral-force-resisting elements (Ninyo and Moore 2021). See Mitigation Measure GEO-1. Standard conditions of approval require that building permits be obtained for all construction and that the project meet all standard seismic and soil test/compaction requirements. Therefore, the potential impacts from severe or violent seismic ground shaking would be less than significant with implementation of mitigation measure GEO-1.

**Mitigation Measure GEO-1: Compliance with California Building Code (CBC).** All construction activities shall meet the CBC regulations as adopted by the City of Santa Rosa. Construction plans shall be subject to review and approval of the City prior to the issuance of grading and building permits, and actual construction shall be subject to inspection by the City.

**aiii.** ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving… Seismic-related ground failure, including liquefaction?*** **Less than Significant with Mitigation Incorporated.** Strong ground shaking can result in liquefaction (the sudden loss of sheer strength in saturated sandy material), resulting in ground failure and displacement. According to the ABAG Hazard Viewer Map, the project site is in an area that has very low liquefaction susceptibility. Additionally, design of the fire station building must incorporate mandatory CBC standards regarding liquefaction potential. The project-specific Geologic Impact Analysis (Ninyo and Moore 2020) concludes that because of the shallow bedrock conditions of the site, the potential for impacts from liquefaction would be less than significant.

Per the Geologic Impact Analysis, the impact of earthquake-induced landslides would be mitigated by setting the proposed structures back from the slope, or construction of retaining walls (Ninyo and Moore 2021). The project proposes construction of retaining walls around the perimeter of the paved area. Additionally, Mitigation Measure GEO-2 would require a construction-level geotechnical investigations, including relevant recommendations, and all associated project grading, excavation, and foundation plans, which shall be subject to review and approval by an independent engineering geologist or geotechnical engineer retained by the City Engineer. In addition, the project civil engineer shall certify to the City Engineer (e.g., through plan submittal for City review) that all relevant provisions of the investigations have been incorporated into the grading, excavation and construction plans, and all earthwork and site preparation shall be performed under the direct supervision of a registered engineering geologist or geotechnical engineer. Implementation of GEO-1 and GEO-2 would reduce the potential seismic related ground failure and grading impacts to a less-than-significant level.

**Mitigation Measure GEO-2: Submit a Geotechnical Investigation.** A registered engineering geologist or geotechnical engineer shall be retained to prepare detailed, construction-level geotechnical investigations, prior to City issuance of grading permits, to guide the construction of all project grading and excavation activities. The detailed, construction-level geotechnical investigations shall be performed for the development site. Subsurface conditions shall be explored, and laboratory tests conducted on selected soil samples to establish parameters for the design of excavations, foundations, shoring, and waterproofing. Recommendations from the investigations shall be incorporated into all plans for project grading, excavation, soil support (both temporary and long-term), and utility construction, to the satisfaction of the City Engineer.

**aiv.** ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving… Landslides?*** **Less than Significant with Mitigation Incorporated.** The urban and developed areas of Santa Rosa are primarily characterized by rolling hills with gradual to moderate slopes. In areas underlain by weak or unconsolidated earth materials, landslides are a hazard. The project is located in a hilly area, and Ninyo and Moore observed evidence of surficial instability along the sloped areas in the eastern and southern boundaries of the site. However, Ninyo and Moore concludes that this instability would be mitigated through the proposed retaining walls around the perimeter of the developed areas, as shown on Figures 3 through 5. Design of the fire station would incorporate mandatory CBC standards (GEO-1) and would require the submission of a geotechnical investigation (GEO-2) regarding landslide hazards, including setbacks from sloping areas. The potential for impacts from landslides would be less than significant.

**b.** ***Result in substantial soil erosion or the loss of topsoil?*** **Less than Significant with Mitigation Incorporated.** The project proposes construction of a 10,763 square-foot, two-story fire station with three apparatus bays, paved driveways, and parking. Project plans indicate that development of the project would require a cut of 8,500 cubic yards (CY), and a fill of 500 CY, which requires the issuance of a grading permit by the City. The Ninyo and Moore Soil Sampling report did not find hazardous soils onsite and concluded that soils could be disposed of at a Class II landfill. The hauled soil is proposed to be taken to Redwood Landfill in Novato, approximately 30 miles south. Improper grading, both during and post-construction, has the potential to increase the soil erosion from a site. Increased soil erosion on- and off-site could adversely impact downstream water quality.

Impacts related to erosion and loss of topsoil would be mitigated by compliance with Best Management Practices (BMPs) identified in the grading permits. These practices typically include sediment control measures such as silt fences, straw wattles or sediment trap during construction, and the installation of soil stabilization measures including erosion control blankets, slope drains with outlet protection, and establishment of vegetative cover. The potential soil erosion impact of the project would be less than significant with incorporation of Mitigation Measure GEO-3.

**Mitigation Measure GEO-3: Erosion and Sediment Control Plan or Stormwater Pollution Prevention Plan. (Also see Mitigation Measure BIO-3)** The Contractor or Design Build Entity shall submit an Erosion and Sediment Control Plan, or Stormwater Pollution Prevention Plan (SWPPP) prepared by a registered professional engineer or qualified stormwater pollution prevention plan developer as an integral part of the grading plan. The Plan shall be subject to review and approval of the City prior to the issuance of a grading permit. The Plan shall include all erosion control measures to be used during project construction and operation, including runoff control, sediment control, and pollution control measures for the entire site to prevent discharge of sediment and contaminants into the drainage system. Post-construction measures include maintenance of the bioretention areas, and vegetative landscaping. The Plan shall include the following measures as applicable:

a) Throughout the construction process, ground disturbance shall be minimized, and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas, and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.
b) All drainage ways, wetland areas, and stream areas shall be protected from silt and sediment in storm runoff using appropriate Best Management Practices (BMPs) such as silt fences, diversion berms, and check dams. Fill slopes shall be stabilized and covered when appropriate. All exposed surface areas shall be mulched and reseeded. All cut and fill slopes shall be protected with hay mulch and/or erosion control blankets, as appropriate.
c) During construction, all erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15. Construction erosion control measures shall remain in place until the end of the rainy season but may not be removed before April 15. The City shall be responsible for notifying construction contractors about erosion control requirements.
d) Example design standards for erosion and sediment control include, but are not limited to, the following: avoiding disturbance in especially erodible areas; minimizing disturbance on slopes; using berms, swales, ditches, vegetative filter strips, and catch basins to prevent the escape of sediment from the site; conducting development in increments; and planting bare soils to restore vegetative cover.

e) The City shall also develop an inspection program to evaluate if there is any significant onsite erosion as a result of rainfall. If problems arise at the site after rainfall, the Contractor or Design Build Entity shall enhance methods to manage onsite erosion.

**c.** ***Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*** **Less than Significant with Mitigation Incorporated.** The project site is subject to seismic shaking, and discussions of impacts related to liquefaction and landslides are in items (iii) and (iv), above. Lateral spreading occurs when soils liquefy during an earthquake, and the liquefied soils along with the overlying soils move laterally to unconfined spaces, causing horizontal ground displacements. Subsidence is the sudden sinking or gradual downward settling of the ground's surface with little or no horizontal motion. Per the Geologic Impact Analysis, the project has the potential to reduce slope stability on the eastern and southern borders of the site if project grading removes materials from the bottom portion of the slope. The potential impact to the stability of adjacent slopes would be mitigated through construction of the proposed retaining walls around the western parking area and yard, as well as the eastern public parking area, as shown on Figures 3 through 5. The potential for settlement or collapse of unstable soil would be mitigated through GEO-1 and GEO-2, bringing impacts to a less-than-significant level.

**d.** ***Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*** **Less than Significant with Mitigation Incorporated.** Expansive soils may be found on the project site and pose a risk for property damage where project improvements are constructed on or adjacent to expansive soils (Ninyo and Moore 2020). The USDA Natural Resource Conservation Service (NRCS) maps show the project's soils as Goulding cobbly clay loam and Spreckels loam, which may be expansive. The Goulding loam covers most of the site and drains well. Spreckles loam is located at the eastern end of the panhandle adjacent to Stagecoach Road and consists of well-drained loam, clay, and cemented soil. (Ninyo and Moore 2020)

Project construction and grading activities must be conducted in compliance with the CBC and City Code Chapter 18-16 (Site Grading). Compliance with all applicable construction and grading regulations, and implementation of Mitigation Measures GEO-1 though GEO-3 would reduce the impact to life and property created from soil expansion to a less-than-significant level.

**e.** ***Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*** **No Impact.** The proposed project would be served by a public sewer system. The project would not include a septic tank or an alternative wastewater disposal system. There would be no impact.

**f.** ***Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*** **Less than Significant with Mitigation Incorporated.** The site is a developed area, and the Geological Map of California does not reveal the presence of, or potential for, unique geological features (e.g., scientifically important rock outcroppings). There would be no impact to unique geologic features.

In case as-yet undiscovered paleontological resources are uncovered on the project site, Mitigation Measures GEO-4 and GEO-5 would reduce any potential impact to a less than significant level.

**Mitigation Measure GEO-4: Conduct Paleontological Sensitivity Training for Construction Personnel.** A professional paleontologist who meets the qualifications set forth by the Society of Vertebrate Paleontology shall be retained and shall conduct a paleontological sensitivity training for construction personnel prior to commencement of excavation activities. The City and/or qualified professional paleontologist shall propose a date for scheduling the training at the pre-construction meeting with City staff. The City shall notify construction personnel at least 48 hours before holding the training and keep a log of all attendees. The training shall include a handout and focus on how to identify paleontological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, the duties of paleontological monitors, notification, and other procedures to follow upon discovery of resources, and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.

**Mitigation Measure GEO-5: Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered.** If paleontological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the City. Work shall be allowed to continue outside of the buffer area. The City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource, along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Paleontological monitoring may be required as part of the treatment plan.

**References:**

Association of Bay Area Governments (ABAG), March 2020. MTC/ABAG Hazard Viewer Map. https://abag.ca.gov/our-work/resilience/data-research/hazard-viewer (accessed March 12, 2021)

California Department of Conservation, 2019. Earthquake Zones of Required Investigation. https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed March 12, 2021)

Ninyo and Moore, 2020. *Geologic Impact Analysis*. December 14, 2020. (Included as Appendix D)

Tom Origer & Associates, 2021. *Cultural Resources Study for the City of Santa Rosa Fire Station 5 Rebuild Project Santa Rosa, Sonoma County, California*. February 12, 2021. (Appendix I: Confidential per AB52, on file with the City)

## 6.8 Greenhouse Gas Emissions

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| 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? | | | ✓ | |

**Conclusion:** Regarding greenhouse gas emissions, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*** **Less than Significant Impact.** Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHGs). The six most common GHGs are listed below.

- Carbon dioxide ($CO_2$)
- Methane ($CH_4$)
- Nitrous oxide ($N_2O$)
- Sulfur hexafluoride ($SF_6$)
- Hydrofluorocarbon (HFCs)
- Perfluorocarbons (PFCs)

GHGs that contribute to climate change are a different type of pollutant than criteria or hazardous air pollutants, as previously discussed in Section 6.3, Air Quality, because climate change is global in scale, both in terms of causes and effects. Some GHGs are emitted to the atmosphere naturally by biological and geological processes such as evaporation (water vapor), aerobic respiration (carbon dioxide), and off-gassing from low oxygen environments such as swamps or exposed permafrost (methane); however, GHG emissions from human activities such as fuel combustion (e.g., carbon dioxide) and refrigerants use (e.g., hydrofluorocarbons) significantly contribute to overall GHG concentrations in the atmosphere, which affects climate regulation and results in a changing climate globally. Examples of the effects of global climate change include rising temperatures and increased severe weather events such as drought and flooding.

GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is $CO_2$, which has a GWP of one. By comparison, $CH_4$ has a GWP of 25, which means that one molecule of $CH_4$ has 25 times the effect on global warming as one molecule of $CO_2$. Multiplying the estimated emissions for non-$CO_2$ GHGs by their GWP determines their carbon dioxide equivalent ($CO_2e$), which enables a project's combined global warming potential to be expressed in terms of mass $CO_2$ emissions. Most often, GHG emissions associated with projects are referred to in terms of metric tons of $CO_2e$, or $MTCO_2e$.

In 1997, the United Nations' Kyoto Protocol was adopted in Kyoto, Japan, establishing an international treaty that set targets for reductions in emissions of four specific GHGs – $CO_2$, $CH_4$, $N_2O$, and $SF_6$ – and two groups of gases – HFCs and PFCs. As previously mentioned, these GHGs

are the primary GHGs emitted into the atmosphere by human activities. The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change.

The State of California has several regulations and executive directives aimed at reducing GHG emissions. In 2005, for instance, the governor issued Executive Order S-3-05, establishing statewide GHG emissions reduction targets. Executive Order S-3-05 provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent below 1990 levels (CalEPA, 2006). In 2006, the California Global Warming Solutions Act (AB 32) was signed into law. AB 32 codifies the statewide GHG emission reduction targets and required CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline, which was approved in 2008 and updated in 2014 and 2017.

Executive Order B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, sets a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. By directing state agencies to take measures consistent with their existing authority to reduce GHG emissions, this order establishes coherence between the 2020 and 2050 GHG reduction goals set by AB 32 and seeks to align California with the scientifically established GHG emissions levels needed to limit global warming below two degrees Celsius.

To reinforce the goals established through Executive Order B-30-15, Governor Brown went on to sign SB-32 and AB-197 on September 8, 2016. SB-32 made the GHG reduction target to reduce GHG emissions by 40 percent below 1990 levels by 2030 a requirement as opposed to a goal. AB-197 gives the Legislature additional authority over CARB to ensure the most successful strategies for lowering emissions are implemented, and requires CARB to, "protect the state's most impacted and disadvantaged communities …[and] consider the social costs of the emissions of greenhouse gases."

On December 14, 2017, CARB adopted the second update to the Scoping Plan, the *2017 Climate Change Scoping Plan Update* (*2017 Scoping Plan Update*; CARB, 2017). The primary objective of the *2017 Scoping Plan Update* is to identify the measures needed to achieve the mid-term GHG reduction target for 2030 (i.e., reduce emissions by 40 percent below 1990 levels by 2030), as established under Executive Order B-30-15 and SB 32. The *2017 Scoping Plan Update* identifies an increasing need for coordination among state, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. It notes emission reduction targets set by more than one hundred local jurisdictions in the state could result in emissions reductions of up to 45 million $MTCO_2e$ and 83 million $MTCO_2e$ by 2020 and 2050, respectively. To achieve these goals, the *2017 Scoping Plan Update* includes a recommended plan-level efficiency threshold of six metric tons or less per capita by 2030 and no more than two metric tons per capita by 2050.

Consistent with the BAAQMD's *CEQA Air Quality Guidelines*, construction-related GHG emissions are amortized over the lifetime of the proposed project (presumed to be a minimum of 30 years). This normalizes construction emissions so that they can be grouped with operational emissions and compared to appropriate thresholds, plans, etc. The proposed project would generate GHG emissions from both short-term construction and long-term operational activities. Construction activities would generate GHG emissions primarily from equipment fuel combustion as well as worker, vendor, and haul trips to and from the project site during demolition, site preparation, grading, building construction, paving, and architectural coating activities. Construction activities

would cease to emit GHGs upon completion, unlike operational emissions that continue year after year until the facilities constructed as part of the project close or cease operation. Once operational, the proposed project would generate GHG emissions from area, energy, mobile, stationary, water/wastewater, and solid waste sources.

GHG emissions from construction and operation of the proposed project were estimated using CalEEMod, version 2016.3.2, based on default data assumptions contained in CalEEMod, with the project-specific modifications described in Section 6.3.

The proposed project's estimated construction and operational emissions are presented below in Table 6, *Project Greenhouse Gas Emissions*. As shown in Table 6, development of the proposed project would generate approximately 88.3 MTCO2e, which is below the BAAQMD 2020 GHG threshold and derived 2030 GHG emissions goal.

**Table 6. Project Greenhouse Gas Emissions**

| Source | GHG Emissions (MT/YR) | | | |
|---|---|---|---|---|
| | $CO_2$ | $CH_4$ | $N_2O$ | TOTAL[A] |
| Area | <0.0[B] | 0.0 | 0.0 | <0.0[B] |
| Energy | 10.1 | <0.0[B] | <0.0[B] | 10.4 |
| Mobile | 33.3 | <0.0[B] | 0.0 | 33.3 |
| Stationary | 25.5 | <0.0[B] | 0.0 | 25.6 |
| Solid Waste | 2.0 | 0.1 | 0.0 | 5.0 |
| Water/Wastewater | 1.3 | 0.1 | <0.0[B] | 3.5 |
| Amortized Construction | 10.4 | <0.0[B] | <0.0[B] | 10.5 |
| ***Total Project Emissions[C]*** | ***82.6*** | ***0.2*** | ***<0.0[B]*** | ***88.3*** |
| Exceeds Goals? | -- | -- | -- | No |

Source: MIG 2021 (see Appendix A)
Note:
(A) $MTCO_2e$
(B) <0.0 does not mean emissions are zero; rather, it means emissions are greater than zero, but less than 0.05.
(C) Slight variations may occur due to rounding.

The City adopted a community-wide Climate Action Plan (CCAP) on June 5, 2012. The CAP examines community-wide sources of GHG emissions and outlines strategies for reducing emissions. On August 6, 2013, the City adopted a Municipal Climate Action Plan (MCAP), which focuses on GHG emissions from the City's municipal operations.

Per the MCAP, the City estimates that buildings and facilities account for 12% of municipal GHG emissions. The fire station would emit GHGs during construction and operation. In addition, the City of Santa Rosa's CAP includes GHG reduction goals. The project would be compliant with Goal 2: Renewable Energy: Install and utilize renewable energy sources in Santa Rosa. The project proposes installation of a small-scale renewable energy system that the project architect estimates would produce an average of 21,612 kW hours per year.

In addition to quantifying the emissions reductions associated with each strategy in the CCAP, BAAQMD guidance recommends that the City clearly specify the measures within the CCAP applicable to new construction projects to demonstrate compliance with the City's GHG emissions reduction strategy and determine that the project's GHG emissions are less than significant. To ensure that each new construction project complies with the City's CCAP, a checklist has been

developed to be submitted by an applicant for each new development project. All new development within the city must meet the mandatory requirements of the New Development Checklist (Appendix E). Action 1.1.3 of the CCAP was adopted to coincide with California Energy Codes. Since the CCAP adoption, the CEC has determined that it is not possible to achieve net zero on a wholesale basis and "net zero" has been removed from the California Energy Codes. Appendix E of the Santa Rosa CCAP states that, "To be in compliance with the CCAP, all measures denoted with an asterisk are required in all new development projects unless otherwise specified. If a project cannot meet one or more of the mandatory requirements, substitutions may be made from other measures listed at the discretion of the Community Development Director. CCAP Goal 1.1 requires projects to comply with Tier 1 CALGreen requirements, as amended, for new non-residential and residential development. Tier 1 CALGreen does not include "net zero" GHG assumptions for development. In addition, current California Green Building Code Standards apply to all projects and has been determined by the Director to be an acceptable substitution for CCAP Goal 1 – 1.1.3. Therefore, strict compliance with CCAP Goal 1 – 1.1.3 is not achievable and not required for the Project.

The following measures in the CCAP are also applicable to the project:
1.4.2 Comply with the City's tree preservation ordinance
1.4.3 Provide public & private trees in compliance with the Zoning Code
7.1.1 Reduce potable water use for outdoor landscaping
7.1.3 Use water meters which track real-time water use
9.1.3 Install low water use landscapes
9.2.1 Minimize construction equipment idling time to 5 minutes or less

In addition to compliance with the above CCAP measures, Table 6 indicates that development of the proposed project would generate approximately 88.3 $MTCO_2e$, which is below the BAAQMD 2020 GHG threshold and derived 2030 GHG emissions goal. Therefore, this impact would be less than significant.

**b.** ***Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*** **Less than Significant Impact.** The proposed project would not conflict with the City of Santa Rosa's Climate Action Plan (CCAP) nor the Municipal CAP (MCAP), CARB's Scoping Plan or the Association of Government / Metropolitan Planning Commission's (ABAG/MTC) *Plan Bay Area 2040*. The 2012 CAP and 2013 MCAP meet CARB's initial Scoping Plan recommendation that local agencies reduce community-wide emissions to 15 percent below 2005 levels by 2020. The project's consistency with these plans is described in more detail below.

**CARB Scoping Plan:** The *2017 Climate Change Scoping Plan* is CARB's primary document used to ensure State GHG reduction goals are met. The plan identifies an increasing need for coordination among State, regional, and local governments to achieve the GHG emissions reductions that can be gained from local land use planning and decisions. The major elements of the 2017 Climate Change Scoping Plan, which is designed to achieve the State's 2030 GHG reduction goal, include:

- Continued implementation of SB 375.
- Implementing and/or increase the standards of the Mobile Source Strategy, which include increasing zero emission vehicle (ZEV) buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewable Portfolio Standard (RPS) to 50 percent and doubles energy efficiency savings by 2030.

- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing $CH_4$ and hydrocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Nearly all of the specific measures identified in the *2017 Climate Change Scoping Plan* would be implemented at the state level, with CARB and/or another state or regional agency having the primary responsibility for achieving required GHG reductions. The proposed project, therefore, would not directly conflict with any of the specific measures identified in the *2017 Climate Change Scoping Plan*.

**ABAG/MTC Plan Bay Area 2040:** The overarching goal of *Plan Bay Area 2040* is to concentrate development in areas where there are existing services and infrastructure rather than allocate new growth in outlying areas where substantial transportation investments would be necessary to achieve the per capita passenger vehicle, vehicle miles traveled (VMT), and associated GHG emissions reductions (ABAG/MTC 2017). Because the trips associated with the fire station that was destroyed by the Tubbs Fire are essentially being replaced, only the community room, which is the only part of the new fire station that is not a replacement for the station that was lost, was considered in evaluating VMT and trip counts, which resulted in a slight increase in trip generation.

Using the rates published by the Institute of Transportation Engineers (ITE) in the Trip Generation Manual for the "Community Center" (Land Use 495), it was estimated that the new community center would generate an average of 51 new trips per day. Based on the traffic analyses conducted for the proposed project, the site would result in a slight increase in trips generated at the site but would likely to result in unchanged or similar VMT (W-Trans 2021). Therefore, the project would not conflict with *Plan Bay Area 2040* because the project is replacing a facility and is below per capita VMT thresholds and associated GHG emissions. The proposed project would not conflict with *Plan Bay Area 2040*.

**City of Santa Rosa Municipal Climate Action Plan (2013):** The Municipal Climate Action Plan (MCAP) focuses on the GHG emissions associated with municipal facilities and operations including the municipal water distribution system, wastewater treatment activities, City buildings and facilities, public lighting, and vehicle fleet.

**City of Santa Rosa Climate Action Plan (2012):** The CAP is considered a qualified GHG Reduction Strategy and is compliant with BAAQMD guidelines. The CAP meets CARB's initial Scoping Plan recommendation that local agencies reduce community-wide emissions to 15 percent below 2005 levels by 2020.

**Conclusion**

As discussed above and in section 6.8.a, the proposed project would neither conflict with nor obstruct implementation of the CARB *2017 Climate Change Scoping Plan*, the ABAG/MTC *Plan*

*Bay Area 2040*, or the City of Santa Rosa's 2012 and 2013 Climate Action Plans. This impact would be less than significant.

**References:**

Association of Bay Area Governments / Municipal Transit Commission (ABAG/MTC). 2017. *Plan Bay Area 2040.* Approved July 26, 2017.

Bay Area Air Quality Management District (BAAQMD), 2017. *CEQA Air Quality Guidelines*. Available at: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (Accessed March 31, 2021).

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. Available at: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf (Accessed March 31, 2021).

California Environmental Protection Agency (CalEPA). 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available at: https://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF (Accessed March 31, 2021).

City of Santa Rosa. June 5, 2012. *Climate Action Plan.* Available at: https://srcity.org/DocumentCenter/View/10762/Climate-Action-Plan-PDF?bidId= (Accessed May 26, 2021).

City of Santa Rosa. August 6, 2013. Municipal Climate Action Plan. Available at: https://srcity.org/DocumentCenter/View/10759/Municipal-Climate-Action-Plan-PDF?bidId= (Accessed May 26, 2021).

W-Trans, February 1, 2021. CEQA Initial Study Checklist for the Santa Rosa Fire Station 5 Project. (Included as Appendix H).

## 6.9 Hazards and Hazardous Materials

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| 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 which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | ✓ | |
| e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | ✓ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | ✓ |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | | | ✓ | |

**Conclusion:** Regarding hazards and hazardous materials resources, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*** **Less than Significant Impact.** Construction of the proposed project, as well as ongoing operation, would involve the intermittent transport, use, and disposal of potentially hazardous materials, including fuels and lubricants, paints, solvents, and other common materials. To maintain the health and safety of the public and environment during project construction and operation, any onsite hazardous materials that may be used, stored, or transported would be required to follow protocols determined by the U.S. EPA, California Department of Health and Safety, and City of Santa Rosa. The project proposal involves storage of engine fuel in an onsite, above-ground 500-gallon tank. The tank would have a secondary containment area around the base, and the dispensing systems would comply with all applicable emission control regulations.

During construction, proper use of materials in accordance with Sonoma County Department of Health, Department of Toxic Substances Control, Regional Water Quality Control Board, and the Environmental Protection Agency requirements, and as required in the construction documents, would minimize the potential for accidental releases or emissions from hazardous materials. In addition, as standard City procedure, project construction contracts are required to comply with Santa Rosa Fire Department regulations for storage of flammable liquids and Santa Rosa Municipal Code regulations related to hazardous materials management. Project construction contracts are also required to specify procedures in the event of a spill of hazardous materials (e.g., contractor or Design Build Entity responsible for immediately calling emergency number 9-1-1 to report spill, taking appropriate actions to contain spill to prevent further migration of hazardous materials, contacting City to verify appropriate clean-up procedures).

During operation, project use, storage, transport, and disposal of hazardous materials would be subject to applicable local, state, and federal regulations, and these regulations (including existing General Plan goals to minimize dangers from "hazardous materials") specify standards and protocols for hazardous materials. The potential threat to public health and safety and the environment from hazardous materials would be less than significant.

**b.** ***Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*** **Less than Significant Impact**. A Phase 1 Environmental Site Assessment (ESA) was completed on January 7, 2021, by Ninyo and Moore (Appendix E) to identify current and historical, potential, and actual recognized environmental conditions (RECs) for the site. A REC is the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to historical or present activities or conditions. The ESA did not identify any active or historical RECs in connection with the project site.

Onsite storage of diesel fuel for the firetrucks is proposed, which could pose a risk for accidents. However, the project would be required to comply with existing local, state, and federal regulations and practices to prevent, contain, and clean-up spills and contamination from paints, fuels, solvents, and other hazardous materials. The impact would be less than significant.

**c.** ***Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*** **No Impact.** The nearest existing schools are farther than one-quarter mile from the project site. The schools are Hidden Valley Elementary (approximately 0.9 miles south) and St. Rose School (approximately 1.6 miles west). No existing or proposed schools are located within one-quarter mile of the project site.

**d.** ***Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?*** **Less than Significant Impact.** The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code 65962.5 (Cortese List), and there are no known hazardous material locations within project boundaries, based on review of the following databases on February 24, 2021:

- State Water Resources Control Board Geotracker database
- California Department of Toxic Substances Control EnviroStor database
- California Integrated Waste Management Board Solid Waste Information System (SWIS)

According to the project-specific ESA report, the project site is within one mile of three leaking underground storage tank (LUST) sites and one Cleanup Program Site (CPS) in GeoTracker. Ninyo and Moore (the ESA preparers) concluded that none of the listed facilities are considered to be a REC based on several factors, including distance from the site, location relative to the regional groundwater flow direction, database listing type, and/or affected soil.

The project proposes storage of engine fuel in onsite, above-ground tanks located in the enclosed utilities yard. These tanks would have a secondary containment area around the base, and the dispensing systems would comply with all applicable emission control regulations. The dispenser would be built into the wall via a remote connection that would dispense fuel in the parking area before the fire trucks would enter the bays from the interior staff parking lot area.

The paved operations yard would house an above-ground 200-kilowatt emergency diesel generator, a 500-gallon fuel storage tank for fueling fire apparatus with secondary containment, a 1500-gallon fuel storage tank for the emergency generator, a hose drying rack, trash and recycling, security fence/gates, vehicle washing station, and an exhaust removal system. The City would also need to obtain Sonoma County permit approval prior to installation, may be required to file a Hazardous Materials Business Plan (HMBP), and may be required to implement a Spill Prevention, Control, and Countermeasure (SPCC) plan according to the Aboveground Petroleum Storage Act (APSA) of 1990 (Sonoma County, 2021).

Additionally, a Soil Sampling Report (Appendix F) was also completed by Ninyo and Moore, which concluded that all soil samples tested below all Construction Worker Environmental Screening Levels (ESLs) for all contaminants, including volatile organic compounds (VOCs), diesel and motor oil, and polychlorinated biphenyls (PCBs). The proposed project and site would not create a significant hazard to the environment or the public. The impact would be less than significant.

**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?*** **No Impact.** The project is not included within an airport land use plan or within two miles of a public airport. The closest public airport is the Charles M. Schulz Sonoma County Airport, over five miles west of the project site. The project would not result in a safety hazard for people residing or working in the project area, and there would be no impact.

**f.** ***Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*** **No Impact.** Due to the loss of the fire station east along Fountaingrove Parkway during the 2017 Tubbs Fire, the surrounding area has experienced diminished fire response compared to conditions that existed when the fire station was operational. The proposed project would replace this facility, improving response times to the surrounding area. The project would use the proposed training room as a command post during emergencies in the northern area of the city. The project would not interfere with emergency evacuation plans.

**g.** ***Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*** **Less than Significant Impact.** The project site is located in a local responsibility area and a moderate fire hazard severity zone, according to the CalFire Fire and Resource Assessment Program (FRAP) Map. While project construction and operation could expose people or structures to increased fire hazards, the project site is in an area of limited vegetative cover and minimal topographical features to channel fire.

The applicant has identified the following fire safety features of the building, which include: a fire sprinkler system, fire alarm system, non-combustible exterior wall cladding (cement plaster and fiber cement board), non-combustible window and door frames, tempered glass for all exterior glazing, non-combustible doors, fire resistant vent screens, metal panel roofing, and rock ballasted membrane roofing. Therefore, the proposed project is expected to have a less than significant impact regarding exposure of people or structures to wildfire risks. Also see section 6.20 (Wildfire) of this Initial Study.

**References:**


Cal Recycle, *Solid Waste Information System (SWIS) Facility/Site Search*. Accessed February 24, 2021. Available at: https://www2.calrecycle.ca.gov/SWFacilities/Directory/

County of Sonoma, 2021. *Sonoma County Airport Referral Area.* Accessed February 24, 2021. Available at: https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Comprehensive-Airport-Land-Use/Sonoma-County-Airport/

Sonoma County, 2021. (Used to locate fire hazard zones) *Permit Sonoma GIS Cannabis Site Evaluation Tool*. Accessed February 24, 2021. Available at: http://sonomamap.maps.arcgis.com/apps/webappviewer/index.html?id=0b784d90045941798d780f288b6f7003

The Department of Toxic Substances Control. *EnviroStor Database*. Accessed February 24, 2021. Available at: http://www.envirostor.dtsc.ca.gov/public/

Ninyo and Moore, 2021. *Phase 1 Environmental Site Assessment*. February 8, 2021. (Included as Appendix E)

Ninyo and Moore, 2021. *Soil Sampling Report.* March 4, 2021. (Included as Appendix F)

Sonoma County, 2021. Aboveground Petroleum Storage. Accessed July 12, 2021. Available at: https://sonomacounty.ca.gov/PRMD/Fire-Prevention/Hazardous-Materials-Unit/Permits-and-Inspections/Aboveground-Petroleum-Storage/

State Water Resources Control Board. *Geotracker Database Search*. Accessed February 24, 2021. Available at: http://geotracker.waterboards.ca.gov/

## 6.10 Hydrology and Water Quality

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | ✓ | | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | | | ✓ | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would: | | | | |
| i. Result in a substantial erosion or siltation on- or off-site; | | ✓ | | |
| ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite: | | | ✓ | |
| iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | | | ✓ | |
| iv. Impede or redirect flood flows? | | | | ✓ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | ✓ | |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | ✓ | |

**Conclusion:** Implementation of Mitigation Measure GEO-1 would result in less than significant impacts with respect to hydrology and water quality.

**Documentation:**

**a.** ***Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*** **Less than Significant with Mitigation Incorporated**. The site is undeveloped and pervious, and the proposed project would generate stormwater runoff from increased impervious surfaces. The project proposes construction of a 10,763 square-foot, two-story fire station with three apparatus bays and paved driveways and parking areas, totaling 56,375 square feet of impervious area.

If construction would result in land disturbance of one or more acres, the State Water Resources Control Board (SWRCB) is responsible for regulating stormwater discharge associated with project construction activities such as clearing, grading, and excavation. The City maintains a National Pollutant Discharge Elimination System (NPDES) permit which requires applicants to demonstrate that their project is covered by the State's General Construction Permit before obtaining any construction related permits. The State's General Construction Permit requires project applicants to prepare a Storm Water Pollution Prevention Plan (SWPPP) for their project. The purpose of the SWPPP is to describe and prescribe Best Management Practices (BMPs) to control sediment and other pollutants during construction from possibly entering stormwater, and the SWPPP must address grading and erosion impacts as well as non-point source pollution impacts from their project, including post-construction operations. Because the project would disturb over one acre of land, the City and/or Design Build Entity would be required to obtain the State's General Construction Permit and prepare a SWPPP (see Mitigation Measure GEO-1). Because the project would place more than 10,000 square feet of impervious surface, pursuant to per Santa Rosa Municipal Code (Section 17-12), the project is also required to develop a Stormwater Control Plan (SWCP) that meets the criteria of the NPDES Municipal Separate Storm Sewer (MS4) Permit requirements.

These regulations would reduce non-point source pollutants through the implementation of BMPs and other control measures that minimize or eliminate pollutants from urban runoff, thereby protecting downstream water sources. BMPs implemented to address commercial pollutant sources generally involve maintenance of storm drain facilities, parking lots, vegetated areas, and dissemination of educational materials. Project construction would be subject to the City's NPDES permit requirements during construction activities, in addition to standard NPDES operational requirements.

An Initial Stormwater Low Impact Development (LID) submittal has been prepared by BKF Engineers, dated February 2021. The project design includes various Integrated Management Practices (IMPs – a type of LID) and BMPs for construction and operation. The City proposes storm drainage improvements with underdrains and outflows, consisting of bioretention basins and IMPs with landscaped areas to collect and filter onsite stormwater and irrigation run-off. These features would be finalized in a final Storm Water Control Plan (SWCP), required in Mitigation Measure GEO-1, and would be subject to review and approval by the Planning and Economic Development Department. Implementation of Mitigation Measure GEO-1 would ensure that impacts on surface and groundwater quality would be less than significant.

**b.** ***Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*** **Less than Significant Impact.** The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The project would rely on the existing water service from Santa Rosa Water, and connect to the existing water main located under Stagecoach Road. The water service would provide potable water for the onsite fire hydrant and building sprinkler system, for domestic water, and for irrigation purposes. The applicant has estimated that 360,000 gallons per year would be used on the project site. This estimate includes landscaping irrigation and periodic truck washing. Although the project would increase impervious surface onsite, the proposed installation of IMP areas would allow for treatment and percolation of water into the underlying soils, which would, in turn, contribute to groundwater recharge. Because the project does not involve an increase in groundwater extraction, the project would not substantially interfere with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table. The impact would be less than significant.

**ci.** ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would…Result in a substantial erosion or siltation on- or off-site?*** **Less than Significant with Mitigation Incorporated.** The project proposes construction of a 10,763 square-foot, two-story fire station with three apparatus bays and paved driveways and parking. Project plans indicate that project development would require a cut of 8,500 cubic yards (CY), and a fill of 500 CY, which requires the issuance of a grading permit by the Planning and Economic Development Department.

As mentioned in 6.10.a, because the project would disturb over one acre of land, the applicant would be required to obtain the State's General Construction Permit and prepare a SWPPP. Runoff from all proposed impervious surfaces would be directed to the bioretention facilities throughout the site where water quality treatment would begin. Bioretention areas remove pollutants by filtering runoff slowly through an active layer of soil. The project must comply with NPDES requirements to treat stormwater runoff and reduce pollutants. Because this project involves the creation of more than 10,000 square feet of net new impervious surface, stormwater is required to be contained and treated onsite. This containment and treatment of stormwater is currently proposed via four new IMP areas.

Improper project grading activities, both during and post-construction, have the potential to increase the volume of runoff from a site and subsequently increase erosion. As discussed in Geology and Soils section 6.7.b, the potential soil erosion impact of the project would be less than significant through implementation of Mitigation Measure GEO-1, which would require the applicant to prepare and implement the project SWPPP. Because of these regulatory standards and the mitigation measure, substantial siltation and erosion is not anticipated; the impact would be less than significant after mitigation.

**cii.** ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would…Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?*** **Less than Significant Impact.** The project design incorporates strategies to reduce and manage runoff. Temporary pollution prevention and permanent stormwater BMPs have been designed to minimize the introduction of pollutants into streambeds and drainages. During construction, the contractor would be required to use filter fabric, gravel bags, straw wattles, or similar measures to collect sediment and filter water before allowing its discharge to downstream facilities. This would also require that disturbed areas be seeded to help stabilize un-vegetated areas.

Permanent BMPs include construction of bioretention/IMP areas containing porous engineered media to capture the post-development stormwater runoff during light precipitation events and encourage infiltration. Additionally, the bioretention areas have been equipped with overflow drains to minimize inundation on paved surfaces during larger storm events. Project LID techniques include limiting impervious surfaces, dispersing development into smaller areas, and creation of stormwater detainment areas. With these design measures and BMPs in place, the impact would be less than significant.

**ciii.** ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would: Create or contribute runoff water which would exceed the capacity of***

***existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*** **Less than Significant Impact.** The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. In order to satisfy water quality requirements, runoff from events up to the 95th percentile 24-hour rainfall event (1.3 inches) shall be retained onsite. Per the Initial Stormwater LID Submittal, the project's four proposed bioretention/IMP basins have capacity to capture stormwater in excess of the required amount, as shown in Table 7 below.

**Table 7. Bioretention Basins and Requirements**

| Bioretention Area | Required Size in Cubic Feet | Captured Stormwater in Cubic Feet |
|---|---|---|
| 1 | 254 | 261 |
| 2 | 288 | 303 |
| 3 | 1,460 | 1,492 |
| 4 | 803 | 818 |
| **TOTAL** | **2,805 CF** | **2,874 CF** |
| Source: BKF. Initial Stormwater LID Submittal. Volume Capture Calculations, 2021. | | |

Discharge generated from project development would be managed and treated with the bioretention basins and BMPs through project construction and operation. Stormwater runoff from the site would be collected and conveyed to the on-site LID features for biotreatment before being discharged to the existing, adjacent drainage swale east of the project site. This swale enters a closed conduit storm drain system and is located under Stagecoach Road, and the municipal close conduit storm drain system continues under Stagecoach Road. The project has adequate capacity to treat stormwater runoff for the proposed development. Drainage patterns would not be altered, and the impact would be less than significant.

**civ.** ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would…Impede or redirect flood flows?*** **No Impact.** Refer to responses 10.c.ii and 10.c.iii above for discussion of hydrological impacts. There would be no impact on flood flows.

**d.** ***In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*** **Less than Significant Impact.** The project is not located in a tsunami zone, nor seiche zone. As part of the Geologic Impact Analysis (GIA), Ninyo and Moore concluded that the site is not located in a flood hazard zone and is rated by the Federal Emergency Management Agency (FEMA) as Zone X, defined as an "area of minimal flood hazard." The GIA also confirmed that the project site is not in a dam failure inundation zone (2020). The risk of pollutant release due to project inundation is less than significant.

**e.** ***Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*** **Less than significant Impact.** As a result of planned drainage treatment features, impacts related to violation of water quality standards would be less than significant. An Initial Stormwater LID submittal has been prepared by BKF. In the project design, the applicant proposes various IMP and BMPs for construction and operation, including storm drainage improvements with underdrains and outflows, consisting of bioretention basins and IMPs with landscaped areas to collect and filter onsite stormwater and irrigation run-off. These features would be finalized in a final Storm Water Control Plan (SWCP), subject to review and approval of the Planning and Economic Development Department.

The City's 2015 adoption of the Water Efficient Landscape Ordinance (WELO) applies to projects requiring a planning-level permit. WELO prohibits turf in commercial projects, and requires the use of highly efficient irrigation methods, which is predicted to reduce landscape water use in new projects by 30 percent or more.

During construction, temporary BMPs and erosion control measures would be put in place to reduce construction and post-construction siltation. For more information on BMPs, see Section 6.10.ci-ciii. The project would not conflict with a groundwater management plan or water quality control plan, and impacts are less than significant.

**References:**

BKF, 2021. *Initial Stormwater Low Impact Development Submittal for Santa Rosa Fire Station 5*. February 2021. (Included as Appendix G)

City of Santa Rosa, 2021. Municipal Code. Available at: https://qcode.us/codes/santarosa/?view=desktop&topic=20-3-20_32-20_32_050 (Accessed March 19, 2021)

City of Santa Rosa, 2021. Landscape Standards. Available at: https://srcity.org/2428/Landscape-Standards (Accessed March 19, 2021)

Ninyo and Moore, 2020. *Geologic Impact Analysis*. December 14, 2020. (Included as Appendix D.)

RossDrulisCusenbery Architecture, Inc. (RDC), 2021. Conceptual Drawings. February 16, 2021. (Included as Appendix J)

## 6.11 Land Use and Planning

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Physical divide an established community? | | | | ✓ |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | ✓ | |

**Conclusion:** Regarding land use and planning, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Physical divide an established community?*** **No Impact.** The project proposes development on a 2.11-acre undeveloped property. The project would not physically divide an established community. There would be no impact.

**b.** ***Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*** **Less than Significant Impact.** The project proposes construction of a fire station at the corner of Fountaingrove Parkway and Stagecoach Road. The proposed development is consistent with the General Plan Designation of Light Industrial, which includes warehousing and heavy commercial uses like auto repair, warehousing, manufacturing/assembly with minor nuisances, landscape materials retail, accessory offices, and services with large space needs. The Planned Development (PD) zoning includes development standards. The project does not comply with development standards in the policy statement, which is permitted per subsection G of the Municipal Code, "The provisions of this Zoning Code shall apply to any County, special district, and State or Federal government or agency to the maximum extent allowed by law. The provisions of this Zoning Code shall not apply to any public project of the City except to the minimum extent required by law." The RC combining district is intended to facilitate the reconstruction and resilience of areas impacted by the Tubbs and Nuns fires of October 2017 and does not regulate land uses.

The project would be consistent with the Santa Rosa 2035 General Plan, including the following guidelines and policies:

- **Noise and Safely: NS-A Prepare for disasters.**
  - NS-A-1 Maintain the Emergency Operations Plan as the city's disaster-response plan. Work with Sonoma County to update joint-emergency response and disaster response plans, as needed.
  - NS-A-5 Locate essential public facilities, such as hospitals and clinics, emergency shelters, emergency command centers, and emergency communications facilities, outside of high fire risk areas, flood hazard zones, and areas subject to dam inundation.
- **Open Space and Conservation: OSC-K Reduce energy use in existing and new commercial, industrial, and public structures.**

    - OSC-K-3 Identify and implement energy conservation measures that are appropriate for public buildings. Implement measures that are at least as effective as those in the retrofit ordinances for commercial and office buildings.
- At a minimum, the project would be subject to Measure M standards in Sections 8, 10–14:
    - The project complies with minimum parcel size requirements of Section 8, and the maximum floor area requirements of Section 12.
    - The project's environmental impacts, if any, would be analyzed during Design Review, in compliance with the requirements of Section 10.

The project would be required to comply with regional waste discharge requirements and the City's regulations to minimize stormwater, surface water, and groundwater pollution, including utilization of BMPs. The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

**References:**

City of Santa Rosa, 2009. *Santa Rosa General Plan 2035*, November 3, 2009. Available at: https://srcity.org/DocumentCenter/View/3095/Santa-Rosa-2035-General-Plan-PDF (accessed March 11, 2021)

City of Santa Rosa, 2021. Resilient City Zoning. Available at: https://srcity.org/2674/Resilient-City-Zoning (accessed March 15, 2021).

City of Santa Rosa, 2020. Ordinance Number ORD- 2020- 017 Available at: https://www.srcity.org/DocumentCenter/View/31150/CC---ORD-2020-017?bidId= (accessed March 15, 2021)

## 6.12 Mineral Resources

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| 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? | | | | ✓ |

**Conclusion:** Regarding mineral resources, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?*** **No Impact.** The State Board of Mining and Geology has adopted regulations to protect lands classified as MRZ-2 (i.e., lands where information indicates that significant stone, sand, and/or gravel deposits are present, or where a high likelihood for their presence exists; and lands otherwise designated as areas of statewide or regional significance relative to mineral resources). No MRZ-2 designated resource zones have been identified by the California Department of Conservation, Division of Mines and Geology for the project area. The project is located in an area that has been identified as containing mineral deposits with a significance that cannot be evaluated from available data (labeled "MRZ-3 zones"). The City of Santa Rosa General Plan does not identify the site as an important mineral resource.

The Santa Rosa 2035 General Plan identifies Policy OSC-C-4 in the Open Space and Conservation Chapter, that the City shall "Work with the County of Sonoma to encourage the conservation of mineral resources and the protection of access to those resources." The project does not propose mineral extraction and would not 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?*** **No Impact.** Refer to Section 6.12.a, above. The project would have no impact on mineral availability.

**References:**

City of Santa Rosa, 2009. *Santa Rosa General Plan 2035*, November 3, 2009. Available at: https://srcity.org/DocumentCenter/View/3095/Santa-Rosa-2035-General-Plan-PDF (Accessed March 11, 2021)

California Geologic Survey, 2013. Division of Mines and Geology. Updated Mineral Land Classification Map: Special Report 205 – Plate 1A. Available by request at: https://filerequest.conservation.ca.gov/?q=SR%20205%20North%20Bay%20Report_Final.pdf (Accessed March 11, 2021)

## 6.13 Noise

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project result in: | | | | |
| a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | ✓ | | |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | | | ✓ | |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | ✓ |

**Conclusion:** Regarding potential noise and vibration impacts, the proposed project would not result in any significant environmental impacts after the incorporation of mitigation. A mitigation measure for the control of temporary construction noise levels has been identified to address a potentially significant impact and incorporated into the project (Mitigation Measure NOISE-1).

**Documentation:**

**a.** ***Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies*****? Less than Significant with Mitigation Incorporated.** As described further below, the proposed project would generate a temporary, construction-related increase in ambient noise levels in the vicinity of the project site. This impact would be less than significant after implementation of Mitigation Measure NOISE-1.

**Noise Fundamentals:** "Sound" is a vibratory disturbance created by a moving or vibrating source and is capable of being detected. For example, airborne sound is the rapid fluctuation of air pressure above and below atmospheric pressure. "Noise" may be defined as unwanted sound that is typically construed as loud, unpleasant, unexpected, or undesired by a specific person or for a specific area.

Sound has three properties: frequency (or pitch), amplitude (or intensity or loudness), and duration. Pitch is the height or depth of a tone or sound and depends on the frequency of the vibrations by which it is produced. Sound frequency is expressed in terms of cycles per second, or Hertz (Hz). Humans generally hear sounds with frequencies between 20 and 20,000 Hz and perceive higher frequency sounds, or high pitch noise, as louder than low-frequency sound or sounds low in pitch. Sound intensity or loudness is a function of the amplitude of the pressure wave generated by a noise source combined with the reception characteristics of the human ear. Atmospheric factors and obstructions between the noise source and receptor also affect the loudness perceived by the receptor. The frequency, amplitude, and duration of a sound all contribute to the effect on a listener, or

receptor, and whether or not the receptor perceives the sound as "noisy" or annoying. Despite the ability to measure sound, human perceptibility is subjective, and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms, such as "noisiness" or "loudness."

Sound pressure levels are typically expressed on a logarithmic scale in terms of decibels (dB). A dB is a unit of measurement that indicates the relative amplitude (i.e., intensity or loudness) of a sound, with 0 dB corresponding roughly to the threshold of hearing for the healthy, unimpaired human ear. Since decibels are logarithmic units, an increase of 10 dBs represents a ten-fold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 times more intense, etc. In general, there is a relationship between the subjective noisiness or loudness of a sound and its intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. Due to the logarithmic basis, decibels cannot be directly added or subtracted together using common arithmetic operations:

$$50\ decibels + 50\ decibels\ \neq 100\ decibels$$

Instead, the combined sound level from two or more sources must be combined logarithmically. For example, if one noise source produces a sound power level of 50 dBA, two of the same sources would combine to produce 53 dB as shown below.

$$10 * \ 10\ log\left(10^{\left(\frac{50}{10}\right)} + \ 10^{\left(\frac{50}{10}\right)}\right) = 53\ decibels$$

In general, when one source is 10 dB higher than another source, the quieter source does not add to the sound levels produced by the louder source because the louder source contains ten times more sound energy than the quieter source.

Although humans generally can hear sounds with frequencies between 20 and 20,000 Hz, most of the sound humans are normally exposed to do not consist of a single frequency, but rather a broad range of frequencies perceived differently by the human ear. In general, humans are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. Instruments used to measure sound, therefore, include an electrical filter that enables the instrument's detectors to replicate human hearing. This filter—known as the "A-weighting" or "A-weighted sound level"—filters low and very high frequencies, giving greater weight to the frequencies of sound to which the human ear is typically most sensitive. Most environmental measurements are reported in dBA, meaning decibels on the A-scale.

Sound levels are usually not steady and vary over time. Therefore, a method for describing either the average character of the sound or the statistical behavior of the variations over a period of time is necessary. The continuous equivalent noise level (Leq) descriptor is used to represent the average character of the sound over a period of time. The Leq represents the level of steady-state noise that would have the same acoustical energy as the sum of the time-varying noise measured over a given time period. Leq is useful for evaluating shorter time periods over the course of a day. The most common Leq averaging period is hourly, but Leq can describe any series of noise events over a given time period.

When considering environmental noise, it is important to account for the different responses people have to daytime and nighttime noise. In general, during the nighttime, background noise levels are generally quieter than during the daytime but also more noticeable because household noise has

decreased as people begin to retire and sleep. Accordingly, a variety of methods for measuring and normalizing community environmental noise have been developed. The California Office of Planning and Research's General Plan Noise Element Guidelines identifies the following common metrics for measuring noise (OPR, 2017):

- **Ldn (Day-Night Average Level):** The average equivalent A-weighted sound level during a 24-hour day, divided into a 15-hour daytime period (7 AM to 10 PM) and a 9-hour nighttime period (10 PM to 7 AM). A 10 dB "penalty" is added to measure nighttime noise levels when calculating the 24-hour average noise level. For example, a 45-dBA nighttime sound level (e.g., at 2 AM) would contribute as much to the overall day-night average as a 55-dBA daytime sound level (e.g., at 7 AM).
- **CNEL (Community Noise Equivalent Level):** The CNEL descriptor is similar to Ldn, except that it includes an additional 5 dBA penalty for noise events that occur during the evening time period (7 PM to 10 PM). For example, a 45-dBA evening sound level (e.g., at 8 PM) would contribute as much to the overall day-night average as a 50-dBA daytime sound level (e.g. at 8 AM).

The artificial penalties imposed during Ldn and CNEL calculations are intended to account for a receptor's increased sensitivity to noise levels during quieter nighttime periods. As such, the Ldn and CNEL metrics are usually applied when describing longer-term ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. In contrast, the Leq metric is usually applied to shorter reference periods where sensitivity is presumed to remain generally the same.

The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. The strength of the source is often characterized by its "sound power level." Sound power level is independent of the distance a receiver is from the source and is a property of the source alone. Knowing the sound power level of an idealized source and its distance from a receiver, sound pressure level at the receiver point can be calculated based on geometrical spreading and attenuation (noise reduction) as a result of distance and environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and shielding by terrain or barriers.

For an ideal "point" source of sound, such as mechanical equipment, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a spherical pattern and travels away from the point source. Theoretically, the sound level attenuates, or decreases, by 6 dB with each doubling of distance from the point source. In contrast, a "line" source of sound, such as roadway traffic or a rail line, spreads out in a cylindrical pattern and theoretically attenuates by 3 dB with each doubling of distance from the line source; however, the sound level at a receptor location can be modified further by additional factors. The first is the presence of a reflecting plane such as the ground. For hard ground, a reflecting plane typically increases A-weighted sound pressure levels by 3 dB. If some of the reflected sound is absorbed by the surface, this increase will be less than 3 dB. Other factors affecting the predicted sound pressure level are often lumped together into a term called "excess attenuation." Excess attenuation is the amount of additional attenuation that occurs beyond simple spherical or cylindrical spreading. For sound propagation outdoors, there is almost always excess attenuation, producing lower levels than what would be predicted by spherical or cylindrical spreading. Some examples include attenuation by sound absorption in air; attenuation by barriers; attenuation by rain, sleet, snow, or fog; attenuation by grass, shrubbery, and trees; and attenuation from shadow zones created by wind and

temperature gradients. Under certain meteorological conditions, like fog and low-level clouds, some of these excess attenuation mechanisms are reduced or eliminated due to noise reflection.

*Noise Effects on Human Beings:* Human response to sound is highly individualized because many factors influence a person's response to a particular noise, including the type of noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the noise occurs. In addition, non-acoustical factors, such as the person's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence a person's response. As such, response to noise varies widely from one person to another and with any particular noise, individual responses will range from "not annoyed" to "highly annoyed" with annoyance being an expression of negative feelings resulting from interference with activities, the disruption of one's peace of mind, or degradation of the enjoyment of one's environment.

Noise effects on human beings are generally categorized as:

- Subjective effects of annoyance, nuisance, and/or dissatisfaction
- Interference with activities such as speech, sleep, learning, or relaxing
- Physiological effects such as startling and hearing loss

Most environmental noise levels produce subjective or interference effects. Noise can mask important sounds and disrupt communication between individuals in a variety of settings, resulting in a slight irritation to a serious safety hazard, depending on the circumstance. Noise-induced sleep interference is a critical factor in community and personal annoyance. Sound level, frequency distribution, duration, repetition, and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern, or level of sleep resulting in short-term adverse effects such as mood changes, job/school performance, etc.

Physiological effects are usually limited to prolonged and/or repeated exposure to high noise environments at facilities such as, but not limited to, industrial and manufacturing facilities or airports.

Predicting the subjective and interference effects of noise is difficult due to the wide variation in individual thresholds of annoyance and past experiences with noise; however, an accepted method to determine a person's subjective reaction to a new noise source is to compare it to the existing environment without the noise source, or the "ambient" noise environment. In general, the more a new noise source exceeds the ambient noise level, the more likely it is to be considered annoying and to disturb normal activities.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible; however, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness that would almost certainly cause an adverse response from community noise receptors.

*Existing Noise and Vibration Environment:* The proposed project is located in the northeastern portion of the city. Located on the border between a light-industrial portion of the city and residential land uses, the approximately 2.11-acre project area is generally configured in an east-west orientation and bounded by Stagecoach Boulevard to the north, Fountaingrove Parkway to the to the west, and open space to the south.

The General Plan Noise and Safety Element identifies transportation as the predominant source of noise in the city. Given the site's distance from the major highways that pass through the City, Highway 101, and Highway 12, it is anticipated that traffic on local roadways is the primary source of noise near the Project site. Emergency medical helicopters and vehicles are also specifically mentioned as a major noise source in the City's General Plan, and likely contribute to temporary noise increases when operating in proximity of the Project site. Figure 12-2 of the City's General Plan indicates that the Project site is in a relatively quiet portion of the city, with a 24-hour noise level of less than 60 dBA CNEL.

*Noise Sensitive Receptors*
Noise sensitive receptors are buildings or areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. Residential areas, hospitals, schools, and parks are examples of noise sensitive receptors that could be sensitive to changes in existing environmental noise levels. The noise sensitive receptors adjacent or in close proximity (within 1,000 feet) of the perimeter of the proposed project include:

- Single-family residential receptors, approximately 350 feet north of the eastern project boundary on Vintage Circle (across Stagecoach Road);
- Future, single-family residences under construction that would be located north and northeast of the project site, on Vintage Circle, Parker Hill Road, etc.; and
- The retirement community, approximately 240 feet southwest of the project site, across Fountaingrove Parkway.

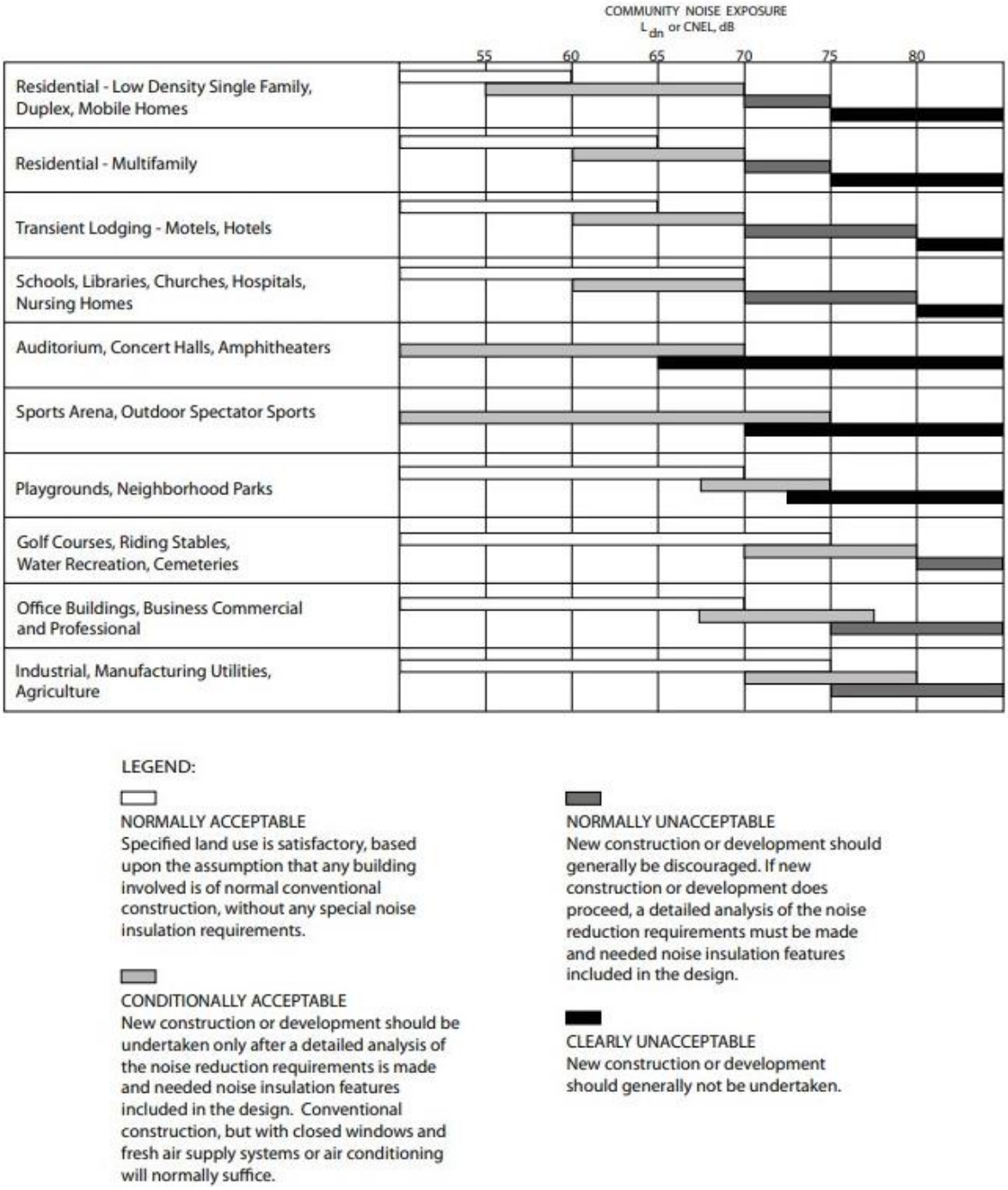
*Applicable Noise Standards:*
**Santa Rosa General Plan**
Chapter 12, Noise and Safety, of the Santa Rosa General Plan includes the following goal and policy relevant to the proposed project:

- **Goal NS-B.** Maintain an acceptable community noise level to protect the health and comfort of people living, working and/or visiting in Santa Rosa, while maintaining a visually appealing community.
    - **Policy NS-B-4.** Require new projects in the following categories to submit an acoustical study, prepared by a qualified acoustical consultant:
        - All new projects proposed for areas with existing noise above 60 dBA DNL. Mitigation shall be sufficient to reduce noise levels below 45 dBA DNL in habitable rooms and 60 dBA DNL in private and shared recreational facilities. Additions to existing housing units are exempt.
        - All new projects that could generate noise whose impacts on other existing uses would be greater than those normally acceptable (as specified in the Land Use Compatibility Standards).
    - **Policy NS-B-7.** Allow reasonable latitude for noise generated by uses that are essential to community health, safety, and welfare. These include emergency medical and vehicle operations, and emergency vehicle sirens.

- **Policy NS-B-14.** Discourage new projects that have potential to create noise levels more than 5 dBA DNL above existing background, within 250 feet of sensitive receptors.

The Noise and Safety Element also identifies the City's noise compatibility guidelines for different land uses (see Figure 10). According to the General Plan, the normally acceptable noise limit for office buildings or business commercial land uses is 70 CNEL, and the conditionally acceptable noise limit is 77.5 CNEL).

**Figure 10. Land Use Compatibility Standards**



**Santa Rosa Municipal Code.** The City regulates noise levels through the enforcement of various provisions contained in the Santa Rosa Municipal Code, Title 17, Environmental Protection, Chapter 16, Noise. Section 17-16.040 sets forth criteria for determining violations of the City's Noise Ordinance. These criteria include but are not limited to: the level of noise, intensity of noise, whether the nature of the noise is usual or unusual, and the proximity of the noise to residential sleeping facilities. Section 17-16.170 goes on to provide specific regulations related to sound-amplifying equipment; however, as noted in Section 17-16.010(M), warning devices on authorized emergency vehicles are not included in the definition of "sound-amplifying equipment".

**Noise Impact Analysis**

*Temporary Construction Noise:* The proposed project involves the construction of a new firehouse over approximately 12 months. Construction activities would involve site preparation, grading, construction, paving, and architectural coating work.

Project construction would require the use of heavy-duty construction equipment that could temporarily increase noise levels at adjacent property lines near work areas. The type of equipment used would include bulldozers, backhoes, a grader, a scraper, compactors/rollers, small cranes, and material handlers, lifts, and trucks. Table 8, *Typical Construction Equipment Noise Levels (dBA)*, presents the estimated, worst-case noise levels that could occur from operation of typical construction equipment used to develop the project. Potential construction noise levels are presented for a reference noise level at a distance of 50-feet, and 250 feet, the approximate distance from project construction activities to the nearest sensitive receptors (i.e., those at the retirement facility southwest of the Project site).

**Table 8. Typical Construction Equipment Noise Levels (dBA)**

| Equipment | Reference Noise Level at 50 Feet (Lmax)[(A)] | Percent Usage Factor[(B)] | Predicted Noise Levels (Leq) @ | |
|---|---|---|---|---|
| | | | 50 Feet | 250 Feet |
| Backhoe | 80 | 40 | 76 | 62 |
| Bulldozer | 85 | 40 | 81 | 67 |
| Compact Roller | 80 | 20 | 73 | 59 |
| Crane | 85 | 16 | 77 | 63 |
| Excavator | 85 | 40 | 81 | 67 |
| Generator | 82 | 50 | 79 | 65 |
| Pneumatic tools | 85 | 50 | 82 | 68 |
| Scraper | 85 | 40 | 82 | 67 |
| Delivery Truck | 85 | 40 | 81 | 67 |

Sources: Caltrans, 2013 and FHWA, 2010.
(A) $L_{max}$ noise levels based on manufacturer's specifications.
Usage factor refers to the amount of time the equipment produces noise over the time period.

As shown in Table 8, the worst-case Leq and Lmax construction equipment noise levels associated with the project are predicted to be approximately 82 and 85 dBA, respectively, at 50 feet. When two or more pieces of equipment are operating in close proximity, construction noise levels could be approximately 85 dBA Leq and 88 dBA Lmax. At a distance of 250 feet, the combined noise levels from the concurrent operation of equipment would decrease to approximately 70 dBA Leq and 73 dBA Lmax. These maximum noise levels would occur for a short period time as the site preparation and grading phases are completed. The majority of activities at the site, which would occur during the building construction

phase, would involve less operation of heavy-duty off-road equipment and lower construction equipment noise levels.

The noise generated from project construction would be temporary and would not produce the same sound levels every day. In addition, the City does not maintain numeric thresholds for the purposes of evaluating construction noise level. Neither the City's General Plan nor Municipal Code specify a noise level for construction activities, nor do they provide permissible hours of construction. Project construction noise, therefore, would not exceed an applicable standard. However, construction noise can be considered intrusive at noise sensitive land uses (e.g., residences and retirements communities), particularly during the evening and nighttime hours. Therefore, the City shall implement Mitigation Measure NOISE-1, which sets forth permissible hours of construction and requirements for abating noise through construction best management practices. The implementation of Mitigation Measure NOISE-1 would reduce construction noise impacts to less than significant.

**Mitigation Measure NOISE-1: Construction Noise Control Best Management Practices:** The City and Design Build Entity shall incorporate the following construction noise best management practices into all applicable project bid, design, and engineering documents:

6) Construction work hours shall be limited to the hours of 7 AM to 7 PM, Monday through Friday, and 8 AM to 6 PM on Saturdays. No construction shall be permitted on Sundays and Federal and state holidays.
7) Heavy equipment engines shall be covered, and exhaust pipes shall include a muffler in good working condition.
8) Stationary equipment such as compressors, generators, and welder machines shall be located as far away from surrounding residential land uses as possible. The project shall connect to existing electrical service at the site to avoid the use of stationary, diesel- or other alternatively-fueled power generators, if feasible.
9) Impact tools such as jack hammers shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. When use of pneumatic tools is unavoidable, it shall be ensured the tool will not exceed a decibel limit of 85 dBA at a distance of 50 feet. Pneumatic tools shall also include a noise suppression device on the compressed air exhaust.
10) No radios or other amplified sound devices shall be audible beyond the property line of the construction site.

*Exterior Noise / Land Use Compatibility:* As identified in Figure 12-2 of the City's General Plan, the Project site is located in a portion of the city that has an ambient noise environment less than 60 dBA CNEL. Therefore, the Project's land use is considered to be "Normally Acceptable" with its existing noise environment (see Figure 10).

*Potential On-Site Operational Noise Levels:* Operational noise sources for California fire station include sound speakers for dispatch calls, the use of horns or sirens during emergency operations, the use of an emergency back-up generator, outdoor training exercises, and regularly scheduled starting and testing of engines. Emergency sirens, which can produce sound levels as high as 120 dB are exempted from the noise standards contained in the City's Municipal Code (Section 17-16.010(M)). Furthermore, General Policy NS-B-7 specifically states that latitude should be given to noise sources that are essential to community health, safety, and welfare. Therefore, while sirens and other sounds related to emergencies would be noticeable at adjacent receptor locations during

emergency response actions, this use would be done in the interest of the local community. The remaining sources of noise identified previously (e.g., testing / operation of the emergency back-up generator, training exercises, etc.) would occur infrequently and not result in a significant operational noise impact at adjacent receptor locations due to the distance between these sources and sensitive receptor locations.

*Potential Off-Site Traffic Noise Levels:* The proposed project would generate traffic that would be distributed onto the local roadway system and potentially increase noise levels along travel routes. Caltrans considers a doubling of total traffic volume to result in a three dBA increase in traffic-related noise levels (Caltrans, 2013). If the proposed project would not result in a doubling of traffic volumes on the local roadway system, it would not result in a substantial permanent increase in traffic-related noise levels.

The transportation analysis prepared by W-Trans for the proposed Project indicates that the project would add approximately 51 new trips to the surrounding roadway network on a daily basis. The addition of these approximately 51 trips would not double roadway volumes in proximity of the project. Therefore, the Project would not result in a substantial, permanent increase in noise levels along the roadways used to access the Project.

*Conclusion*. The proposed Project's construction noise levels could be potentially significant; however, the City would implement Mitigation Measure NOISE-1 to establish permissible hours of construction and require the implementation of best management practices to reduce noise levels while equipment is in operation. Once operational, the Project would generate noise from various sources. The loudest of these noise sources, sirens from emergency vehicles, is omitted from regulatory requirements in the City's Municipal Code and the City's General Plan stipulates that latitude shall be given to noise that is generated by activities that are essential to community health, safety, and welfare. The sirens would only operate in the case of an emergency and other on-site noise sources would not contribute meaningfully to the existing noise environment in proximity of the Project site. Finally, the proposed Project's addition of 51 new trips onto the local roadway network would not result in a substantial permanent increase in traffic-related noise levels. This impact would be less than significant with mitigation incorporated.

**b.** ***Generation of excessive groundborne vibration or groundborne noise levels?*** **Less than Significant Impact.** The proposed Project is located more than 200 feet from the nearest structure, and construction activities would not involve the operation of heavy-duty equipment that generates substantial groundborne vibration (e.g., pile drivers). The typical types of equipment that would be required for the project (e.g., bulldozers, backhoes, etc.) would not generate groundborne vibration that would be perceptible at the nearest receptor locations, nor would groundborne vibration damage any physical structure.

Once operational, the proposed project would not result in the operation of sources that would generate substantial groundborne vibration levels. This impact would be less than significant.

**c.** ***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*** **No Impact.** The proposed project is not within the vicinity of a private airstrip or an airport land use plan, nor is it within two miles of a public or private airport. The closest airport is the Charles M. Schulz Sonoma County Airport, over five miles west of the Project site. The proposed Project would

not expose people residing or working in the project area to excessive noise levels. No impact would occur.

**References:**

California Office of Planning and Research (OPR) 2017. State of California General Plan Guidelines. Sacramento, CA.

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

California Department of Transportation (Caltrans) 2018. *Transportation and Construction Vibration Guidance Manual*. Sacramento, California. April 2018.

City of Santa Rosa, 2009. Santa Rosa General Plan 2035, November 3, 2009. Available at: https://srcity.org/DocumentCenter/View/3095/Santa-Rosa-2035-General-Plan-PDF (Accessed March 11, 2021)

City of Santa Rosa, 2021. Santa Rosa City Code. Current through January 14, 2021. Accessed April 13, 2021. http://qcode.us/codes/santarosa/?view=desktop

U.S. Federal Highway Administration (FHWA) 2010. "Construction Noise Handbook, Chapter 9 Construction Equipment Noise Levels and Ranges." *U.S. Department of Transportation FHWA.* August 24, 2017. Accessed November 1, 2020 at: <http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm>

U.S. Federal Transit Administration (FTA) 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. Prepared by John A. Volpe National Transportation Systems Center. Washington, DC. September 2018.

W-Trans, February 1, 2021. CEQA Initial Study Checklist for the Santa Rosa Fire Station 5 Project. (Included as Appendix H)

## 6.14 Population and Housing

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | ✓ |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | ✓ |

**Conclusion:** Regarding population and housing, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*** **No Impact.** There are no new homes or businesses proposed as part of the project, and the project would not result in direct population growth. The fire station would provide onsite employee accommodations while firefighters are on duty. During construction, there would be a short-term increase in construction jobs. It is anticipated that workers would be employed locally and live within Santa Rosa or nearby. The project would include infrastructure improvements only to serve the project itself. As a result, there would be no impact from unplanned population growth, either directly or indirectly.

**b.** ***Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*** **No Impact.** The fire station would provide onsite employee accommodations while firefighters are on duty. The site is currently vacant, so no people would be displaced due to project development. There would be no impact from displacement.

## 6.15 Public Services

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the 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: | | | | |
| a) Fire protection | | | | ✓ |
| b) Police protection | | | | ✓ |
| c) Schools | | | | ✓ |
| d) Parks | | | | ✓ |
| e) Other Public Facilities | | | | ✓ |

**Conclusion:** Regarding public services, the proposed project would not result in any significant environmental impacts.

**Documentation:** ***Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the 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:***

**a.** ***Fire protection:*** **No Impact.** The City of Santa Rosa is served by the Santa Rosa Fire Department. The Santa Rosa Fire Department provides 24-hour protection to the City of Santa Rosa and the surrounding unincorporated areas. The Santa Rosa Fire Department is responsible for protecting life, property, and the environment from fire, explosion, and hazardous materials incidents. The Santa Rosa Fire Department responds to calls including structure, wildland, and other fires; alarm responses; medical emergencies; hazardous materials incidents; automobile accidents; and citizen calls for assistance. The City operates ten fire stations which are located throughout the community to provide timely response. In addition, the City has an agreement with the Sonoma County Fire District, which helps with citywide fire response.

According to the Santa Rosa General Plan (2009), to continue to provide high service levels in the future, the relocation of two fire stations and development of one new station were proposed. Figure 6-3 in the Public Services and Facilities Chapter illustrates existing, relocated, and future fire stations. The proposed project would be located between the General Plan's facility to be relocated and the proposed relocation site. The locations on figure 6-3 are not parcel-specific and only indicate fire stations are needed in the vicinity.

Due to the loss of the fire station further east along Fountaingrove Parkway during the 2017 Tubbs Fire, the surrounding area has experienced diminished fire response compared to conditions that existed when the fire station was operational. The project proposes a governmental facility to improve current response times and performance objectives for the Santa Rosa Fire Department. The project would not include construction of infrastructure that would induce substantial population growth, and the project would have no negative impact on fire facilities.

**b.** ***Police protection*****: No Impact.** The City of Santa Rosa is within the jurisdiction of the City of Santa Rosa Police Department (SRPD). SRPD provides police services throughout the city. SRPD headquarters are located at 965 Sonoma Avenue, approximately 3 miles south of the project site and roughly 10 minutes away driving.

The project would not include construction of infrastructure that would induce substantial population growth, and existing police protection facilities would be adequate to serve the proposed project. There would be no increased need for police facilities.

**c.** ***Schools*****: No Impact.** The project does not propose any residential development and would not affect the number of students attending public schools. There would be no impact on school facilities.

**d.** ***Parks*****: No Impact.** The proposed project does not include the construction of any residences that would generate a demand for additional park amenities. There would be no impact on new or existing recreational facilities.

**e.** ***Other Public Facilities:*** **No Impact.** The project would not result in population growth that would incrementally affect other public services such as libraries, public transit, public meeting places, or community centers. There would be no impact.

**References:**

City of Santa Rosa, 2009. Santa Rosa General Plan 2035, November 3, 2009. Available at: https://srcity.org/DocumentCenter/View/3095/Santa-Rosa-2035-General-Plan-PDF (Accessed March 11, 2021)

## 6.16 Recreation

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | ✓ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | ✓ |

**Conclusion:** Regarding recreation, the proposed project would not result in any significant environmental impacts. Also see Section 6.15.d in Public Services, above.

**Documentation:**

**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?*** **No Impact.** The project proposes rebuilding a public fire station. Project development would not result in an increase in demand or use of existing neighborhood and regional parks, or other recreational facilities. No physical deterioration of recreational facilities would result from the project. There would be no impact.

**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?*** **No Impact.** The proposed project does not include onsite recreational amenities and does not require the construction or expansion of recreational facilities. The new fire station would have no impact on recreational facilities.

## 6.17 Transportation

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

**Conclusion:** The transportation analysis for this Initial Study was prepared by W-Trans. Regarding transportation, the proposed project would not result in any significant environmental impacts after mitigation.

**Documentation:**

**a.** ***Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*** **Less than Significant Impact with Mitigation Incorporated.** The proposed project would potentially have a significant traffic impact if the design is not consistent with, or does not conform to, applicable City transportation policies. Regarding transit users, bicyclists, and pedestrians, there are no notable gaps in the multimodal circulation network in the project vicinity, and the project would not impact the existing or planned facilities, as most proposed improvements are located on-site. The General Plan includes the following goals and policies relevant to new development regarding public transit, bicycle, and pedestrian facilities:

- T-J-1 Pursue implementation of walking and bicycling facilities as envisioned in the City's Bicycle and Pedestrian Master Plan.
- T-J-4 Provide street trees to enhance the city's livability and to provide identity to neighborhoods and districts.
- T-K-3 Orient building plans and pedestrian facilities to allow for easy pedestrian access from streets, sidewalks, transit stops, and other pedestrian facilities, in addition to access from parking lots.
- T-K-4 Require construction of attractive pedestrian walkways and areas in new residential, commercial, office, and industrial developments. Provide landscaping or other appropriate buffers between sidewalks and heavily traveled vehicular traffic lanes, as well as through and to parking lots. Include pedestrian amenities to encourage and facilitate walking.
- T-L-1 Provide bicycle lanes along all regional/arterial streets and high volume transitional/collector streets.
- T-L-4 Maintain all roadways and bicycle-related facilities so they provide safe and comfortable conditions for bicyclists.
- T-L-5 Consider bicycle operating characteristics and safety needs in the design for roadways, intersections, and traffic control systems.

- T-L-8 Require new development to dedicate land and/or construct/install bicycle facilities and provide bicycle parking as specified in the Zoning Code, where a rough proportionality to demand from the project is established. Facilities such as showers and bicycle storage shall also be considered.

*Pedestrian and Bicycle Facilities:* Fountaingrove Parkway serves as a major arterial in northeastern Santa Rosa. It is characterized by continuous sidewalks and street lighting along the project frontage. The project is located adjacent to the signalized intersection at Stagecoach Road, which includes pedestrian crossing facilities. Most streets in the vicinity of the project also have continuous sidewalks along both sides of the street. Regarding bicycles, there are Class I shared-use paths along Fountaingrove Parkway and Class II bike lanes on Stagecoach Road adjacent to the project site.

*Transit Facilities:* There are two transit stops for Santa Rosa CityBus Route 19 within 500 feet of the project site.

This project would align with the goals and policies set for roadway networks outlined in the General Plan, provided the surrounding circulation system remains safe and efficient. The adjacent walking and bicycling facilities are consistent with the City's Bicycle and Pedestrian Master Plan, and no further bikeway/pedestrian projects are proposed in the area. By maintaining the shared-use paths and bike lanes surrounding the site, the project remains consistent with Policies T-J-1, T-L-1, and T-L-4. The detailed design plans for the fire station would be reviewed for street trees, walkways, sidewalk buffers, and bicycle/ pedestrian facilities to be consistent with Policies T-J-4, T-K-4, and T-L-8. Also, the orientation of the station and bicycle operating characteristics would be reviewed to ensure the project conforms with Policies T-K-3 and T-L-5. Implementation of Mitigation Measure TRANS-1 would result in a less than significant impact on transportation.

**Mitigation Measure TRANS-1**: The City and Design Build Entity shall review the detailed design plans for the fire station to ensure consistency with General Plan transportation policies T-J-1, T-J-4, T-K-3, T-K-4, T-L-1, T-L-4, T-L-5, and T-L-8.

**b.** ***Conflict or be inconsistent with CEQA Guidelines 15064.3, subdivision(b)?*** **Less than Significant Impact.** Per CEQA Guidelines Section 15064.3(c) (Applicability), the provisions of Section 15064.3 (Determining the Significance of Transportation Impacts) are applicable as of July 1, 2020. CEQA Guidelines §15064.3, subdivision (b) indicate that land use projects would have a significant impact if the project resulted in vehicle miles traveled (VMT) exceeding an applicable threshold of significance. VMT thresholds for this analysis were established based on guidance provided by the California Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, 2018) as well as the *Vehicle Miles Traveled (VMT) Guidelines Final Draft* issued by the City of Santa Rosa in June 2020. Both documents contain guidance indicating that projects expected to generate fewer than 110 trips per day may generally be assumed to cause a less than significant VMT impact. Because the trips associated with the fire station that was destroyed by the Tubbs Fire, and trips associated with the current temporary fire station, are essentially being replaced, only the community room, which is the only part of the new fire station that is not a replacement for the station that was lost, was considered in evaluating VMT.

Using the rates published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual* for the "Community Center" (Land Use 495), it was estimated that the new community

center would generate an average of 51 new trips per day. The estimated trip generation for the project is shown in Table 9 below. Because the project would be expected to generate fewer than 110 new trips per day, it can reasonably be assumed to have a less than significant impact on VMT.

**Table 9. Trip Generation Summary**

| *Land Use* | *Size* | *Daily* | | *AM Peak Hour* | | | | *PM Peak Hour* | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Rate* | *Trips* | *Rate* | *In* | *Out* | *Total* | *Rate* | *In* | *Out* | *Total* |
| Community Center | 1.761 ksf(A) | 28.82 | 51 | 1.76 | 2 | 1 | 3 | 2.31 | 2 | 2 | 4 |

W-Trans, 2021. Based on rates from *Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition.*
(A) ksf = 1,000 square feet

**c.** ***Substantially increase hazards due to a geometric design feature (e,g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?*** **Less than Significant Impact.** A significant impact would occur if the proposed project considerably increased hazards due to a design feature or introduced incompatible uses to the existing circulation system. The project does not include any feature that would create a roadway or traffic hazard. The proposed project would have access from new driveways on both Fountaingrove Parkway and Stagecoach Road. Both streets have median dividers that currently limit access to adjacent parcels to right turns in and out. Fountaingrove Parkway has a north-south alignment while Stagecoach Road is oriented east-west; these directions are used in the following discussion.

*Fountaingrove Parkway Driveway:* The Fountaingrove Parkway driveway would be located about 140 feet south of the crosswalk at the signalized intersection with Stagecoach Road. This new driveway would be limited to right turns in and out but would be about 80 feet farther from the crosswalk than the existing driveway, providing additional separation from the signalized intersection and therefore less conflict. The proposed new driveway would be expected to provide an improvement in terms of design features over the existing driveway location.

*Stagecoach Road Driveways*: Four driveways are proposed on Stagecoach Road. The westernmost would be about 55 feet from the crosswalk at Fountaingrove Parkway and would serve outbound movements only from two fire truck bays and both inbound and outbound movements from a third bay while the middle driveway, located about 130 feet east of the crosswalk, would serve both inbound and outbound movements.

To allow fire trucks responding to an emergency to gain access to Fountaingrove Parkway from the fire truck bays, breaks in the median island at each of the driveways are proposed. The westernmost driveway on Stagecoach Road would serve egress by fire trucks, including those turning left to access Fountaingrove Parkway. Because fire trucks exiting the fire station would typically be responding to an emergency, the trucks must be given priority over other traffic. This is accomplished through use of emergency timing at traffic signals, including the signal adjacent to the site at Fountaingrove Parkway/Stagecoach Road. This timing would clear westbound traffic from the approach to Fountaingrove Parkway, creating an open roadway for the trucks' use. Use of this signal timing, in conjunction with warning signs and lights activated to flash when a firetruck is preparing to exit, will allow this driveway to operate acceptably.

*Parking Driveways:* The remaining two driveways would serve the eastern parking lot. A full-access driveway would be located opposite an existing full-access driveway to a mixed-use development

that was also destroyed in the Tubbs Fire and at the west end of the parking lot, where only right turns in and out would be allowed. The two easterly driveways at the parking lot would operate in a manner typical of other driveways along this road and are therefore not expected to introduce any potential hazards due to a design feature. Because the designs for the two westerly driveways includes openings in the median island, these two driveways were evaluated in greater detail.

The easterly site driveway would serve both inbound and outbound movements, with left turns accommodated via an opening in the median. As part of the project the westbound left-turn pocket would be extended to accommodate fire trucks turning left to enter the site. Consideration was given to potential conflicts associated with making left turns outbound from this easterly site driveway, assuming that such movements would be made primarily by employees in their personal vehicles and not fire trucks. From the driveway location there is adequate visibility of oncoming traffic from both the east and the west, including vehicles turning onto Stagecoach Road from Fountaingrove Parkway, allowing drivers to turn left across Stagecoach Road to travel west toward Fountaingrove Parkway. This driveway would therefore be expected to operate acceptably.

**d.** ***Result in inadequate emergency access?*** **Less than Significant Impact.** Due to the loss of the fire station further east along Fountaingrove Parkway during the 2017 Tubbs Fire, the surrounding area has experienced diminished fire response compared to conditions that existed when the fire station was operational. The proposed project would replace this facility, restoring improved response times to the surrounding area. The project has been designed to ensure that fire trucks could readily leave the site and travel in all directions from the site through the design of the western driveway on Stagecoach Road. The project would improve emergency response times and have a less than significant impact on emergency access.

**References:**

W-Trans, February 1, 2021. CEQA Initial Study Checklist for the Santa Rosa Fire Station 5 Project. (Included as Appendix H.)

## 6.18 Tribal Cultural Resources

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register or historical resources as defined in Public Resources Code section 6020.1(k), or | | ✓ | | |
| ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe. | | ✓ | | |

**Conclusion:** Implementation of Mitigation Measures **CUL-1, CUL-2**, **CUL-3, TCR-1 and TCR-2** would reduce potential impacts to less than significant levels. Regarding tribal cultural resources, the proposed project would not result in any significant environmental impacts.

**Documentation:**

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

**a.** ***i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register or historical resources as defined in Public Resources Code section 6020.1(k)?*** **Less Than Significant with Mitigation Incorporated.** Origer & Associates requested a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC), which did not suggest the presence of sacred sites on the project site or in the vicinity (November 25, 2020). The California Historical Resources Information System (CHRIS) search at the Northwest Information Center (NWIC) showed that there are no known Native American sites within the project boundaries which qualify as tribal cultural resources (TCRs).

Information included in this section is based, in part, on the Cultural Resources Summary prepared for the Project by Tom Origer & Associates (Origer & Associates 2020). This and additional resource details are included in the confidential Appendix I, in accordance with Federal and State law.

Letters were sent to the following tribes: *Cloverdale Rancheria of Pomo Indians of California, Dry Creek Rancheria of Pomo Indians, Federated Indians of Graton Rancheria, Guidiville Band of Pomo Indians, Kashia Band of Pomo Indians of the Stewarts Point Rancheria, Lytton Rancheria of California, Middletown Rancheria of Pomo Indians of California, Mishewal-Wappo Tribe of Alexander Valley, and Pinoleville Pomo Nation*. Letters were sent to all the tribes, and three responses were received:

- The *Lytton Rancheria* responded on December 8, 2020. On March 5, 2021, a copy of the February 12, 2021, Cultural Resources Report was mailed to Lytton Rancheria. The Lytton Rancheria responded on April 2, 2021.
- The *Federated Indians of Graton Rancheria* responded on December 2, 2020, with a formal request for tribal consultation for the mitigation of potential project impacts to tribal cultural resources. On March 5, 2021, a copy of the February 12, 2021, Cultural Resources Report was mailed to the Federated Indians of Graton Rancheria. The City met with the Tribe by video conference on July 20, 2021. A site visit was conducted for the 2nd consultation meeting on August 24, 2021. Following the site visit the City met with the Tribe by video conference on August 30, 2021, and September 16, 2021. The City included final comments/mitigation measures from the tribe September 30, 2021. Consultation with the Graton Rancheria was resolved on October 14, 2021.
- The *Kashia Band of Pomo Indians* responded on June 14, 2021.

Based on the results of the cultural research and cultural resources study completed by Origer, detailed in Section 6.5, there is a low potential that additional TCRs could be present below the surface of the site. However, project excavation could result in the discovery of TCRs. In the event that project ground-disturbing activities disturb, damage, or destroy previously unknown buried prehistoric features, sites, or artifacts which qualify as TCRs, a significant impact could occur.

Implementation of mitigation measures CUL-1, CUL-2, CUL-3, TCR-1 and TCR-2 would result in a less than significant impact with regards to accidental discovery of historic tribal cultural resources.

**Mitigation Measure CUL-1: Conduct Archaeological Sensitivity Training for Construction Personnel.** A qualified professional archaeologist shall retain who meets U.S. Secretary of the Interior's Professional Qualifications and Standards to conduct an archaeological sensitivity training for construction personnel prior to commencement of excavation activities. The training session shall be carried out by a cultural resource professional with expertise in archaeology, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. The City and/or qualified professional archaeologist shall propose a date for scheduling the training at the pre-construction meeting with City staff. The City shall notify the construction personnel at least 48 hours before holding the training and keep a log of all attendees. The training session shall include a handout and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event; the duties of archaeological monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation, if one is necessary. The archaeologist shall coordinate with the Federated Indians of Graton Rancheria on the training schedule and content.

**Mitigation Measure CUL-2: Prepare a Cultural Resources Treatment Plan.** Prior to any ground disturbing activities for the proposed project, a qualified archaeologist shall prepare a Cultural Resources Treatment Plan for review by and in consultation with the Federated Indians of Graton Rancheria and approval by the City. The plan shall address the treatment of any discovered resource, along with subsequent laboratory processing and analysis.

**Mitigation Measure CUL-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered.** In the event archaeological resources are unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated. Ground moving activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. This examination shall be done in coordination with the Tribal Cultural Monitor(s), Tribal Heritage Preservation Officer(s) (THPO). All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. In the event that the newly discovered artifacts are determined to be prehistoric, the Federated Indians of Graton Rancheria and Lytton Rancheria shall be contacted and consulted.

The discovery of prehistoric artifacts shall require that a Tribal Cultural Monitor be present for ground disturbing activities to resume. The specifications for this requirement shall be described in the Cultural Resources Treatment Plan listed in Mitigation Measure CUL-2.

A lead agency engages in Consultation with the Local Native American Tribes to identify Tribal Cultural Resources, the significance of Tribal Cultural Resources, and to determine how any resources are to be protected. All Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 and the Treatment Plan described in CUL-2 shall be followed if any tribal finds are discovered. If appropriate, the archaeologist and THPO may introduce archaeological and Tribal Cultural monitoring on the site. An archaeological report shall be written detailing all archaeological finds and submitted to the City and the Northwest Information Center This shall be done in consultation with the Tribe's THPO.

**Mitigation Measure TCR-1:** The Design/Build Entity shall provide a weekly construction update to the Tribal Historic Preservation Officer of the Federal Indians of Graton Rancheria during any ground disturbing activities. This update shall include a photo log of the construction.

**Mitigation Measure TCR-2:** An archaeologist on the Federated Indians of Graton Rancheria's preferred list shall be retained to provide spot monitoring of ground disturbing activities.

**ii.** ***A resource determined by the lead agency, in its discretion and supported by substantial evidence to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.*** **Less Than Significant with Mitigation Incorporated.** The discovery of prehistoric artifacts shall require that a Tribal Cultural Monitor be present for ground disturbing activities to resume ground disturbing construction. The specifications for this requirement shall be described in the Cultural Resources Treatment Plan listed in Mitigation Measure CUL-2.

A lead agency engages in Consultation with the Local Native American Tribes to identify Tribal Cultural Resources, the significance of any Tribal Cultural Resource, and to determine how any

resources are to be protected. All Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 and the Treatment Plan described in CUL-2 shall be followed if any tribal finds are discovered. If appropriate, the archaeologist and THPO may introduce archaeological and Tribal Cultural monitoring on the site. An archaeological report shall be written detailing all archaeological finds and submitted to the City and the Northwest Information Center This shall be done in consultation with the Tribe's THPO.

Implementation of Mitigation Measure CUL-3, TCR-1, and TCR-2 would reduce impacts to TCRs to less than significant.

**Mitigation Measure CUL-3: Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered.** In the event archaeological resources are unearthed during ground-disturbing activities, all ground-disturbing activities within 50 feet of the find shall be halted so that the find can be evaluated. Ground moving activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. This examination shall be done in coordination with the Tribal Cultural Monitor(s), Tribal Heritage Preservation Officer(s) (THPO). All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. In the event that the newly discovered artifacts are determined to be prehistoric, the Federated Indians of Graton Rancheria and Lytton Rancheria shall be contacted and consulted.

The discovery of prehistoric artifacts shall require that a Tribal Cultural Monitor be present for ground disturbing activities to resume. The specifications for this requirement shall be described in the Cultural Resources Treatment Plan listed in Mitigation Measure CUL-2.

A lead agency engages in Consultation with the Local Native American Tribes to identify Tribal Cultural Resources, the significance of Tribal Cultural Resources, and to determine how any resources are to be protected. All Native American artifacts (tribal finds) shall be considered as a significant Tribal Cultural Resource, pursuant to PRC 21074 and the Treatment Plan described in CUL-2 shall be followed if any tribal finds are discovered. If appropriate, the archaeologist and THPO may introduce archaeological and Tribal Cultural monitoring on the site. An archaeological report shall be written detailing all archaeological finds and submitted to the City and the Northwest Information Center This shall be done in consultation with the Tribe's THPO.

**Mitigation Measure TCR-1:** A weekly construction update shall be provided to the Tribal Historic Preservation Officer of the Federal Indians of Graton Rancheria during any ground disturbing activities. This update shall include a photo log of the construction.

**Mitigation Measure TCR-2:** An archaeologist on the Federated Indians of Graton Rancheria's preferred list shall be retained to provide spot monitoring of ground disturbing activities.

**References:**

Tom Origer & Associates, 2021. *Cultural Resources Study for the City of Santa Rosa Fire Station 5 Rebuild Project Santa Rosa, Sonoma County, California*. February 12, 2021. (Appendix I. Confidential per AB52, on file with the City)

## 6.19 Utilities and Service Systems

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
| Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? | | | ✓ | |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | ✓ | |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project area that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | ✓ | |
| d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | ✓ | |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | ✓ | |

**Conclusion:** Regarding utilities and service systems, the proposed project would not result in any significant environmental impacts.

**Documentation:**

**a.** ***Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?*** **Less than Significant Impact.** The proposed project would not result in a significant environmental impact from the relocation or construction of new or expanded water supply, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities. Besides utility hook-ups to existing facilities, the project includes relocation of existing onsite PG&E telecommunications transformer.

**Water**

The project would be served by municipal water and sewer service from the City of Santa Rosa. Water service is expected to be provided for the site from a single service connection from the existing water main located under Stagecoach Road. Water service would be provided for the onsite fire hydrant and building sprinkler system, for domestic water, and for irrigation water.

Prior to issuance of building permits, the project engineer would be required to prepare a construction-level study indicating specifications of the new water infrastructure and any modifications needed to the existing municipal conveyance system to accommodate project needs, subject to review and approval by the City Engineer. Construction of new water supply infrastructure would be conducted in compliance with the City-approved utilities construction BMPs and the applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Therefore, water infrastructure construction impacts would be less than significant.

**Wastewater**

Santa Rosa provides wastewater collection and conveyance service for the city. Sanitary waste from the fire station is expected to be discharged via a single sewer lateral from the building. This lateral would connect to the existing sewer main located under Stagecoach Road. The City would be required to obtain a sewer connection permit and pay fees for permitting and connection to the wastewater treatment system.

Prior to issuance of building permits, the City Engineer would review a construction-level study prepared by the project engineers, indicating specifications of the new wastewater infrastructure for review and approval. Because all wastewater system improvements would be onsite and constructed to serve only the proposed project, no new public wastewater conveyance or treatment facilities would be needed to serve the proposed project. The impact would be less than significant.

**Stormwater**

The site is undeveloped and pervious, and the proposed project would generate stormwater runoff from increased impervious surfaces. Stormwater runoff from the site would be collected and conveyed to the on-site Low Impact Development (LID) features for biotreatment before being discharged to the existing, adjacent drainage swale east of the project site. This swale enters a closed conduit storm drain system and is located under Stagecoach Road, and the municipal close conduit storm drain system continues under Stagecoach Road. Refer to Section 6.10 Hydrology and Water Quality for further details of project stormwater treatment and runoff. The process of connecting the project to existing infrastructure is expected to be standard for conveying stormwater. Construction would be conducted in compliance with City-approved BMPs for stormwater infrastructure improvements and applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Impacts would be less than significant.

**Electric Power**

The project would connect to, and be served by, existing electricity infrastructure owned and operated by PG&E. Multiple PG&E transmission poles and power lines are located adjacent to the project site and onsite. The onsite PG&E transformer would be removed, and all utilities would be trenched to serve the project site. Exact locations of the service connection points for power and communications are to be determined, but due to the developed nature of the surrounding area and the presence of a joint utility trench along Fountaingrove Parkway, the applicant anticipates that service for these utilities would come from the Fountaingrove Parkway frontage. The process of connecting the project to existing infrastructure is expected to be standard for conveying electrical power to new development. Construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements and applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Impacts would be less than significant.

**Natural Gas**
The project would connect to, and be served by, existing natural gas infrastructure owned and operated by PG&E. The project proposes a 500-gallon exterior fuel storage tank for use in fueling vehicles; this tank is not anticipated to be associated with any utility infrastructure onsite. There would be a less than significant impact on natural gas connections.

**Telecommunications**
The proposed project would connect to existing telecommunications infrastructure, likely via a joint utility trench along Fountaingrove Parkway. Cable TV would be supplied in the utility trenches serving the fire station. A telecommunications provider for the project has not yet been selected. Telecommunications infrastructure is often grouped with electric power infrastructure on utility poles and transmission towers; therefore, it can be reasonably assumed the project would connect to telecommunications infrastructure on existing PG&E utility poles or trenches. The process of connecting the project to existing infrastructure is standard for transmitting internet and other telecommunications services. The existing aboveground PG&E transformer is located the west side of the site along Fountaingrove Parkway. This transformer serves the AT&T Switch Gear Building south of the site, along the existing gravel access road. Project construction would necessitate moving the transformer to a location yet to be determined by PG&E. Construction would be conducted in compliance with City-approved BMPs for utilities infrastructure improvements and applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Impacts would be less than significant.

In summary, the project would not require or result in the construction of new public utilities and service facilities beyond connections to existing infrastructure. Project construction would include a domestic water service line between the water meter and the station, a new fire hydrant and building sprinkler system, irrigation meter and piping, a single sewer lateral, underground power and communications connections, and a network of onsite LID stormwater catch basins and piping to collect and convey water away from the station. Additionally, the City anticipates the need for a sand-and-oil separator on the storm drain line to filter out debris contained within the truck wash water. For backup power, an on-site generator would be installed. City standards mandate undergrounding all new connections, including electric, telephone, and television lines. Construction of the new or expanded utilities infrastructure would comply with City standards and BMPs, and applicable construction-related mitigation measures identified in this Initial Study (e.g., air emissions, noise, traffic). Impacts would be less than significant.

**b.** ***Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*** **Less than Significant Impact.** The site is currently unconnected to municipal water, and operation of the proposed project would result in increased water demand. The project is proposing to connect to the existing water main under Stagecoach Road to receive water service from Santa Rosa Water (SWR) supply. Project water consumption is estimated to be approximately 360,000 gallons per year, which is 1.1-acre-feet per year (AFY). The potable water would be used for the on-site fire hydrant and building sprinkler system, domestic water, and irrigation. Any drought restrictions in effect at the time of project construction would be applied to the project.

According to the SRW 2020 Urban Water Management Plan which was adopted on June 8, 2021, the City of Santa Rosa receives the majority (99 percent) of its drinking water from the Sonoma

County Water Agency (SCWA), which wholesales water mostly from the Russian River to retail providers in Sonoma County and portions of Marin County. SRW supplements this drinking water supply by operating two groundwater wells. To decrease the demand for potable drinking water, SRW has developed Water Use Efficiency programs and provides recycled water from its own Subregional Water Reuse System (see 6.19.c below for more information on the Subregional System).

According to the 2020 UWMP, during non-drought years, the total water demand in 2045 is projected to be 25,097 AFY, while the UWMP projects water supply to be approximately 31,540 AFY in 2045, indicating adequate supply during normal years. During dry and multiple dry years, drought conditions are not anticipated to reduce the City's groundwater supplies due to the quantities of groundwater storage available. However, if a supply shortfall should occur during a multiple-dry year, the City would enact the appropriate stage of the City's Water Shortage Plan to reduce customer water demands. The Water Shortage Plan includes seven water rationing stages in the case of a disruptive drought. These stages include automatic hose shutoffs, limiting landscape irrigation, and water feature or pool restrictions, among others.

The 2020 UWMP concludes in section 7.2.4 Water Service Reliability – Five Consecutive Dry Years that that demand would not exceed supply in dry five-year periods through 2045, which is the planning horizon of the UWMP. The City would continue to be able to provide water to customers in normal, dry, and multiple dry years. No new water supply sources or entitlements would be necessary for project operation, and the proposed water connection would be reviewed by the City Engineer for consistency with City standards. Considering existing and future projected water supplies, there would be sufficient water supplied to meet project demand. Impacts would be less than significant.

**c.** ***Result in a determination by the wastewater treatment provider which serves or may serve the project area that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*** **Less than Significant Impact.** The project would connect to the existing sewer main located under Stagecoach Road See the wastewater discussion in Section 19.a above. The City of Santa Rosa Water Department is responsible for the operation and management of the Santa Rosa Subregional Water Reclamation System (Subregional System), which operates the Laguna Wastewater Treatment Plant, oversees the Industrial Pretreatment Program, and operates and maintains the recycled water system for more than 225,000 residents and 6,500 businesses for the northern California cities of Cotati, Rohnert Park, Santa Rosa, and Sebastopol; and the South Park Sanitation District and portions of unincorporated Sonoma County (City of Santa Rosa, 2016). This system collected approximately 13,119 AFY of wastewater in 2015. The wastewater generated by the project would result from the approximately ten personnel on duty plus occasional use of the community/training room. Also, the new fire station would replace the previous fire station (which also generated wastewater) that was destroyed in the Tubbs Fire. Based on these circumstances, the project would have a less than significant impact on the capacity of wastewater treatment providers to serve the project.

**d.** ***Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*** **Less than Significant Impact.** The City of Santa Rosa contracts with Recology Sonoma Marin to provide solid

waste collection, organic waste, and recyclable materials in the city pursuant to Chapter 9-12 of the Santa Rosa City Code. Solid waste management in the project area is the responsibility of the City of Santa Rosa through an agreement with the County of Sonoma. Sonoma County owns the Central Disposal Facility, which includes the landfill, recycling and reuse, and household toxics facility, all of which are operated by Zero Waste Sonoma. Zero Waste Sonoma implements waste diversion programs and fulfills the solid waste planning and reporting requirements for the region. Solid waste is collected and hauled to the Central Disposal Facility for appropriate disposal, which has a maximum permitted daily throughput of 2,500 tons per day, and estimated remaining capacity of 9,181,519 cubic yards, with no estimated closure year (CalRecycle 2019).

Based on the CalRecycle Solid Waste Generation Rates[2] for government land uses, the proposed project would generate approximately 5.9 tons of solid waste per year. Given the available capacity at the landfill, the additional solid waste generated by the proposed project is not anticipated to cause the facility to exceed its daily permitted capacity. Implementation of the City's recycling programs would further reduce solid waste generation and would ensure there is sufficient capacity to accommodate the proposed project's solid waste at the Central Disposal Facility. While the project would increase the amount of solid waste generated, the project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs. Impacts would be less than significant.

**e.** ***Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*** **Less than Significant Impact.** The primary State legislation regarding solid waste is AB939, the California Integrated Waste Management Act, adopted in 1989. AB939 required local jurisdictions to achieve a minimum 50 percent solid waste diversion rate by 2000. The Act requires each county to prepare and adopt a Countywide Integrated Waste Management Plan (CIWMP). Zero Waste Sonoma is the joint powers authority and designated regional agency responsible for implementing, monitoring, and reporting programs that meet the goals of AB939.

The project would include construction and materials disposal and recycling. Compliance with Santa Rosa Code Section 9-12, which describes the responsibilities and requirements for owners, occupants, and service providers regarding solid waste collection, storage, recycling, and disposal, is also required. The project would not conflict with local, or State laws governing construction or operational solid waste diversion and would comply with local implementation requirements. The impact would be less than significant.

**References:**

California Department of Resources Recycling and Recovery (CalRecycle), 2019. Estimated Solid Waste Generation Rates. Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (accessed on March 29, 2021)

California Department of Resources Recycling and Recovery (CalRecycle), 2019. SWIS Facility/Site Summary Facility Number 49-AA-0001. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1224?siteID=3621 (Accessed March 29, 2021)

[2] Government solid waste generation: 0.59 tons/emp/year x 10 employees = 5.9 tons

City of Santa Rosa, 2021. 2020 Urban Water Management Plan. Available at: https://srcity.org/856/Water-Supply-Planning (Accessed October 6, 2021)

City of Santa Rosa, 2021. 2020 Water Shortage Plan. Available at: https://srcity.org/DocumentCenter/View/32717/Shortage-Plan---Complete-Document-PDF?bidId= (Accessed October 6, 2021)

City of Santa Rosa, 2021. Santa Rosa City Code. Available at: http://qcode.us/codes/santarosa/?view=desktop&topic=9-9_12-9_12_010 (Accessed March 29, 2021)

County of Sonoma, 2021. Disposal Sites Available at: https://sonomacounty.ca.gov/TPW/Integrated-Waste/Disposal-Sites/ (Accessed March 29, 2021)

Pacific Gas & Electric (PG&E), 2021. Learn Where Natural Gas Pipelines are Located. https://www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page (Accessed March 19, 2021)

Zero Waste Sonoma, 2003. State and Local Waste Policies. Available at: https://zerowastesonoma.gov/uploads/reports/CoIWMP_Combined.pdf (Accessed March 29, 2021)

## 6.20 Wildfire

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

**Conclusion:** The project site is not located in a state responsibility area or on lands classified as very high fire hazard severity zones. The project site is located in a local responsibility area, and according to the CalFire FRAP Map, is located in a moderate fire hazard severity zone. Regarding wildfire, the proposed project would not result in any significant environmental impacts. Also see Section 6.9.f,g Hazards and Hazardous Materials (regarding wildland fires).

**Documentation:**

**a.** ***Substantially impair an adopted emergency response plan or emergency evacuation plan?*** **Less than Significant Impact.** Due to the loss of the fire station further east along Fountaingrove Parkway during the Tubbs Fire, the surrounding area has experienced diminished fire response compared to conditions that existed when the fire station was operational. The proposed project would replace this facility, improving response times to the surrounding area. The project has been designed to ensure that fire trucks could readily leave the site and travel in all directions from the site. The project would use the proposed training room to be used as a command post during emergencies in the northern area of the city. The project would not interfere with emergency evacuation plans. See Section 6.9.f,g Hazards and Hazardous Materials and 6.17.d Transportation for information on emergency response and evacuation. The impact would be less than significant.

**b.** ***Due to scope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*** **Less than Significant Impact.** The project proposes a fire station to replace a previous station that burned down in the 2017 Tubbs Fire. Operation of this new station would improve fire response and protection in the area and would not exacerbate wildfire risks.

**c.** ***Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*** **Less than Significant Impact.** The project site is located in a moderate fire hazard severity zone. The proposed project would rebuild a fire station that was destroyed in the 2017 Tubbs Fire. The construction and operation of the proposed project would require connections to existing utility infrastructure, which is proposed to be undergrounded, posing no risk to fire combustion. Defensible space and high-grade fire safety features of the building are also proposed, including a fire sprinkler system, fire alarm system, non-combustible exterior wall cladding (cement plaster and fiber cement board), non-combustible window and door frames, tempered glass for all exterior glazing, non-combustible doors, fire resistant vent screens, metal panel roofing, and rock ballasted membrane roofing.

While the project proposes onsite fuel storage in aboveground fuel tanks, the project includes secondary containment preventative measures. The impact from associated infrastructure would be less than significant.

**d.** ***Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*** **Less Than Significant Impact**. The fire station is not located in an area that would expose people or structures to downslope instability or drainage changes, as the project would be located uphill from adjacent development. The proposed project would have retaining walls, vegetated landscaping, and as stated in section 6.10, Hydrology, would not change drainage patterns and would be able to capture the post-development stormwater runoff in the onsite bioretention basins. Development of the fire station would not increase flooding potential, as the project site is not located in a flood zone, nor in an area with landslide potential. The impact would be less than significant.

**References:**

Sonoma County, 2021. (Used to locate fire hazard zones) *Permit Sonoma GIS Cannabis Site Evaluation Tool.* Accessed February 24, 2021. Available at: http://sonomamap.maps.arcgis.com/apps/webappviewer/index.html?id=0b784d90045941798d780f288b6f7003

## 6.21 Mandatory Findings of Significance

| | Summary of Impacts | | | |
|---|---|---|---|---|
| | Potentially Significant Impact | Less than Significant With Mitigation Incorporated | Less than Significant Impact | No Impact |
| | | | | |
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | ✓ | | |
| 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 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? | | ✓ | | |

**Conclusion:** The proposed project would result in less than significant environmental impacts after mitigation, as related to mandatory findings of significance.

**Documentation:**

**a.** ***Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*** **Less than Significant with Mitigation Incorporated.** The project does have the potential to degrade the quality of the environment. However, the project would be set back from aquatic features on the project site by a minimum of 30 feet from the stream centerline. Construction of a retaining wall around the perimeter of the developed areas would not degrade or reduce habitat of a fish or wildlife population. Any potential biological resource impacts would be less than significant with incorporation of Mitigation Measures BIO-1 through BIO-4.

The project site is not known to have any association with an important example of California's history or prehistory. The site would be redeveloped on a previously disturbed area, and adverse impacts to archaeological and paleontological resources are not likely to occur. Construction-phase procedures would be implemented in the event any archaeological or paleontological resources are discovered during grading and excavation, consistent with Mitigation Measures CUL-1, CUL-2, and

GEO-2 and GEO-3. Implementation of these mitigation measures would ensure that impacts related to cultural and paleontological resources would be less than significant.

**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 projects, and the effects of probable future projects.)*** **Less than Significant with Mitigation Incorporated.** Cumulative impacts can result from the interactions of environmental changes resulting from one proposed project with changes resulting from other past, present, and future projects that affect the same resources, utilities and infrastructure systems, public services, transportation network components, the air basin, the watershed, and other physical conditions. For the proposed project, such impacts would be short-term and temporary, usually consisting of overlapping construction impacts, as well as long-term, due to the permanent land use changes involved in the project.

Short-term, construction-related impacts resulting from air pollutant emissions and noise would be less than significant after mitigation (Mitigation Measures AIR-1 and NOISE-1) and would not contribute substantially to any other concurrent construction operations that might occur in the project vicinity.

The project's contribution to long-term, cumulative impacts would not be significant, primarily because project impacts would be confined to the new 10,763 square-foot, two-story, fire station on the 2.11-acre site, the project would be required to implement the mitigation measures for each topic area, and the project is consistent with General Plan goals and policies as well as City development standards. In addition, there are no proposed developments within one mile of the project site (City of Santa Rosa, 2021). The nearest proposed development is the Fountaingrove Inn Apartments, located approximately 1.25 miles southwest of the project site, and includes six buildings and approximately 224 units of multi-family rental housing amenities. Any potential cumulative impacts, such as those mitigated by AIR-1, NOISE-1 and TRANS-1 have been evaluated in the environmental topic area. The impacts would be less than significant.

**c.** ***Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*** **Less than Significant with Mitigation Incorporated.** Potential environmental impacts of the proposed project were analyzed in Sections 6.1 thru 6.20, and all potential impacts would be either less than significant with no mitigation required, or less than significant after mitigation. With implementation of the Mitigation Measures AIR-1, and NOISE-1, there would be no substantial, adverse impacts on human beings, directly or indirectly.

**References:**

City of Santa Rosa, 2021. Developments, Events, Initiatives. Available at: https://srcity.org/533/Developments-Initiatives [accessed May 24, 2021]

Identified throughout this Initial Study as applicable to the specific environmental topics.

# 7. Lead Agency and Consultants

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