



HINES DOWNTOWN PETALUMA STATION

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

PREPARED BY:
CITY OF PETALUMA
11 ENGLISH STREET
PETALUMA, CA 94952

December 2020

**Hines Downtown Petaluma Station
CEQA ENVIRONMENTAL CHECKLIST AND INITIAL STUDY**

Initial Study Checklist	
Project Title:	Hines Downtown Petaluma Station
Lead Agency:	City of Petaluma 11 English Street Petaluma, CA 94952
Contact Person and phone number:	Aaron Hollister, Senior Planner ahollister@cityofpetaluma.org 707-778-4422
Project Location:	315 D Street, Petaluma, Sonoma County, California Assessor's Parcel Number 007-131-003
Project Sponsor:	Hines c/o Charles Tilleman 1970 Broadway, Suite 400 Oakland, CA 94612 414-617-4222
Property Owners:	Sonoma Marin Area Rail Transit c/o Laura Giraud 5401 Old Redwood Hwy, Suite 200 Petaluma, CA 94954 707-794-3069
General Plan Designation:	Mixed Use (MU)
Existing / Proposed Zoning:	Urban Center (T5) and Urban Core-Open (T6-O)
Description of project:	The project proposes construction of a mixed-use project on a vacant, approximately 4.58-acre site adjacent to an existing train station operated by Sonoma Marin Area Rail Transit (SMART). The two new mixed-use buildings will measure approximately 73.5 feet in height, or five stories, and will include a combined total of 402 rental dwelling units and 5,129 square feet of retail space. Each building also includes a six-story parking structure, interior ground floor courtyard with swimming pool and other tenant amenities, community amenity space, leasing office area, vehicular ingress/egress areas, bicycle parking, and other utility areas such as refuse collection, utility rooms, and mailrooms. A non-vehicular thoroughfare will bisect the two buildings and will function as a linear park and pedestrian/bicycle throughway (Transverse Street). Vehicular access to garages will be provided via driveways on Copeland Street. Garage structures contain a total of 622 parking spaces, of which 610 will be reserved for residential uses and 12 for retail uses. Off-site improvements include improvements to the Copeland Street Transit Mall, existing bus stop on East D Street, and upsizing of the existing storm drain outfall to the turning basin of the Petaluma River. Project entitlements include Site Plan and Architectural Review.

<p>Surrounding land uses and setting; briefly describe the project's surroundings:</p>	<p>The project is located in central Petaluma, east of the Petaluma River Turning Basin. The site has frontage on East Washington Street, Copeland Street, and East D Street. Adjacent uses include the Petaluma Downtown SMART station to the east, the entitled Haystack Mixed-Use project to the west, commercial and retail uses to the north, and industrial and vacant uses to the south. The Petaluma Transit Mall is located adjacent to the project site on Copeland Street and currently includes nine bus gates.</p>
<p>Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):</p>	<p>Sonoma Water U.S. Army Corps of Engineers (Section 404 Clean Water Act) Regional Water Quality Control Board (Section 401 Clean Water Act) California Department of Fish and Wildlife (1602 Streambed Alteration Agreement)</p>
<p>Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to PRC section 21080.3.1? If so, has consultation begun?</p>	<p>Consistent with Assembly Bill 52 (AB 52) and Public Resources Code (PRC) Section 21080.3.1(d), the City of Petaluma provided formal written notification to the Federated Indians of Graton Rancheria (FIGR) on September 3, 2020. The Federated Indians of Graton Rancheria (FIGR) requested to consult on the project within the statutory timeframe provided by Public Resources Code §21080.3.1. The City and FIGR carried out consultation including a correspondence and a virtual conference call on September 29, 2020.</p>

HINES DOWNTOWN PETALUMA STATION

TABLE OF CONTENTS	PAGE #
1. SUMMARY AND INTRODUCTION	7
1.1. PURPOSE AND INTENT	7
1.2. PROJECT SUMMARY	7
1.3. PETALUMA GENERAL PLAN AND EIR	8
1.4. CENTRAL PETALUMA SPECIFIC PLAN AND EIR	8
1.5. PETALUMA SMART RAIL STATION AREAS: TOD MASTER PLAN	9
2. PROJECT DESCRIPTION	10
2.1. ENVIRONMENTAL SETTING	10
2.2. PROJECT DESCRIPTION	11
2.3. PUBLIC OUTREACH	16
2.4. ENTITLEMENTS & APPROVALS	17
3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	25
3.1. DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)	25
4. EVALUATION OF ENVIRONMENTAL IMPACTS	26
4.1. AESTHETICS	27
4.2. AGRICULTURAL AND FORESTRY RESOURCES	29
4.3. AIR QUALITY	31
4.4. BIOLOGICAL RESOURCES	38
4.5. CULTURAL RESOURCES	47
4.6. ENERGY	50
4.7. GEOLOGY AND SOILS	54
4.8. GREENHOUSE GAS EMISSIONS	58
4.9. HAZARDS/HAZARDOUS MATERIALS	61
4.10. HYDROLOGY AND WATER QUALITY	65
4.11. LAND USE AND PLANNING	69
4.12. MINERAL RESOURCES	73
4.13. NOISE	73
4.14. POPULATION AND HOUSING	79
4.15. PUBLIC SERVICES	81
4.16. RECREATION	83
4.17. TRANSPORTATION	85
4.18. TRIBAL CULTURAL RESOURCES	94
4.19. UTILITIES AND SERVICE SYSTEMS	96
4.20. WILDFIRE	100
4.21. MANDATORY FINDINGS OF SIGNIFICANCE (CAL. PUB. RES. CODE §15065)	102
5. REFERENCE DOCUMENTS	104
6. MITIGATION MONITORING AND REPORTING PROGRAM	106

TABLE OF FIGURES

FIGURE 1: REGIONAL LOCATION	19
FIGURE 2: PROJECT VICINITY	20
FIGURE 3: GENERAL PLAN LAND USE	21
FIGURE 4: ZONING	22
FIGURE 5: SITE PLAN	23
FIGURE 6: REQUIRED AND PROPOSED FRONTAGE TYPE	24

LIST OF TABLES

TABLE 1: AIR QUALITY THRESHOLDS OF SIGNIFICANCE 32
TABLE 3: CONSTRUCTION PERIOD EMISSIONS 34
TABLE 4: OPERATIONAL EMISSION ESTIMATES 35
TABLE 5: HEALTH RISKS AT THE MEIR AND MEIS LOCATIONS 35
TABLE 6: CUMULATIVE HEALTH RISKS AT MEIS LOCATION 36
TABLE 7: CUMULATIVE HEALTH RISKS AT THE PROJECT SITE 37
TABLE 8: PROJECT GHG EMISSIONS 60
TABLE 9: CALCULATED NOISE LEVELS (DBA) OF CONSTRUCTION EQUIPMENT 75
TABLE 10: CONSTRUCTION EQUIPMENT VIBRATION AT 25 FEET FROM..... 77
TABLE 11: PROJECT TRIP GENERATION 88
TABLE 12: LOS INTERSECTION OPERATIONS ANALYSIS 90

APPENDICES

- A. AIR QUALITY AND GREENHOUSE GAS STUDY
- B. BIOLOGICAL RESOURCES ASSESSMENT
- C. PRELIMINARY GEOTECHNICAL REPORT
- D. PHASE I ENVIRONMENTAL SITE ASSESSMENT
- E. SEA LEVEL RISE SCENARIOS
- F. NOISE AND VIBRATION STUDY
- G. TRANSPORTATION IMPACT STUDY

1. SUMMARY AND INTRODUCTION

1.1. PURPOSE AND INTENT

This Environmental Checklist for the proposed Hines Downtown Petaluma Station project (hereinafter referred to as the “project”) has been prepared by the City of Petaluma as lead agency in full accordance with the procedural and substantive requirements of the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

This Initial Study is intended to inform City decision-makers, responsible agencies, interested parties and the general public of the proposed project and its potential environmental effects. It provides the CEQA-required environmental documentation for all city, local and state approvals or permits that might be required to implement the proposed project.

CEQA Guidelines Section 15063(c) lists the following purposes of an Initial Study:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration.
2. Enable an Applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby possibly enabling the project to qualify for a Negative Declaration.
3. Assist in the preparation of an EIR, if one is required.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

The City of Petaluma, as the lead agency, has conducted an Initial Study to determine the level of environmental review necessary for the proposed project. Consistent with Section 15070(b) of the CEQA Guidelines, the Initial Study identified potentially significant effects, but:

1. Revisions in the Project plans or proposal made by or agreed to by the applicant before a proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect would occur; and
2. There is no substantial evidence, in light of the whole record before the agency, that the Project as revised may have a significant effect on the environment.

Therefore, as the lead agency, the City of Petaluma has determined that a Mitigated Negative Declaration is the appropriate level of environmental review.

1.2. PROJECT SUMMARY

The project proposes construction of a mixed-use project on a vacant, approximately 4.58-acre site adjacent to the existing train station operated by Sonoma Marin Area Rail Transit (SMART). The project proposes to introduce two new mixed-use buildings separated by a non-vehicular thoroughfare (Transverse Street). Buildings will be 5 stories and measure approximately 73.5 feet in height and will contain a combined total of 402 residential dwelling units (rental) and 5,129 square feet of retail space. Each building also includes a six-story parking structure including a ground floor level and partial roof level, interior ground floor courtyard with swimming pool and other tenant amenities, community amenity space, leasing office area, vehicular ingress/egress areas, bicycle parking, and other utility areas such as refuse collection, utility rooms, and mailrooms. Transverse Street will be publicly accessible and will function as a pedestrian/bicycle thoroughway and linear park. The Hines project has proposed Alternative Compliance through an offsite deed restriction to fulfill of the City’s inclusionary housing requirements.

1.3. PETALUMA GENERAL PLAN AND EIR

General Plan

The Petaluma General Plan 2025, adopted in 2008, serves the following purposes:

- Reflects a commitment on the part of the City Council and their appointed representatives and staff to carry out the Plan;
- Outlines a vision for Petaluma's long-range physical and economic development and resource conservation; enhances the quality of life for all residents and visitors; recognizes that human activity takes place within the limits of the natural environment; and reflects the aspirations of the community;
- Provides strategies and specific implementing policies and programs that will allow this vision to be accomplished;
- Establishes a basis for judging whether specific development proposals and public projects are in harmony with Plan policies and standards;
- Allows City departments, other public agencies, and private developers to design projects that will enhance the character of the community, preserve and enhance critical environmental resources, and minimize impacts and hazards; and
- Provides the basis for establishing and setting priorities for detailed plans and implementing programs, such as Development Codes, the Capital Improvement Program (CIP), facilities and Master Plans, redevelopment projects, and the Urban Growth Boundary (UGB).

General Plan EIR

The General Plan EIR was certified by the City Council on April 7, 2008 (SCH# 2004082065). The General Plan EIR reviewed all potentially significant environmental impacts and developed measures and policies to mitigate impacts from buildout of the General Plan. Nonetheless, significant and unavoidable impacts were determined to occur. Therefore, the City adopted a statement of overriding considerations, which balances the merits of approving the project despite the potential environmental impacts. The impacts identified as significant and unavoidable in the General Plan EIR are:

- Increased motor vehicle traffic which would result in unacceptable level of service (LOS) at six intersections covered in the Master Plan:
 - McDowell Boulevard North/Corona Road, Lakeville Street/Caulfield Lane, Lakeville Street/East D Street, Petaluma Boulevard South/D Street, Sonoma Mt. Parkway/Ely Boulevard South/East Washington Street, and McDowell Boulevard North/Rainier Avenue.
- Traffic related noise at General Plan buildout, which would result in a substantial increase in existing exterior noise levels that are currently above City standards.
- Cumulative noise from proposed resumption of freight and passenger rail operations and possible resumption of intra-city trolley service, which would increase noise impacts.
- Air quality impacts resulting from General Plan buildout to population levels that could conflict with the Bay Area 2005 Ozone Strategy. (This regional air quality plan has since been replaced by the 2010 Clean Air Plan, which is further discussed in Sections 3.3 Air Quality and 3.7 Greenhouse Gases.)
- A possible cumulatively considerable incremental contribution from General Plan development to the significant impact of global climate change.

1.4. CENTRAL PETALUMA SPECIFIC PLAN AND EIR

Central Petaluma Specific Plan

The Central Petaluma Specific Plan (CPSP) was approved by the City Council on June 2, 2003 by Resolution 2003-105 N.C.S. The CPSP provides specific land use and development regulations for approximately 400 acres within the central portion of the City, adjacent to downtown. The Plan Area is bounded by Lakeville Street to the east and north, Petaluma Boulevard to the west, and Highway 101 to the south. The Plan seeks to redirect anticipated growth into central Petaluma, reconnect the City to the river, reinforce Petaluma's waterfront identity, encourage diversity in transportation modes, enhance the physical structure and overall identity of the area, and promote sustainable development. The CPSP is largely defined by the presence of the Petaluma River, Turning Basin, and active rail corridor with the balance of land supporting warehouse and light industrial uses with limited office and residential uses.

There are four distinct areas identified within the Central Petaluma Specific Plan including the North River, Turning Basin, Riverfront Warehouse, and Lower Reach subareas. The project site is located within the Turning Basin subarea, which is bounded by East Washington Street to the north, Lakeville Street to the east, East D Street to the south, and Petaluma Boulevard to the west. The Turning Basin subarea is the location of early development in Petaluma. Industrial and warehouse structures associated with historic river trade are still visible along the edge of the river. The eastern portion of the subarea contains some agricultural, industrial, municipal, and residential buildings with a large portion of land still vacant, including the project site. The western portion of the subarea is located within the Historic Commercial District and is characterized by retail and other commercial uses.

Central Petaluma Specific Plan EIR

The CPSP EIR (SCH Number 2002-11-2039) was certified by the City Council on June 2, 2003 by Resolution 2003-104. For planning and environmental analysis purposes, the CPSP EIR assumed a maximum development potential of 1,617 dwelling units and 2.9 million square feet of commercial uses. The CPSP EIR reviewed all potentially significant environmental impacts and developed measures and policies to mitigate impacts. Nonetheless, significant and unavoidable impacts were determined to occur under the CPSP. Therefore, the City adopted a statement of overriding considerations, which balances the merits of approving the project despite the potential environmental impacts. The impacts identified as significant and unavoidable in the CPSP EIR are as follows:

- Household and population increases would result in associated physical (environmental) impacts, including significant transportation, public services and utilities, visual, noise, air quality, storm drainage, flood control, geotechnical, and hazardous materials exposure impacts.
- Cumulative impacts on the US 101 Southbound Ramps/East Washington Street intersection.
- Cumulative impacts at the Lakeville Street / D Street intersection.
- Cumulative impacts on US 101.
- Cumulative impacts from the installation of roundabouts at the Copeland Street / East Washington Street and Petaluma Boulevard / D Street intersections.

Because CEQA discourages "repetitive discussions of the same issues," this environmental document tiers off the General Plan EIR and Central Petaluma Specific Plan EIR to examine site-specific impacts of the proposed project, as described below. A copy of the City of Petaluma's General Plan and EIR, and Central Petaluma Specific Plan and EIR are available online at <https://cityofpetaluma.org/planning-documents/>.

1.5. PETALUMA SMART RAIL STATION AREAS: TOD MASTER PLAN

On June 17, 2013 the Petaluma City Council adopted the Petaluma SMART Rail Station Areas: TOD Master Plan, the Amended SmartCode, and a Mitigated Negative Declaration for the project. The primary objectives of the Station Area Master Plan include:

- Provide a framework that will guide future development and redevelopment within the station areas toward uses that will support transit ridership.

- Improve motorized, non-motorized, and transit connectivity between the station sites and existing adjacent commercial, employment, and residential areas.
- Develop and implement urban design standards that promote walkable and livable environments within the station area.
- Identify infrastructure needs and a financing plan with an emphasis on funding opportunities to incentivize future development/redevelopment.
- Inform the public and stakeholders about the master plan process, transit-oriented design concepts, and future opportunities within the two station areas.
- Create an integrated development plan that capitalizes on the SMART rail system.

The Station Area Master Plan (SAMP) identifies three catalyst sites, including the project site, which are intended to transform the Station Area, meeting the goals of the General Plan and the CPSP.

2. PROJECT DESCRIPTION

2.1. ENVIRONMENTAL SETTING

Regional Setting

Petaluma is located in southwestern Sonoma County along the Highway 101 corridor approximately 15 miles south of Santa Rosa and 20 miles north of San Rafael. The City is oriented northwest - southeast and as such, cardinal directions are generally described relative to the position of the Highway 101 corridor, where streets parallel to Highway 101 are described as north-south trending and streets perpendicular to Highway 101 are described as east-west trending. The City is situated at the northernmost navigable end of the Petaluma River, a tidal estuary that drains to the San Pablo Bay. The City originated along the banks of the Petaluma River, spreading outward over the floor of the Petaluma River Valley as the City developed. The Valley itself is defined by Sonoma Mountain on the northeast and the hills extending northward from Burdell Mountain on the west. To the south are the Petaluma Marshlands and the San Francisco Bay beyond.

Petaluma's Urban Growth Boundary (UGB) defines the limits within which urban development may occur and encompasses approximately 9,911 acres. The UGB was implemented in 1987 (as the Urban Limit Line), formally adopted as the UGB in 1998 via Measure I and is set to expire in 2025. The General Plan and EIR evaluated potential impacts associated with existing development and buildout of all land use within the UGB. The project site is located in the central portion of the City, within the UGB (Error! Reference source not found.).

Vicinity Setting

The project site is located within the Central Petaluma Specific Plan Subarea of the City's General Plan, which is characterized by the Petaluma River, Turning Basin, and an active rail corridor. Older warehouses and light industrial uses mixed with new office and residential developments are located west of the river in an area historically referred to as the warehouse district. Commercial uses are primarily located near the Turning Basin and along Petaluma Boulevard South. A portion of the City's Downtown also lies within this subarea.

The site is also located within the Lakeville Priority Development Area (PDA). PDAs are the foundation for sustainable regional growth as envisioned through Plan Bay Area, the region's Sustainable Community Strategy (SCS). The most recently adopted SCS is Plan Bay Area 2040, a regional Plan prepared as a joint effort between the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). Plan Bay Area 2040 identifies focused growth as a core strategy in existing communities along associated existing transportation networks. The focused growth approach identified in the Plan is intended to achieve key regional economic, environmental, and equity goals as it builds upon existing community characteristics. PDA's are identified as a key strategy in implementing the focused growth approach. Implementation of PDA's enhance mobility and economic growth by linking the location of housing and jobs with transit, thus offering a more efficient land use pattern, reducing greenhouse gas emissions, and realizing a greater return on existing and planned transit investments. The Plan Bay Area 2050 Blueprint is the first draft of Plan Bay Area 2050 and updates Plan Bay Area 2040. Plan Bay Area 2050 focuses on improving housing

affordability for all bay area residents, expanding housing opportunities, focusing growth in walkable places, increasing safety related to auto collisions and sea level rise, and facilitating economic growth. The draft plan is scheduled for consideration for adoption by the MTC Commission and ABAG Executive Board. The final approved plan will serve as the preferred alternative for environmental analysis purposes.

Project Site

The project site is located at 315 East D Street in central Petaluma and encompasses approximately 4.58-acres in Downtown Petaluma, adjacent to the existing SMART station. The site is bordered by East Washington Street to the north, East D Street to the south, the SMART Station and Petaluma Visitors Center to the east, and Copeland Street to the west. A portion of the project site along the East Washington Street frontage currently provides parking for the Petaluma Downtown SMART Station. The Copeland Street Transit Mall, which serves as a hub for local and regional transit agencies including Petaluma Transit, Sonoma County Transit, and Golden Gate Transit, is located along the project site's frontage to Copeland Street. The currently vacant property located immediately across Copeland Street was approved for mixed-use development, the Haystack Project, in May 2019. (**Figure 2: Project Vicinity**).

The applicable General Plan land use designation for the project site is Mixed-Use (MU) (**Figure 3: General Plan Land Use**). Within the CPSP, the Mixed-Use designation directs a robust combination of uses, including retail, residential, service commercial, and/or offices. MU development is expected to be oriented toward the pedestrian, with parking provided, to the extent feasible, in larger common areas or garages. There is no residential density standard or Floor Area Ratio (FAR) maximum applied to the CPSP subarea. Instead, density and intensity are indirectly regulated by the SmartCode's building form, mass, and height standards.

The SmartCode Regulating Plan serves as a Zoning Map and is principally organized around the application of Transect Zones with zone designations ranging from T1 (Natural) to T6 (Urban Code). The T-5 Urban Center Zone and the T-6-O Urban Core-Open Zone are applicable to the project site where the first 50 feet of site depth along the East Washington Street and East D Street frontages, as well as along the first 50 feet of the site adjacent to the train station property are designated T-6-O with the remainder of the site designated T-5. (**Figure 4: Zoning**). The T-5 Urban Center Zone anticipates higher density mixed-use buildings that accommodate retail, offices, rowhouses and apartments. A tight network of streets, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks may also be found in this zone. The T-6-O Urban Core-Open Zone anticipates the highest building density and height, with the greatest variety of uses. This zone may have larger blocks, and streets have steady street tree plantings and buildings set close to wide sidewalks.

The project site is currently vacant and was used for construction staging during development of the Downtown Petaluma SMART station from 2014 to 2016. Remnant train tracks which diverged in two spurs on the project site and ran generally parallel to the east and west property lines were removed in 2020 by SMART. Train tracks currently extend south of the project site across East D Street where they converge and ultimately run parallel with the SMART right-of way. These remnant tracks are indicative of the site's historic use as a rail yard, which was present since at least 1888, and reportedly as early as 1870. Though no structures currently exist onsite, it is reported that the site previously contained an engine house, water tanks, turntables, tool houses, oil house, and cattle yards. All such improvements were reportedly retired in 1947. The site is relatively flat and has been heavily disturbed over time. The site contains ruderal vegetation throughout including non-native grasses and forbs. Two man-made depressions, likely caused by vehicles driving over the site, cause water to be held onsite following rain events. An approximately six-foot soil pile containing ruderal vegetation, concrete, and brick debris is located at the southwest corner of the property near the intersection of E D Street/Copeland Street. The northern portion of the site is accessible via East Washington Street and contains gravel surfaces used for parking associated with the adjacent SMART station. The remainder of the site is inaccessible to the public and is secured via chain link fencing.

2.2. PROJECT DESCRIPTION

Mixed-Use Buildings

The project proposes construction of two mixed-use buildings, referred to as the North and South Buildings. Each building measures five stories in height, approximately 73.5 feet, and include a combined total of 402

rental dwelling units and 5,129 square feet of retail space. Each building wraps a six-story parking structure and an interior ground-floor courtyard containing a pool. The ground floors also include community amenity space, leasing office area, vehicular ingress/egress areas, bicycle parking, and other utility areas such as refuse collection, utility rooms, and mailrooms (**Figure 5: Site Plan**). The two individual building layouts are further described below.

North Building

The North Building is located along East Washington Street and contains a total of 195 residential units inclusive of 19 studios, 109 one-bedroom units, and 67 two-bedroom units. Residential units are located on each floor of the five-story building including 26 on the first floor, 42 on the second, third, and fifth floors, and 43 on the fourth floor. The North Building also includes 2,861 square feet of retail space at the corner of Copeland Street and the new Transverse Street, a 2,011 square foot leasing area at the corner of East Washington Street/Copeland Street, 1,403 square foot amenity area along Copeland Street, 10,848 square foot interior courtyard, a 991 square-foot roof deck, and a 1,554 square foot clubhouse located in the interior portion of the building.

South Building

The South Building is located along East D Street and contains a total of 207 residential units inclusive of 33 studios, 115 one-bedroom units, 56 two-bedroom units, and three three-bedroom units. Thirty residential units are located on the first floor, 44 on the second, third, and fifth floors, and 45 on the fourth floor. The South Building also includes 2,268 square feet of retail space at the intersection of Copeland Street and the new Transverse Street, a 1,390 square foot leasing area at the corner of East D Street/Copeland Street, 1,547 square foot amenity area along Copeland Street, 11,376 square foot interior courtyard, a 1,572 square-foot roof deck, and a 1,845 square foot clubhouse located in the interior portion of the building.

Private Frontages

The SmartCode and Station Area Master Plan establish standards applicable to the development of private frontages, which are components of a building that provide a transition between the public and private realms. As outlined in the SmartCode, the project is required to provide several different frontage types including a shopfront, terrace, arcade, or gallery along East Washington Street, East D Street, a portion of the north-south Transverse Street envisioned by the SAMP, and along Copeland Street for the first 25 feet from its intersection with East Washington Street and East D Street. In addition, the project is required to provide a 50-foot minimum gallery along the envisioned north-south and east-west Transverse streets and a stoop or dooryard must be provided along the east-west Transverse Street and along Copeland Street for the first 25 feet from its intersection with the east-west Transverse Street. Any frontage type may be provided along the remainder of the Copeland Street frontage. The project complies with the private frontage standards with the exception of the required shopfront, terrace, arcade, or gallery frontage types along the ground-floor facing the SMART station, Transverse Street, East Washington Street, and East D Street. Section 8.10.020(H) of the SmartCode provides for deviations from the specific requirements of the code. Where a project is inconsistent with a specific provision, but meets the overall intent of the code, a Warrant may be granted allowing deviation from the specific requirements. (**Figure 6: Required and Proposed Frontage Types**).

As proposed, the project provides three frontage types including stoops, galleries, and shopfronts. The stoop frontage type will be provided along the western property line adjacent to the SMART Station property, along the majority of the Transverse Street, and along portions of East Washington Street and East D Street. Stoops are designed to be elevated above the sidewalk to provide privacy while also engaging the public right-of-way. Galleries, which are intended for buildings with ground-floor commercial uses are designed to extend far enough from the building to provide adequate protection and circulation for pedestrians. Galleries are proposed at the intersection of the Transverse Street and Copeland Street adjacent to proposed retail spaces in each building, as well as over sidewalks adjacent to the northwest corner of the North Building at the intersection of Copeland Street/East Washington Street and the southwest corner of the South Building at the intersection of Copeland Street/East D Street. Shopfronts are intended for retail use and provide a substantial amount of glazing at the sidewalk level and may also include awnings which overlap the sidewalk. As proposed, the project will provide shopfronts along Copeland Street, East Washington Street, and East D Street. As previously stated, though

the project deviates from the required frontage types, this deviation may be permitted through approval of a Warrant, as provided by the SmartCode.

Site Access and Circulation

Each building includes a six-floor parking garage which will accommodate off-street parking for residential and retail uses, as required by the SmartCode. Though the parking garages are six levels, the overall height of the parking structures will be consistent with the residential portions of the structures as the floor to ceiling height required is less than the residential portions of the project. Additionally, a portion of the sixth levels are located on the roof of each building. New curb cuts will be installed along the Copeland Street frontage to provide vehicular access to onsite parking. The total number of off-street parking spaces provided will be 622, including 302 in the North Building garage and 320 in the South Building garage. Of the total spaces provided, 610 are reserved for onsite residential units and 12 for retail uses. Vehicular parking spaces for residential uses are unbundled, meaning that parking spaces will not be assigned to specific units and residents desiring parking spaces will be required to pay an additional fee. Of the total vehicular parking spaces, 62 will be designated as electric vehicle parking including 30 in the North Building garage and 32 in the South Building garage.

Secured bicycle parking is proposed in each of the buildings on the East Washington Street and East D Street frontages, respectively. Bicycle parking rooms will be accessed directly from the street frontage or from an interior hall and will contain a total of 108 secured spaces for both short- and long-term parking including 36 spaces in the North Building and 72 spaces in the South Building. Unsecured bicycle parking racks accommodating up to two bicycles per rack will be provided on East Washington Street (1 rack), Copeland Street (6 racks), East D Street (4 racks), and on the east-west Transverse Street (12 racks) for a total of 46 unsecured bicycle parking spaces. In addition to bicycle parking, the project also proposes to install a bicycle share station with five bicycles on the Copeland Street sidewalk where it intersects with the Transverse Street.

Sidewalks of up to 15 feet in width are proposed along East D Street and East Washington Street with areas of the sidewalks narrowing to approximately 13.5 feet on East Washington Street and 12.5 feet on East D Street. A sidewalk width of 17 feet is proposed along Copeland Street. A Class IV bicycle facility is proposed along the East D Street frontage and will align with the Class IV bicycle facility proposed to the west along the Haystack project site's East D Street frontage. A Class IV bicycle facility is separated from vehicular traffic by a physical barrier and is intended for bicycle use only. The proposed Class IV bicycle lane will be a one-way, five-foot-wide lane with a physical barrier consisting of landscaping and a bus shelter. A cycle track will be provided along the south end of the Transverse Street area and includes a two-way facility measuring 10 feet in width with each lane being five feet in width. The cycle track is physically separated from both vehicular traffic as well as sidewalks and other pedestrian facilities.

Move-in/loading/refuse pick-up areas are proposed on East Washington Street and East D Street. Due to traffic safety and congestion issues along these streets, on-street parking for private vehicles will not be permitted.

Public and Private Open-Space

As previously discussed, the east-west Transverse Street is designed as a linear park and pedestrian/bicycle thoroughway. Features of the linear park include two seven-foot wide pedestrian paths on either side, a 10-foot wide, two-way cycle track on the south end, a 28-foot wide social lawn, a plaza with splash pad fountain, a food truck plaza, and retail dining areas. Other amenities include water fountains, water bottle filling stations, and benches. All features of the Transverse Street are publicly accessible and measure 60 feet in total width. The remaining 22 feet of the Transverse Street include private improvements including bioretention areas, planting strips, and porches for ground-floor residential units located along Transverse Street. Semi-private open space, which will be limited to use by residents is provided in interior courtyard areas. Each courtyard contains a clubhouse, pool, jacuzzi, cabana, outdoor kitchen/dining area, fire table lounge, and dog areas. Additionally, private open space is provided in the form of deck and patio areas.

Landscaping and Fencing

Landscaping is proposed along the project's street frontages, Transverse Street area, along the eastern property line between the proposed buildings and the SMART Station property, and in common areas. Landscaping species will require low to moderate water application with two species in the bioretention areas requiring highwater application.

Landscaping along street frontages will include street trees, shrubs, and groundcover. Street trees will be planted in four-foot by eight-foot tree wells with decorative grills placed over the wells. Enhanced paving (concrete unit pavers) will be located between each tree well. Proposed street trees include Chinese Pistache along the East D Street and East Washington Street frontages, which are consistent with the approved street trees in the Haystack project, providing continuity along street frontages in the vicinity. Existing trees along the Copeland Street frontage will be removed and replaced with Trident Maples. The eastern property line fronting the SMART station property will also include Trident Maples.

The Transverse Street will be lined with Chinese Pistache street trees. The “social lawn” area will be planted with grasses, while the bioretention areas are proposed with 20 differing plant species. Enhanced paving will be utilized in the food truck court, public court with the splash fountain, and adjacent to the SMART Station access area.

Lighting is proposed throughout the project site including City standard street lighting along East Washington Street, East D Street, Copeland Street, and along the eastern property line. Pedestrian-scale pole lights will be provided along the length of east-west Transverse Street. Additionally, the project proposes to install floodlights and halo lights at the plaza/splash pad fountain area, and a catenary ring pendant, mounted on poles at the food truck/retail dining area near the intersection of Transverse Street/Copeland Street. Lighted bollards are proposed adjacent to residential units with frontage on the Transverse Street as well as within interior courtyards. Other lighting proposed within interior courtyards includes string lights above the outdoor kitchen/dining area, halo lighting at the fireplace lounge area and around tree wells, recessed canopy lighting, and pool deck floodlights. Various styles of decorative wall mounted lights are also proposed along all elevations of both structures.

A 42-inch-tall board formed concrete wall and metal/wood fence is proposed along the eastern property line adjacent to the SMART Station property. The fence will leave an opening for a connection from the Transverse Street to the SMART Station property. Fencing will also be installed within courtyard areas to enclose the proposed pools in compliance with required building code requirements. As proposed, fencing will be five feet in height and will be open or transparent, providing visibility to the pool area. Openings will be no greater than four inches and the fence will include a self-latching gate.

Utilities

Utilities will extend to the project site via existing and proposed utility easements. Wastewater will be accommodated via the installation of new sewer laterals that will connect to the existing sanitary sewer lines in Copeland Street. The new sewer line infrastructure will connect to the existing sanitary sewer line system within surrounding roadways, which conveys flows to the regional wastewater plant for treatment.

A new eight-inch water line will connect to the existing water line east of the project site on the adjacent SMART property. The new water line will run parallel to the eastern property line, extending to East D Street and will then extend west, connecting with an existing water line at the intersection of East D Street/Copeland Street. The project will install new water lines from the project site to the existing water lines in East Washington Street and East D Street. Additionally, a new private eight-inch water line will be installed within the east-west Transverse Street and will connect to the existing water line in Copeland Street. A new fire hydrant will be connected to the new water line within this area.

The project will include new storm drainage infrastructure to accommodate the increase in impervious surfaces resulting from development of the site. Onsite improvements include installation of a new storm drain within the onsite Transverse Street which will capture storm water onsite, connect to the existing storm drain within Copeland Street, and ultimately convey flows to the existing outfall to the Petaluma River. The existing 15-inch outfall to the Petaluma River will be upsized to a 30-inch outfall to accommodate storm water from the proposed and future developments in the vicinity.

Frontage Improvements

As previously discussed, frontage improvements include installation of sidewalks along East D Street, East Washington Street, and Copeland Street as well as installation of a Class IV bicycle facility along East D Street

which will align with the Class IV bicycle facility proposed to the west along the Haystack project's East D Street frontage. Sidewalk widths along East D Street and East Washington Street will be up to 15 feet in width with pinch points narrowing the sidewalk to approximately 12.5 feet on East D Street and 13.5 feet on East Washington Street. A sidewalk width of 17 feet is proposed along Copeland Street. Proposed sidewalks on East D and East Washington streets largely comply with the requirements of the SmartCode, with the exception of the aforementioned pinch points. As provided by the SmartCode, the deviation in sidewalk width is permitted through approval of a Warrant, so long as the overall intent of the code is met. Other frontage improvements proposed by the project include move-in/loading/refuse pick-up areas on East Washington and East D streets.

The project also proposes improvements to the Copeland Street Transit Mall including reconfiguration of the existing bus gates to accommodate two 45-foot long gates and six 40-foot long gates, installation of four new City-standard bus shelters, new benches, bicycle racks, drinking fountains/water bottle filling stations, and trash and recycling bins. The red curb along Copeland Street will be repainted and one new "No Parking Bus Stop" sign for each bus gate will be installed. Two LED information signs will be installed between gates and will provide transit riders with real-time updates for various routes. Other signage to be installed includes bicycle share parking area signage near the building entrances and wayfinding signage directing pedestrians and bicyclists to the SMART station, Transit Mall connection points, and other points of interest. The project also proposes installation of pedestrian-scale street lighting along the entire length of Copeland Street as well as replacement of all existing security cameras.

The existing bus stop on East D Street serviced by both City and County Transit will be re-aligned to accommodate the Class IV bicycle facility. The stop will continue to have a 100-foot-long pull-out with associated red curb and no parking signs. Additional features will include a new bus shelter with two six-foot benches and two four-foot benches, four bicycle racks, one 32-gallon trash receptacle and one 32-gallon recycle steel receptacle, bicycle share parking signage near the building entrances, one new LED information display providing real-time transit updates, and decorative pedestrian-scale street lighting along the entire length of the project's East D Street frontage. Pedestrian-scale lighting will also be provided along the length of the East Washington Street frontage.

Off-site Improvements

The Hines project includes upsizing of the existing storm drain outfall in the Turning Basin of the Petaluma River including replacing approximately 30 feet of 15-inch diameter with 30-inch diameter storm drain pipe. Outfall improvements include a rock rip rap collar extending 2 feet beyond the top and sides of the culvert barrel and extending 5 feet below the culvert bottom. The rip rap collar will be 7 feet wide and 10 feet long. The entitled Haystack project includes installation of storm drain infrastructure (30-inches in diameter) within the new transverse street between Copeland and Weller Streets, and extending onto APN 007-142-012 tying into the existing 15-inch CMP outfall. Upsizing by Hines will complete the infrastructure improvements identified in the CPSP to accommodate storm water runoff. In the event that Haystack installs storm drain improvements within Transverse Street and completes upsizing of the storm drain pipeline in advance of the Hines development, then the Hines Project could use new storm drain infrastructure through Transverse Street and the upsized storm drain outfall consistent with CPSP. Otherwise, Hines will accommodate storm water runoff onsite through new storm drain infrastructure within Transverse Street and connect to existing storm drain infrastructure within Copeland Street, which conveys storm water runoff via existing pipelines along East Washington Street and D Street to outfall discharge points along the Petaluma River.

Offsite improvements also include frontage improvements to East Washington Street, Copeland Street and D Street, as well as ADA compliant sidewalks, curbs, and crosswalks.

Site Preparation and Construction

Site preparation will include grubbing to remove existing vegetation, and removal of debris piles and storage containers, impacted soils, and remnant railroad materials. Grading will occur over the entire project site and will result in the distribution of soil across the site to achieve level topography. Excess cut from excavation, foundation and utility work may be re-used onsite or exported for disposal. Grading activities are expected to result in a net import of 3,948 cubic yards. Following grading activities, infrastructure improvements, building foundations, utilities, storm drains, and bioretention areas will be installed.

As proposed, the project will occur over approximately 33 months. As proposed, the project will be constructed in stages starting with site preparation and grading. Site preparation is expected to take approximately one week, followed by two weeks of grading. Each building will take approximately 30 months to construct (including site preparation & grading), with the South building commencing first followed by the North building after a 3-month lag. South Building construction will start with the leasing, amenity, garage, and a portion of residential units along East D Street occurring first, followed by construction of the retail area and residential units along the Transverse Street frontage, and concluding with construction of the clubhouse and remainder of residential units along the eastern property line. North Building construction will likewise begin with the leasing, amenity, and garage area, followed by construction of the clubhouse and residential units along the eastern property frontage, and concluding with construction of the retail area and residential units along the Transverse Street frontage. Construction will generally track the following schedule: 8 months for excavation & foundation work, 10 months for structures, 6 months for building façades and 9 months for interiors & finishes – totaling 33 months.

Construction equipment expected to be utilized includes tractors, backhoes, haul trucks, graders, pavers, cranes, water trucks, bore/drill rigs, and other heavy-duty construction equipment. Pile driving activities will include the use of an auger drill rig and is expected to occur eight hours per day over the five-day site preparation stage. Staging of construction equipment and materials will occur within the footprint of the project site and if needed through a temporary encroachment permit for staging along adjacent roadways.

Sustainable Design

The proposed project includes elements of environmentally sustainable design including an all-electric approach with no new natural gas infrastructure. Specific features include electric vehicle charging stations and incorporation of CalGreen Tier 1 standards.

Inclusionary Affordable Housing

Pursuant to the City's inclusionary housing policies in program 4.3 of the Housing Element and the requirements of Petaluma's IZO §3.040, a minimum of 15% of the units onsite are required to be provided at an affordable level including 7.5% at the low-income level, 7.5% at the moderate-income level, or alternative compliance. As proposed, the project is requesting Alternative Compliance to meet the City's inclusionary housing requirements. The proposed Alternative Compliance involves granting of a deed restriction on an offsite 6.5-acre property located at 890 North McDowell Boulevard and requiring at least 80 residential units affordable to low and very-low income households.

The City has received an application for the Meridian at Corona Station Affordable Housing project on the aforementioned offsite property. The Meridian at Corona Station project proposes 131 multi-family units affordable to households at 20% to 60% of Average Median Income (AMI) and includes 33 supportive housing units. The project also includes a small retail pad for a coffee shop and a range of tenant amenities, including onsite supportive housing services in a community building, playground, tot lot, half-court basketball court, dog run, and community garden. The project has been submitted to the City for processing under Assembly Bill 2162 (AB 2162), which provides for streamlined review and CEQA exemptions for projects that meet AB 2162 criteria. Under AB 2162, the proposed Meridian at Corona Station Affordable Housing project is expected to qualify for a CEQA exemption and does not require further environmental review. As such, the Meridian at Corona Station Affordable Housing project is not further discussed in this CEQA analysis.

Acceptance of the Hines project's Alternative Compliance proposal is contingent upon City Council's review approval. In the event that Alternative Compliance is not approved or otherwise cannot be implemented, then the project will be required to comply with the City's inclusionary housing policy through onsite units or an acceptable and implementable Alternative Compliance proposal.

2.3. PUBLIC OUTREACH

Pursuant to City of Petaluma Resolution No. 2018-107 N.C.S., one formal, required public outreach event was held to obtain feedback from the community. The event was a "virtual" event due to the shelter-in-place executive orders associated with COVID-19. The meeting was conducted via a live Zoom session where the

applicant presented the proposed project to interested parties. Members of the public were able to ask questions and make comments in real time and were able to submit comments and questions before and after the meeting. Plans and project materials were made available to the public to access and download. The live Zoom session took place on November 18, 2020, starting at 6:30 p.m. All property owners and occupants within 1,000 feet of the project site were notified of the virtual event via U.S. Mail with the notice sent out on November 2, 2020. The notice contained instructions that detailed how an interested member of the public could access the event. The virtual event was also recorded for subsequent viewing. Participants expressed concerns about increased traffic, location of retail, sea level rise, and access due to potential conflicts with the Copeland Transit Mall, pedestrians, and bicyclists.

The project was reviewed by the Transit Advisory Committee on August 6, 2020 and September 3, 2020. Input was provided by the Committee regarding the amount of vehicle parking, pedestrian safety near the garage entrances on Copeland Street, and bus maneuvering in the reconfigured transit mall layout. The project was also reviewed by the Pedestrian and Bicycle Advisory Committee on September 2, 2020. Input was provided by the committee regarding the amount of vehicle parking; pedestrian safety near the garage entrances on Copeland Street; maneuvering from East D Street to Copeland Street for bicycles/vehicles; restricting Copeland Street to transit, bicycles, and project resident access only; the bikeshare pod location; the Transverse Street crossing across Copeland Street; and, rideshare pick-up and drop-off locations.

2.4. ENTITLEMENTS & APPROVALS

As required by the City of Petaluma, the project requires review and approval of Site Plan and Architectural Review (SPAR) in order to authorize this proposal. As described above, the project proposes deviations from specific requirements of the SmartCode including deviations from ground-floor development standards and required frontage types, building wall location and dimension requirements, sidewalk widths along East Washington and East D streets and development standards for the Transverse Street. As such, the project is subject to the provisions of Section 8.10.020(H) of the SmartCode, which states that approval of a Warrant is required when a project proposes to deviate from the specific provisions of the code. Warrants are permitted if the proposed deviations are justified by the intent of the code.

The following approvals are expected to be required from outside agencies and regulatory agencies:

1. Sonoma Water - Approval of the Hydrology Study, Stormwater Detention/Bioretenion feature
2. U.S. Army Corps of Engineers - 404 Fill Permit
3. Regional Water Quality Control Board - Section 401 Water Quality Certification, Individual NPDES Permit
4. California Department of Fish and Wildlife - 1602 Lake and Streambed Alteration Agreement

FIGURE 1

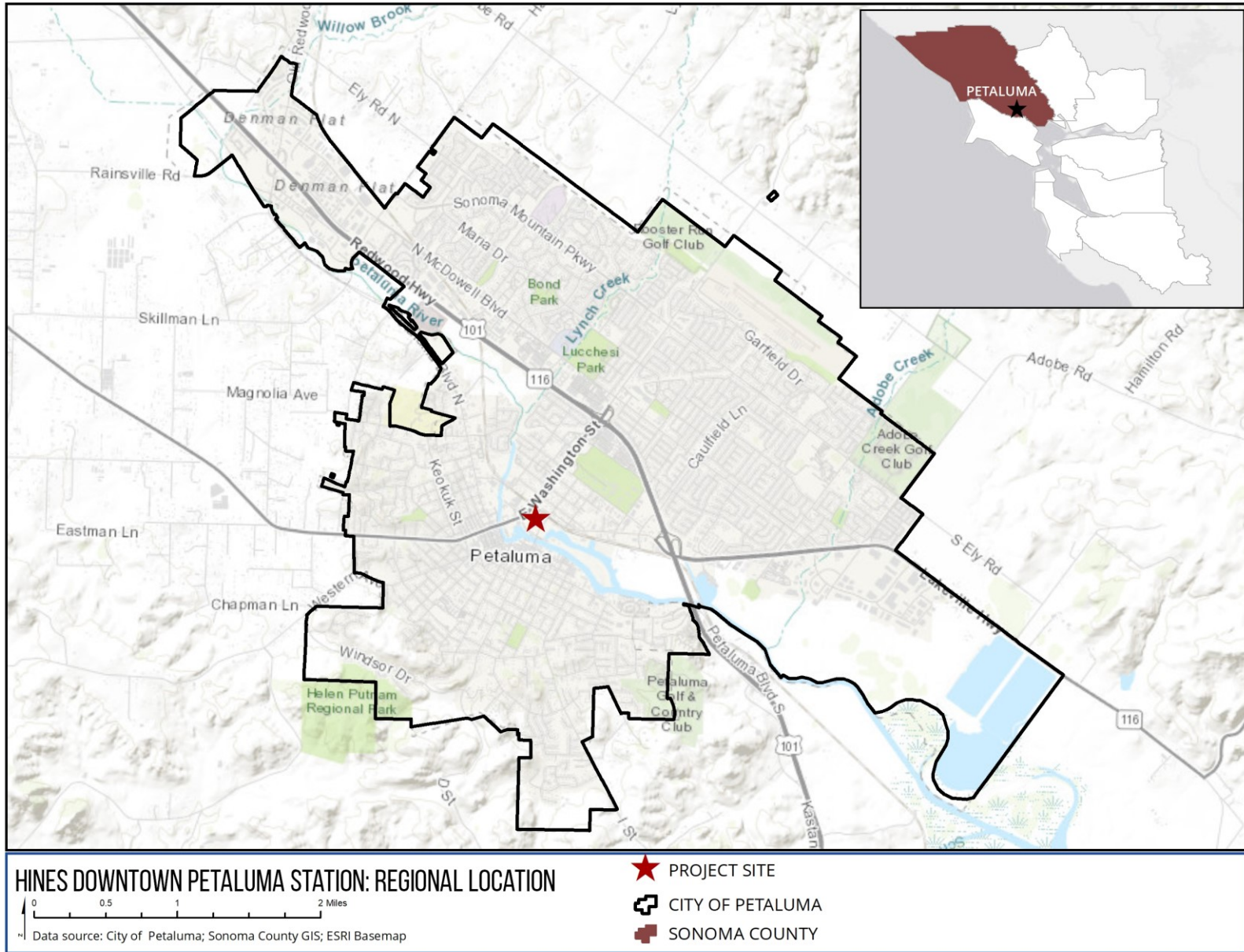


FIGURE 2



FIGURE 3

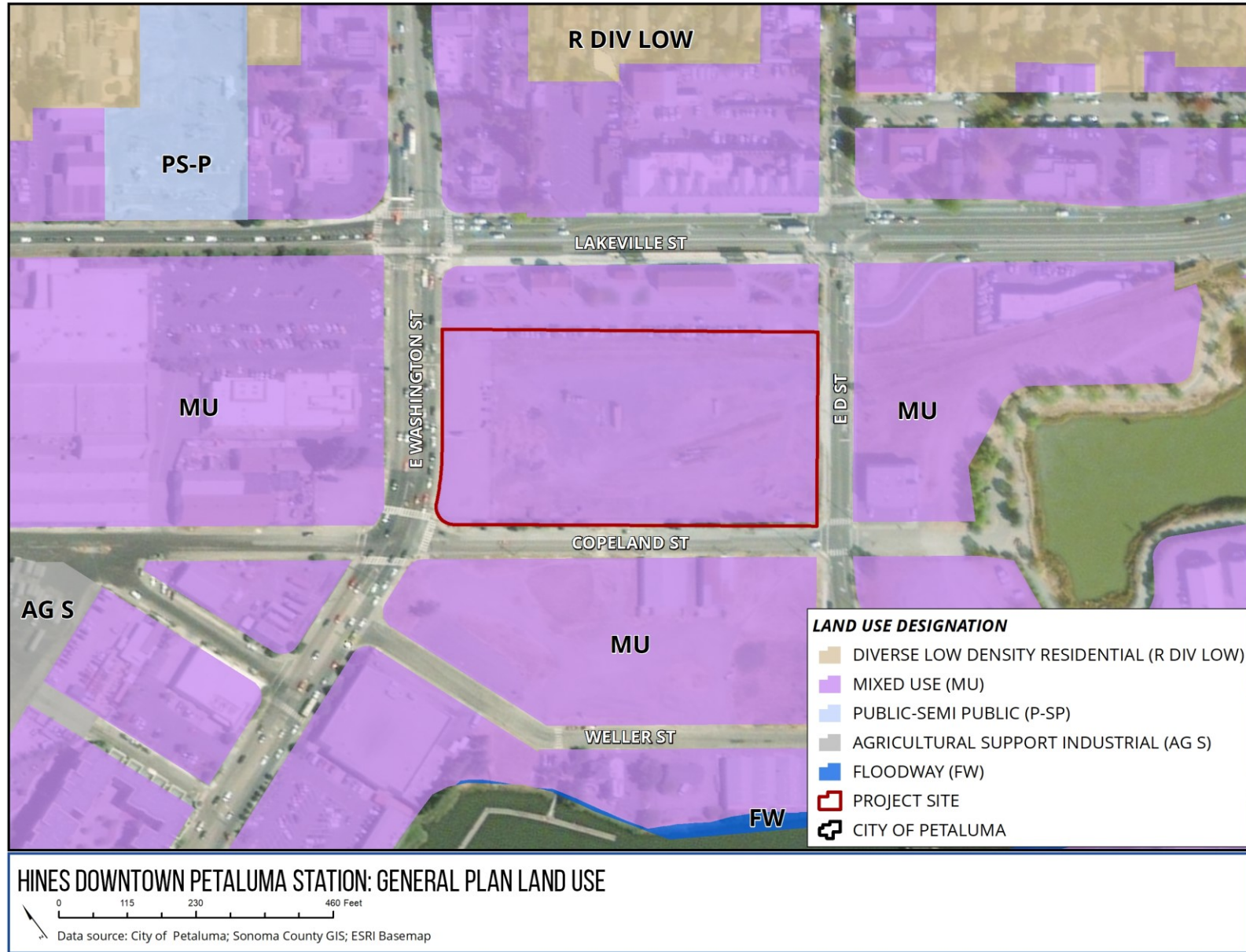
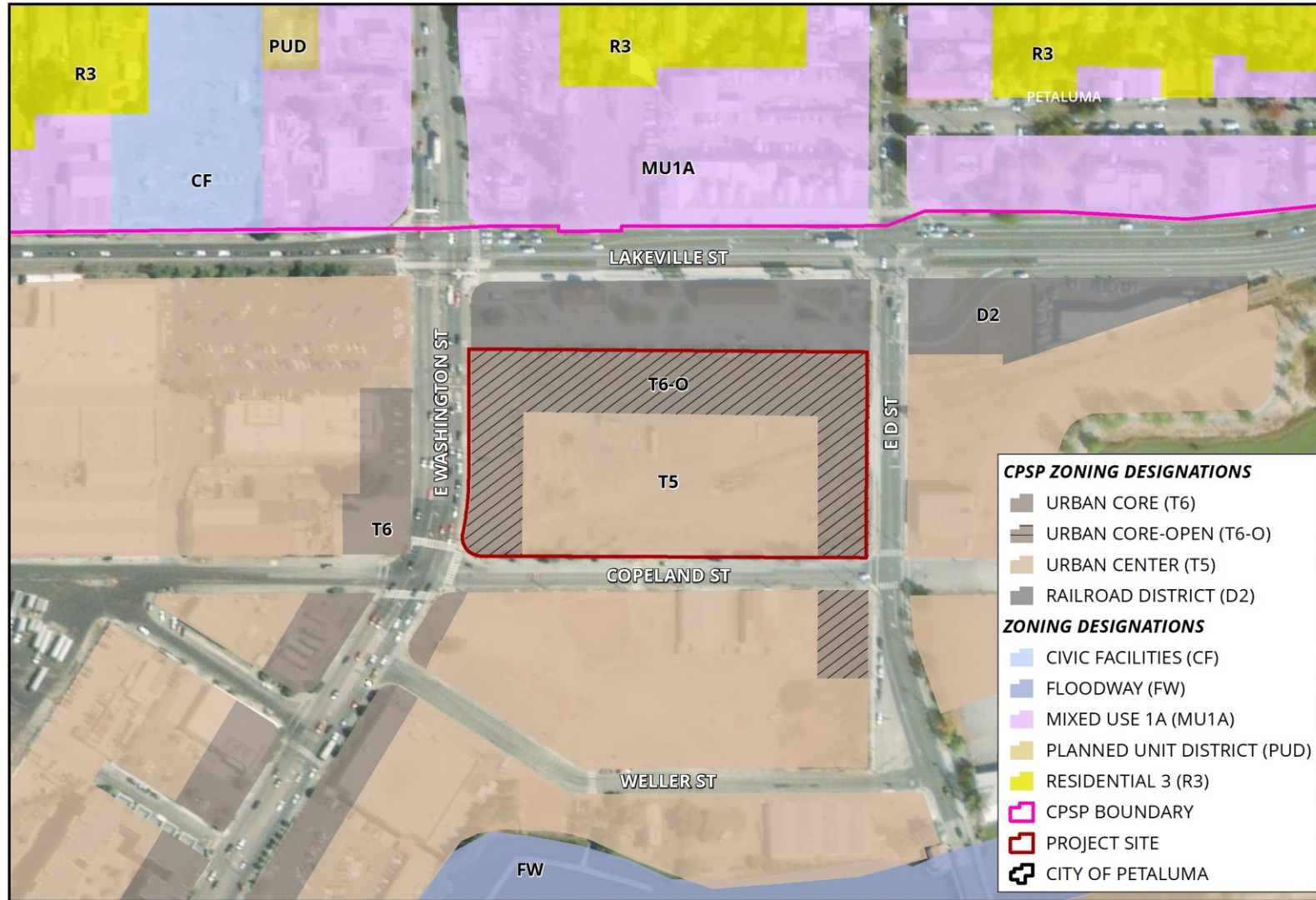


FIGURE 4



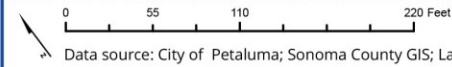
HINES DOWNTOWN PETALUMA STATION: ZONING DESIGNATIONS

0 115 230 460 Feet
 Data source: City of Petaluma; Sonoma County GIS; ESRI Basemap

FIGURE 5



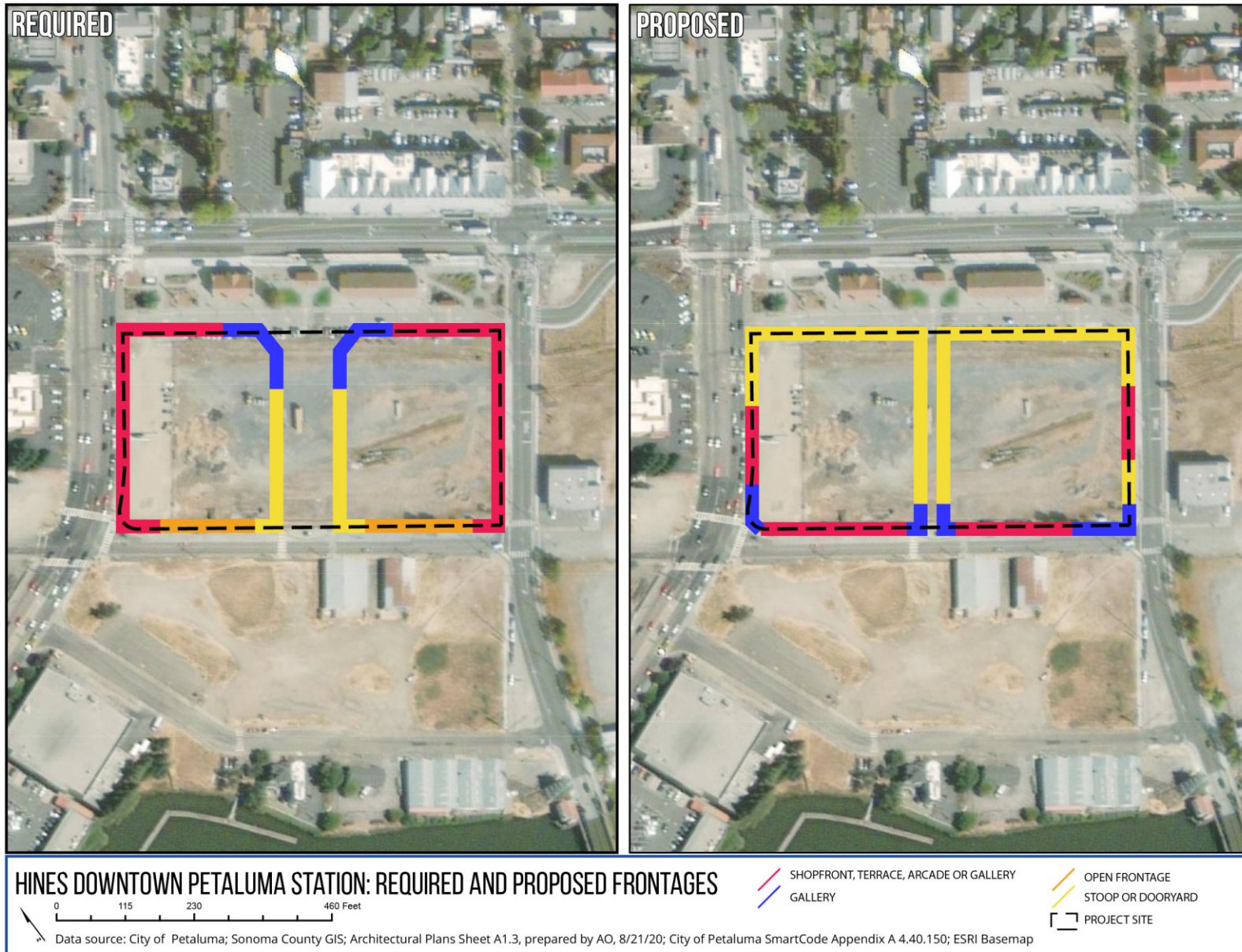
HINES DOWNTOWN PETALUMA STATION: SITE PLAN



Data source: City of Petaluma; Sonoma County GIS; Landscape Plans Sheet L2.0, prepared by Lemon Brooke, 8/21/20; Architectural Plans Sheet A1.11, prepared by AO, 8/21/20; ESRI Basemap

- LEASING AND AMENITY AREAS
- RETAIL AREAS
- FOOD TRUCK/RETAIL DINING AREA
- GARAGE ENTRANCES
- PLAZA/SPLASH PAD FOUNTAIN
- PROPERTY BOUNDARY

FIGURE 6



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 Unless Mitigation is Incorporated" as indicated by the checklist on the following pages.

1. Aesthetics	<input checked="" type="checkbox"/>	8. GHG Emissions	<input type="checkbox"/>	15. Public Services	<input type="checkbox"/>
2. Agriculture / Forestry	<input type="checkbox"/>	9. Hazards	<input checked="" type="checkbox"/>	16. Recreation	<input type="checkbox"/>
3. Air Quality	<input checked="" type="checkbox"/>	10. Hydrology	<input type="checkbox"/>	17. Transportation	<input checked="" type="checkbox"/>
4. Biological Resources	<input checked="" type="checkbox"/>	11. Land Use / Planning	<input checked="" type="checkbox"/>	18. Tribal Cultural Resources	<input checked="" type="checkbox"/>
5. Cultural Resources	<input checked="" type="checkbox"/>	12. Mineral Resources	<input type="checkbox"/>	19. Utilities / Service Systems	<input type="checkbox"/>
6. Energy	<input type="checkbox"/>	13. Noise	<input checked="" type="checkbox"/>	20. Wildfire	<input type="checkbox"/>
7. Geology / Soils	<input checked="" type="checkbox"/>	14. Population / Housing	<input type="checkbox"/>	21. Mandatory Findings	<input checked="" type="checkbox"/>

3.1. DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	X
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION , including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	



Olivia Ervin, Principal Environmental Planner

December 8, 2020

Date

4. EVALUATION OF ENVIRONMENTAL IMPACTS

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

The following discussion addresses the potential level of impact relating to each aspect of the environment.

4.1. AESTHETICS

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

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma Implementing Zoning Ordinance (IZO); City of Petaluma Central Petaluma Specific Plan and EIR; City of Petaluma SMART Rail Station Areas: TOD Master Plan and Appendix A: SmartCode Amendments; California Scenic Highway Mapping System, Scenic Highway System Lists; Lighting Plan, Lighting Design Alliance, August 21, 2020; Architectural Plans, prepared by AO Architects, August 21, 2020.

Aesthetics Setting: The natural features that characterize Petaluma and its surroundings provide for a visually rich setting. The City of Petaluma is located in the Petaluma River Valley, which is northwest-southeast trending between Sonoma Mountain and Mount Burdell. The City is flanked by the foothills and peaks associated with these mountain ranges which provide views of rolling hills and agricultural landscapes. Petaluma is traversed by the Petaluma River and tributaries that contribute to the aesthetic quality of the City. A long-established urban form within City limits contrasts with the surrounding natural and agricultural features.

The project site is located within the Central Petaluma Specific Plan subarea of the General Plan, which is characterized by the Petaluma River, Turning Basin, and an active rail corridor. Older warehouses and light industrial uses mixed with new office and residential developments are located west of the river in an area historically referred to as the warehouse district. The Haystack development site is located west of the project site, and though not yet constructed, is entitled to develop 178 residential dwelling units and approximately 24,855 square feet of retail/commercial use in three and four-story buildings, public and private open space, a new street bisecting the site, frontage improvements, parking, landscaping and ancillary improvements. Other surrounding uses include low intensity retail and commercial to the north, Downtown Petaluma SMART station and Petaluma Visitors Center to the east, and industrial and vacant land to the south. Aesthetic and visual resources present in the project area include limited views of the Petaluma River corridor, intermittent views of the Sonoma Mountains to the east, and views of the West Marin hills to the west.

The CPSP EIR describes the visual setting of the Plan area relative to the built environment, streetscape conditions, view corridors, and visual landmarks including buildings and natural features. Within the Turning Basin subarea, the CPSP EIR identifies several built environment features which contribute to the visual degradation of the area including the Golden Eagle Shopping Center, vacant lots between Weller and Lakeville Street, deteriorated buildings, degraded streets, abandoned railroad ties, storage tanks, trash, and debris. Due to the width of pavement area, lack of landscaping, and presence of strip commercial uses with large parking areas, East Washington Street is identified as having a diminished visual character within the Turning Basin subarea. D Street is also noted as lacking pedestrian and bicycle amenities.

The project site currently contributes to the diminished visual character of the area as it is an undeveloped lot containing remnant railroad materials, and debris piles from construction staging associated with development of the adjacent SMART station. A portion of the site along East Washington Street is currently used for parking associated with the station. This area of the site is an unpaved gravel surface with the remainder of the site containing gravel surfaces and ruderal vegetation. Chain link fencing and access gates enclose the site on all sides. Other than the existing street trees (eight Purple Leaf Sand Cherry and four Callery Pear) located along the western property line (fronting Copeland Street), the project site is void of trees. All existing street trees will be removed and replaced under the proposed project. Although species are non-protected trees under the City of Petaluma Implementing Zoning Ordinance, trees within the public right-of-way are considered protected.

Aesthetics Impact Analysis:

4.1 (a) (Scenic Resource or Vista) Less Than Significant Impact: General Plan EIR Figure 3.11-1 identifies hills to the west and south of the City, vistas of Sonoma Mountain, and land along the Petaluma River as local scenic resources. The General Plan 2025 EIR utilizes the following three public viewpoints to determine potential adverse effects upon the aforementioned vistas: (a) Washington Street overpass; (b) McNear Peninsula; and (c) Rocky Memorial Dog Park. In addition to the General Plan EIR, the CPSP EIR identifies the Petaluma River as a visual centerpiece of the Specific Plan area, noting the Turning Basin as a distinctive character of the river corridor. Significant views and landmarks within the subarea include short-range views of the Petaluma River and Turning Basin from Water Street, views of the Sonoma Mountains between Weller and Lakeville streets, views of the West Marin hills from Weller and Copeland streets, and views of Burdell Mountain from the Petaluma River along D Street and Western Avenue.

The project site is located approximately one mile west of the Washington Street overpass, 500 feet north of the McNear Peninsula, and on the east side of the Turning Basin, outside of the Petaluma River Access and Enhancement Plan area. As described above, the CPSP EIR identifies several features contributing to the visual degradation east of the Turning Basin, including features present on and adjacent to the project site such as abandoned railroad ties, debris, lack of landscaping along East Washington Street, and lack of pedestrian and bicycle amenities along East Washington and East D streets. Resources visible from the project site include intermittent views of the Sonoma Mountains to the east and the West Marin hills to the west.

The project will introduce two new five story mixed-use buildings on a site that is currently vacant. As identified in the CPSP EIR, the introduction of structures envisioned by the Plan that are larger in height, mass, and scale as compared to existing development have the potential to result in significant impacts to visual resources in the area. The project is consistent with the Community Design Chapter of the CPSP including goals which seek to strengthen linkages to the river, enhance the livability of Central Petaluma, and establish a pedestrian scale within the public realm. Except for minor deviations from frontage improvement requirements, the project is also generally consistent with the SmartCode, which is intended to ensure that all new development is harmonious with surrounding development and with the character of the City, and further, the project is subject to the Site Plan and Architectural Review (SPAR) process in accordance with the City's Zoning Code (Chapter 24.010). The SPAR process provides a systematic approach to ensuring that new development meets design standards, utilizes high quality architectural materials, and contributes to the City's visual character.

The project will develop an underutilized site adjacent to the existing active SMART station. Pedestrian, bicycle, and landscaping improvements along East Washington Street and East D Street will improve the visual quality of these major thoroughfares. Additionally, in conjunction with the Haystack development, the new Transverse Street bisecting the site will provide a visual connection between the SMART station and the Turning Basin, which is identified as a character defining feature of the area. Though the project will introduce two new five-story buildings that will obscure visibility of the Sonoma Mountains and West Marin hills, the overall project design is consistent with required SPAR findings including that the project utilizes high quality materials, is compatible with the character of the neighborhood in that it provides a high-density mixed-use project adjacent to transit as envisioned by the CPSP and SAMP, and provides landscaping and frontage improvements consistent with City standards. As such, the project will result in less than significant impacts to scenic resources.

4.1 (b) (Scenic Resources from a Designated State Highway) No Impact: According to the California Scenic Highway Program, US 101 and State Route 116 (Lakeville Highway) are not designated scenic highways within

the City of Petaluma, nor are they considered eligible to be officially designated. The project will not be readily visible from Highway 101 due to existing urban development, landscaping, and trees between the project site and the Highway. Development of the proposed project will not damage scenic resources including, but not limited to trees, rock outcroppings, and historic buildings viewable from a designated (or eligible) State scenic highway. Therefore, no impacts to scenic resources viewable from a designated state highway will result from development of the proposed project.

4.1 (c) (Degrade Visual Character or Conflict with Scenic Quality) Less Than Significant Impact: The site is surrounded by low-intensity development including one-story commercial, retail, and industrial uses as well as vacant land. As previously discussed, high-density mixed-use development of the area is envisioned by both the CPSP and SAMP. The proposed project is cohesive in layout and design with the entitled Haystack development located west of the project site in that the project is similar in height and mass, provides continuity along the east-west Transverse Street, consistent landscaping along project frontages, and continuous bicycle and pedestrian facilities along East Washington Street and East D Street. The project will enhance the overall visual character of the area, consistent with the CPSP and SAMP. Therefore, environmental impacts due to a degraded visual character would be less than significant.

4.1 (d) (Light and Glare) Less Than Significant Impact with Mitigation: The project will introduce City standard street lighting along East Washington Street, East D Street, Copeland Street, and along the eastern property line. Pedestrian-scale pole lights will be provided along the length of east-west Transverse Street. Additionally, the project proposes to install floodlights and halo lights at the plaza/splash pad fountain area, and a catenary ring pendant, mounted on poles at the food truck/retail dining area near the intersection of Transverse Street/Copeland Street. Lighted bollards are proposed adjacent to residential units with frontage on the Transverse Street as well as within interior courtyards. Other lighting proposed within interior courtyards includes string lights above the outdoor kitchen/dining area, halo lighting at the fireplace lounge area and around tree wells, recessed canopy lighting, and pool deck floodlights. Additionally, various styles of decorative wall mounted lights will be installed along all elevations of both structures. A photometric plan was prepared for the project and depicts proposed illumination levels from new lighting introduced by the project. As currently proposed, the project exceeds the standards of IZO Section 21.040(D), which provides that indirect and direct glare shall be below 3-foot candles. **Mitigation Measure AES-1** requires that upon building permit submittal, the lighting plan be revised, and a new photometric plan be submitted which demonstrates compliance with the Implementing Zoning Ordinance. Additionally, as a standard condition of approval, the project will be required to comply with Section 21.040(D) of the IZO. With implementation of AES-1 and standard conditions of approval, the project’s potential light and glare impacts would be reduced to less than significant levels.

Aesthetics Mitigation Measures:

AES-1: Upon submittal of a building permit the applicant shall revise the proposed lighting plan to reduce indirect and direct glare from new lighting to be below 3-foot candles. A revised photometric plan shall be submitted which demonstrates compliance with Section 21.040(D) of the Implementing Zoning Ordinance.

4.2. AGRICULTURAL AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sources: City of Petaluma 2025 General Plan and EIR; California Department of Conservation, Farmland Mapping and Monitoring Program, Sonoma County, 2016; Sonoma County Draft Vital Lands Initiative, December 2019; and Permit Sonoma’s Williamson Act Properties 2017.

Agricultural and Forestry Setting: The California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP) classifies agricultural land according to soil quality and irrigation status. According to data acquired from the Department of Conservation, FMMP, land classifications within the City consist of Prime Farmland, Grazing Land, Farmland of Local Importance, Unique Farmland, Other Land, and Urban and Built-up Land. One objective of the establishment of the UGB was the preservation of natural resources, including agricultural lands, and other open spaces outside of the UGB boundary and concentration of urban development within the UGB. The Sonoma County Draft Vital Lands Initiative maps the county’s natural resources, including conifer forests, priority shrublands and hardwood forest. The County’s Draft Vital Lands Initiative does not identify forestlands within the City of Petaluma.

The project site is located on land designated as Urban and Built-up and is surrounded by land also designated as Urban and Built-up. Portions of the Petaluma River, south of the site are designated as Other Land, which includes riparian areas not suitable for livestock grazing. The nearest land designated by the FMMP as agricultural is located approximately three-quarters of a mile northeast of the project site and is designated as Farmland of Local Importance. The project site is not designated as forestland, nor is the project site under a Williamson Act Contract.

Agricultural and Forestry Impact Analysis:

4.2 (a-e) (Farmland Conversion, Williamson Act, Forestland/Timberland Conflict) No Impact: The project site does not include any agricultural or forested lands as identified by the California Department of Conservation, Farmland Mapping and Monitoring Program, and Sonoma County’s Draft Vital Lands Initiative. The project, as proposed, consists of high-density mixed-use development on a vacant site adjacent to an existing transit station. The project site and surrounding area are designated by the California Department of Conservation, FMMP as Urban and Built-up. Furthermore, the project site has a General Plan Land Use designation of Mixed-Use and is surrounded by lands designated for mixed-use development. The nearest land designated by the FMMP as agricultural land is located approximately 0.75 miles to the northeast. The project will not convert land designated by the FMMP as farmland, nor will the project conflict with existing zoning for agricultural use by converting a parcel under a Williamson Act contract to a non-agricultural use. As such, the project will have no impact nor conflict with current agricultural zoning or lead to the loss of farmland.

In the absence of forested lands there is no potential for the project to conflict with existing forested land or result in the loss or conversion of forested land to another use. The project proposes a high-density mixed-use development within central Petaluma and as such will not provide an impetus for the conversion of farmland or forest land to any alternative use. Therefore, the project will have no impact to agricultural and forestry resources.

Agricultural and Forestry Mitigation Measures: None required.

4.3. AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Exposure of sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma 2025 General Plan and EIR; BAAQMD 2017 Bay Area Clean Air Plan; and BAAQMD CEQA Guidelines May 2017; Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020; and Hines Petaluma Station Project – Response to Air Quality Analysis Comment, prepared by Baseline Environmental Consulting, November 20, 2020.

Air Quality Setting: The City of Petaluma is located within the San Francisco Bay Area air basin regulated by the Bay Area Air Quality Management District (BAAQMD). Air quality within the Bay Area Air Basin is influenced by natural geographical and meteorological conditions as well as human activities such as construction and development, operation of vehicles, industry and manufacturing, and other anthropogenic emission sources. The Federal Clean Air Act and the California Clean Air Act (CCAA) establish national and state ambient air quality standards. The California Air Resources Board (CARB) oversees the implementation of the CCAA by regulating emissions from motor vehicles and consumer products. The BAAQMD is responsible for planning, implementing, and enforcing air quality standards within the Bay Area Air Basin, including the City of Petaluma.

The Bay Area Air Basin is designated as non-attainment for both the one-hour and eight-hour state ozone standards; 0.09 parts per million (ppm) and 0.070 ppm, respectively. The Bay Area Air Basin is also in non-attainment for the PM₁₀ and PM_{2.5} state standards, which require an annual arithmetic mean (AAM) of less than 20 µg/m³ for PM₁₀ and less than 12 µg/m³ for fine particulate matter (PM_{2.5}). In addition, the Basin is designated as non-attainment for the national 24-hour PM_{2.5} standard although the EPA recognized the Air District as achieving the attainment in 2013.¹ The nearest BAAQMD air monitoring station to the project site is located in Sebastopol which reports an annual level of PM_{2.5} at 5.6 µg/m³, below the required AAM. All other national ambient air quality standards (NAAQS) within the Bay Area Air Basin are in attainment.

The BAAQMD is given authority by the California Air Resources Board (CARB) to regulate toxic air contaminants (TAC) as an air pollutant causing carcinogenic and other health effects. The Air District regulates

¹ In January 2013, the US EPA issued a final determination recognizing the BAAQMD achieved the 24-hour PM_{2.5} national standard which effectively suspended the requirements for the region to submit EPA national ambient air quality documentation. So as long as the District meets the 2006 24-hour PM_{2.5} NAAQS, the District is not required to submit an attainment demonstration, reasonably available control measures, a reasonable further progress (RFP) plan, and contingency plans for failure to meet RFP and attainment deadlines. The ruling is effective February 8, 2013 and continues through the latest available fine particulate matter measurements. The BAAQMD will continue to be designated as “non-attainment” for the national 24-hour PM_{2.5} standard until the Air District submits a “resignation request” and “maintenance plan” to EPA, and EPA approves the District’s resignation proposal.

TACs emitted from diesel-fueled engines, called diesel particulate matter, which is responsible for 70 percent of TAC emissions in the Air District.

Air quality emissions of carbon monoxide (CO), ozone precursors (ROG and NOx) and particulate matter (PM10 and PM2.5) from construction and operation are evaluated pursuant to the BAAQMD CEQA Air Quality Guidelines established in May 2010² and updated in May 2017. With release of the 2017 Bay Area Clean Air Plan (CAP) and the associated EIR, it was expected that updated thresholds and guidelines would also be released, but none have been made available to date (November 2020). In the absence of updated guidelines and thresholds, based upon its own judgment and analysis, the City of Petaluma recognizes that the BAAQMD thresholds represent the best available scientific data and has elected to rely on BAAQMD Guidelines dated May 2017 in determining screening levels and significance.³ BAAQMD air quality thresholds are presented in Table 1 below.

TABLE 1: AIR QUALITY THRESHOLDS OF SIGNIFICANCE			
Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Maximum Annual Emissions (tons/year)
Criteria Air Pollutants			
ROG	54	54	10
NOx	54	54	10
PM10	82	82	15
PM2.5	54	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other BMP	Not Applicable	
Single-Source Health Risks and Hazards for New Sources or New Receptors			
Excess Cancer Risk	> 10.0 per one million		
Chronic or Acute Hazard Index	> 1.0		
Incremental annual average PM _{2.5}	> 0.3 µg/m ³		
Cumulative Health Risks and Hazards for Sensitive Receptors			
Excess Cancer Risk	> 100.0 per one million		
Chronic Hazard Index	> 10.0		
Annual Average PM _{2.5}	> 0.8 µg/m ³		

Source: Table 2-1, Page 2-2, BAAQMD's May 2017 CEQA Air Quality Guidelines.

Note: BMP = Best Management Practices, ROG = reactive organic gases, NOx = nitrogen oxides, PM10 = coarse particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM2.5 = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less; and CO = carbon monoxide.

The City's General Plan sets forth policies and programs to maintain and enhance air quality. Several policies are particularly applicable to the proposed project, including policy 4-P-6 which seeks to improve air quality

² Adopted by Board of Directors of the BAAQMD in June 2010 (Resolution No. 2010-6).

³ In March 2012, the Alameda County Superior Court ordered BAAQMD to set aside use of the significance thresholds within the BAAQMD 2010 CEQA Guidelines and cease dissemination until they complete an assessment of the environmental effects of the thresholds. In August 2013, the First District Court of Appeal reversed the Alameda County Superior Court's decision. The Court held that adoption of the thresholds was not a "project" subject to CEQA because environmental changes that might result from their adoption were too speculative to be considered "reasonably foreseeable" under CEQA. In December 2015, the California Supreme Court reversed the Court of Appeal's decision and remanded the matter back to the appellate court to reconsider the case in light of the Supreme Court's opinion. The BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The May 2017 Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Thresholds Justification Report. The BAAQMD is currently working to update any outdated information in the Guidelines.

through the planting of trees along streets and within park and urban separators, policy 4-P-7 which seeks to reduce motor vehicle related air pollution through implementation of land use and transportation strategies that promote alternative modes of transportation, policy 4-P-9 which requires projects with large garages to provide electric vehicle charging facilities, and policy 4-P-11 which promotes ride-sharing and car-sharing programs.

The City's Central Petaluma Specific Plan also sets forth goals, objectives, and policies intended to directly and indirectly maintain and enhance air quality. Goals, objectives, and policies particularly relevant to the proposed project include Community Design Goal 7, which seeks to emphasize creativity and sustainability in design, Circulation Goal 3, which seeks to reinforce the role of Central Petaluma as a center for transit and non-vehicular modes of travel, and Circulation Objective 5 which seeks to develop transportation demand management programs that discourage single-occupancy vehicle trips and encourage use of alternative modes.

Baseline Environmental Consulting prepared an Air Quality and Greenhouse Gas Assessment for the proposed project (**Appendix A**). The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions from construction and operation assuming full build-out of the project. Results of the Assessment have been incorporated into the impact discussion below. Greenhouse gases are discussed in Section 4.8.

Air Quality Impact Analysis:

4.3 (a) (Conflict with Air Quality Plan) Less Than Significant Impact: The BAAQMD adopted the 2017 Bay Area Clean Air Plan on April 19, 2017 to comply with state air quality planning requirements set forth in the California Health & Safety Code. The 2017 CAP includes a wide range of control measures designed to decrease emissions of air pollutants most harmful to Bay Area residents including particulate matter (PM), ozone (O3), and TACs. The CAP further aims to reduce emissions of methane and other "super-greenhouse gases" that are potent climate pollutants in the near-term and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The proposed control strategy for the 2017 CAP consists of 85 distinct measures targeting a variety of local, regional, and global pollutants. The CAP includes control measures for stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants. Implementation of some of the control measures could involve retrofitting, replacing, or installing new air pollution control equipment, changes in product formulations, or construction of infrastructure that have the potential to create air quality impacts.

The BAAQMD CEQA Guidelines set forth criteria for determining consistency with the CAP. In general, a project is considered consistent if: a) the project supports the primary goals of the CAP, b) includes control measures and c) does not interfere with implementation of measures outlined in the CAP. The proposed project would have a less than significant impact due to a conflict with the CAP since, a) the project limits urban sprawl by proposing development on an infill site within existing urban limits in close proximity to goods, services, and existing transit including the Copeland Street Transit Mall which provides local and regional transit services as well as the SMART station which provides regional transit services between Sonoma and Marin counties; b) includes control measures to protect air quality during construction by implementing best management practices set forth by BAAQMD; and c) the proposed mixed-use project proposes an all-electric design that would reduce operational air quality emissions to levels well below the BAAQMD criteria pollutant thresholds (4.3(b)). Therefore, the project will not conflict with the regional air quality plan and impacts will be less than significant.

4.3 (b) (Violate Air Quality Emission Standard) Less Than Significant Impact with Mitigation: Air quality emissions associated with the proposed project would result from short-term construction activities and ongoing operation. BAAQMD "screening criteria" provide a conservative estimate above which a project would be considered to have a potentially significant impact to air quality and a quantitative analysis must be prepared. An air quality and GHG assessment was prepared by Baseline Environmental Consulting for the entirety of the project and provides a quantitative analysis of the project's emissions during construction and at operation (**Appendix A**). A summary of the air quality analysis for construction and operation of the proposed project is included below. Greenhouse gas emissions are further described in Section 4.8.

Construction

Construction activities include grubbing, removal of vegetation and grasses, as well as grading, construction of the two new mixed-use buildings, transverse street, frontage improvements including installation of sidewalks, bike lanes, public utilities, upgrades to the existing transit mall, and off-site improvements including upsizing of the storm drain outfall from Weller Street to the Petaluma River. During construction activities, the project would generate temporary air pollutant emissions associated with site preparation, ground disturbance, operation of heavy-duty construction equipment, workers traveling to and from the site, and delivery of materials. These activities would create temporary emissions of fugitive dust from site grading, and the release of toxic air contaminants, particulate matter, and ozone precursors (ROG and NOx) from combustion of fuel and the operation of heavy-duty construction equipment.

The California Emissions Estimator Model Version 2016.3.2 was used to estimate emissions during project construction. CalEEMod defaults based on land use size and type as well as applicant-provided information were used to estimate construction related emissions. Non-default inputs included a construction period of approximately 33 months and additional construction equipment including a drill rig, an additional excavator and a crane which were used to account for the proposed upsizing of the drainage outfall located offsite. Proposed cut and fill amounts included in the preliminary grading plan were also included in the analysis. Construction activities for the proposed project would include site preparation, grading, building construction, paving, and architectural coatings. The primary pollutants of concern during construction include ROG, NOx, PM₁₀, and PM_{2.5}, which are generated as a result of off-road construction equipment, on-road vehicles related to worker trips, vendor trucks, and haul trucks, and application of architectural coatings and paving.

As shown in Table 2 below, average daily construction emissions (total construction emissions/construction workdays) of ROG, NOx, PM₁₀, and PM_{2.5} are well below the BAAQMD thresholds. Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5} that could contribute to cumulatively considerable net increases in criteria air pollutants for which the region is in non-attainment. The BAAQMD CEQA Air Quality Guidelines consider contributions of fugitive dust to be less-than-significant if best management practices (BMPs) are implemented. **Mitigation Measure AQ-1**, set forth below, provides for a variety of dust control measures during construction activities including watering the project site, covering haul loads, limiting idling time, and temporarily halting construction when winds are greater than 15 miles per hour. With implementation of Measure AQ-1, the project will have a less than significant impact to air quality as a result of construction activities.

Table 2: Construction Period Emissions				
	ROG	NOx	PM₁₀ Exhaust	PM_{2.5} Exhaust
Average Daily Emissions (lbs/day)	5.6	9.7	0.36	0.34
BAAQMD Thresholds (lbs/day)	54	54	82	54
Exceeds Threshold?	NO	NO	NO	NO

Source: BAAQMD’s May 2017 CEQA Air Quality Guidelines; Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020, Table 5.

Operation

Operation of the proposed project would result in emission of criteria pollutants. Operational emissions primarily result from mobile sources including vehicle trips to and from the site. Other emission sources include use of electricity, consumer products, and architectural coatings.

CalEEMod was used to estimate operational emissions of the project, assuming an operational year of 2023. Default data provided in CalEEMod as well as available project-specific information was used in the analysis. As shown in Table 3, the estimated levels of criteria pollutants including ROG, NOx, PM₁₀, and PM_{2.5} that will be generated at project operation as a result of heating and cooling, water and wastewater treatment and conveyance, as well as emissions from vehicle trips generated by residents fall well below BAAQMD thresholds for annual operational and average daily emissions. As such, the project will have a less than significant impact to air quality at operation.

Table 3: Operational Emission Estimates

Scenario	ROG	NOx	PM10	PM2.5
Annual Project Operational Emissions (tons/year)	1.71	2.89	1.79	0.55
BAAQMD Thresholds (tons/year)	10	10	15	10
Exceeds Threshold?	No	No	No	No
Average Daily Emissions (lbs per day)	9.33	15.83	9.82	3.02
BAAQMD Thresholds (lbs per day)	54	54	82	54
Exceeds Threshold?	No	No	No	No

Source: BAAQMD’s May 2017 CEQA Air Quality Guidelines; Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020.

4.3 (c) (Sensitive Receptors) Less Than Significant Impact: The BAAQMD defines sensitive receptors as “facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly and people with illnesses.” Examples of sensitive receptors include places where people live, play or convalesce and include schools, day care centers, hospitals, residential areas and recreation facilities.

The project site is near existing sensitive receptors including single family residences approximately 470 feet east of the site along East D Street near its intersection with Wilson Street and a daycare center located approximately 520 feet east of the site along Wilson Street. Though construction has not begun, the Haystack Mixed-Use Project located west of the project site will include new sensitive receptors. Existing and future sensitive receptors located in close proximity to the site may be exposed to health risks from construction exhaust emissions generated by the proposed project. Additionally, the project construction schedule will span 33 months with occupation of the South Building potentially occurring while the North Building remains under construction. As such, new occupants onsite may also be exposed to health risks from ongoing construction exhaust emissions.

During construction, onsite activities will result in the emission of exhaust from vehicles and heavy-duty equipment as well as the generation of fugitive dust from grading and ground disturbing activities. The Environmental Protection Agency’s (EPA) Industrial Source Complex Short Term (ISCT3) air dispersion model was used to estimate annual average concentrations of diesel particulate matter (DPM) and PM_{2.5} exhaust emissions within 1,000 feet of the project site. For purposes of the analysis DPM was used as a proxy for PM₁₀, representing a conservative analysis as more than 90 percent of DPM is less than 1 micron in diameter. The health risk assessment calculated the incremental increase in cancer risk and chronic hazard index (HI) to sensitive receptors. A detailed description of the air dispersion model and assumptions used in the analysis is included in the Air Quality and Greenhouse Gas Study prepared by Baseline Environmental Consulting (**Appendix A**).

Construction

The health risk assessment assumed that the maximally exposed individual resident (MEIR), Haystack MEIR, and maximally exposed individual student (MEIS) would be exposed to an annual average DMP concentration throughout the duration of construction. For on-site receptors, project phase 1 MEIR, the exposure duration was assumed to span seven months, corresponding to the proposed occupancy of the South Building in the 26th month of the 33-month construction period. At the three MEIR locations, the incremental increase in cancer risk was assessed for a young child starting from infancy in the third trimester. At the MEIS location, the risk was assessed for a pre-school aged child starting at six months. Both scenarios represent the most sensitive individuals that could be exposed to adverse air quality impacts during construction of the proposed project. Results of the analysis are presented in Table 4 below.

Table 4: Health Risks at the MEIR and MEIS Locations

Construction Scenario	Diesel Particulate Matter		Exhaust PM2.5
	Cancer Risk (per million)	Chronic Hazard Index	Annual Average Concentration (ug/m ³)
<i>Offsite</i>			
MEIR	1.8	<0.01	0.01

Haystack MEIR	4.9	<0.01	<0.01
MEIS	6.7	<0.01	0.01
<i>Onsite</i>			
Phase 1 MEIR	5.1	0.02	0.08
Thresholds of Significance	10	1	0.3
Exceeds Threshold?	No	No	No

MEIR = Maximally exposed individual resident; MEIS = Maximally exposed individual student; ug/m³ = micrograms/cubic meter

Source: BAAQMD's May 2017 CEQA Air Quality Guidelines; Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020, Table 9

The health risk assessment also analyzed potential cumulative health risks to sensitive receptors from existing and reasonably foreseeable sources of TACs. To represent the worst-case scenario, the analysis estimated cumulative health risk at the MEIS location. In addition to construction of the proposed project, the cumulative analysis also included concurrent construction of the Haystack Mixed-Use Project, existing and future stationary sources, and existing mobile source emissions. Existing and future stationary sources include operation of two gas stations, and a diesel generator associated with the Haystack Mixed-Use Project. Mobile sources include vehicles traveling on East Washington Street and operation of the Petaluma SMART station. Results of the analysis are included in Table 5 below.

Table 5: Cumulative Health Risks at MEIS Location

Source	Type	Cancer Risk	Chronic Hazard Index	PM2.5 (ug/m ³)
Project Construction	Diesel exhaust	6.7	0.00	0.01
Concurrent Haystack Construction ¹	Diesel exhaust	6.7	0.00	<0.01
Chevron Station	Gas station	1.27	<0.01	NA
Valero Station	Gas station	0.69	<0.01	NA
Haystack Project (future)	Diesel generator	0.5	<0.01	<0.01
East Washington Street	Mobile	16.8	NA	0.24
SMART Station	Railway	2.3	NA	<0.01
Cumulative Health Risks		35	<0.1	0.2
Thresholds of Significance		100	10.0	0.8
Exceeds Threshold?		No	No	No

1 - construction of the haystack project was assumed to have the same health risk impacts at the MEIS location as the proposed project

MEIS = Maximally exposed individual student; ug/m³ = micrograms/cubic meter

Source: BAAQMD's May 2017 CEQA Air Quality Guidelines; Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020, Table 10

As shown in Table 4 the estimated cancer risk and chronic HI for DPM and annual average PM2.5 concentrations from construction emissions at all three MEIR locations and the MEIS location are below the BAAQMD thresholds of significance for single-source health risks. Additionally, as shown in Table 5 emissions from project construction will not exceed BAAQMD thresholds of significance for cumulative health risk exposure of sensitive receptors to TAC and PM_{2.5} concentrations. The project will be required to implement Mitigation Measure AQ-1, which requires compliance with BAAQMD Basic Control Strategies including covering haul trucks, watering during active ground disturbance, limiting idling time, proper maintenance of equipment, and other standard measures that are routinely required of development projects to reduce emissions during construction. As such, project construction would not generate air quality emissions that would impact sensitive receptors and therefore impacts will be less than significant.

Operation

At operation, the proposed project will not generate air quality emissions that would affect nearby sensitive receptors. As a mixed-use project with residential and commercial uses, operational activities will be similar to

existing and approved uses in the immediate vicinity. Therefore, impacts to sensitive receptors during project operation will be less than significant.

Land Use Compatibility with Existing Ambient Air Quality

The project will introduce new sensitive receptors to the site, which could potentially expose future residents to existing and future sources of TAC emissions associated with stationary and mobile sources within 1,000 feet of the project site. However, the California Supreme Court has held that CEQA does not require analysis and mitigation of the impact of existing environmental conditions on a project's future users or residents. (See *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 392.) For informational and land use compatibility purposes, we identify potential nearby emission sources as follows: two nearby gas stations, two existing and one future diesel generator, vehicles traveling on East Washington Street, and operation of the adjacent SMART station. It should be noted that emissions associated with idling buses at the Copeland Street Transit Mall are captured in health risk modeling for major roadways.

Table 6 below shows that existing sources of mobile emissions along East Washington Street fall below the cumulative threshold for health risks. None of the other existing or future stationary and mobile source emitters within 1,000 feet of the project site would result in health risks due to an exceedance of established BAAQMD thresholds for cumulative emissions.

Source	Type	Cancer Risk	Chronic Hazard Index	PM2.5 (ug/m ³)
Off-road construction equipment (last 7 months of construction of N Bldg)	Diesel exhaust	5.1	0.02	0.08
Chevron Station	Gas station	1.04	<0.01	NA
Valero Station	Gas station	0.29	<0.01	NA
City of Petaluma	Diesel generator	0.07	<0.01	<0.01
Verizon Wireless	Diesel generator	0.16	<0.01	<0.01
Haystack Project (future)	Diesel generator	10	<0.01	<0.01
East Washington Street	Mobile	38.1	NA	0.55
SMART Station	Railway	2.3	NA	<0.01
Cumulative Health Risks		57	0.02	0.6
Cumulative Thresholds of Significance		100	10.0	0.8
Exceeds Cumulative Threshold?		No	No	No

ug/m3 = micrograms/cubic meter

Source: BAAQMD's May 2017 CEQA Air Quality Guidelines; Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020, Table 11

Although CEQA does not require analysis of the project's impact on the environment, the project would introduce new sensitive receptors and was considered for potential conflicts with General Plan policy 4-P-17, which states that plans for new residential and sensitive receptor sites shall include buffer zones to separate those uses from potential stationary sources of odors or toxic air contaminants. Within 1,000 feet of the project site, there are no potential sources of odor, agricultural uses and/or stationary sources of toxic air contaminant that pose potential health risks at the project site. Therefore, the project would not result in impacts to new sensitive receptors introduced by the Hines development.

4.3 (d) (Other Emissions or Odor) Less Than Significant Impact: There may occasionally be localized odors during site development associated with construction equipment, paving and the application of architectural coatings. Any odors generated during construction would be temporary and will not likely be noticeable beyond the immediate construction zone. As a residential development, operation of the project will not create objectionable odors affecting a substantial number of people. Therefore, the project will have less than significant impacts to air quality due to objectionable odors introduced by the project.

Air Quality Mitigation Measures:

AQ-1: Latest BAAQMD recommended Best Management Practices (BMPs) to control for fugitive dust and exhaust during all construction activities shall be incorporated into all demolition and construction plans to require implementation of the following:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper working condition prior to operation.
8. A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

4.4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (Formerly Fish and Game) or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (formerly Fish and Game) or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma Implementing Zoning Ordinance (IZO); Civil Engineering Plans, prepared by CSW/Stuber-Stroeh Engineering Group, Inc., August 21, 2020; and Biological Resources Assessment, prepared by WRA Environmental Consulting, November 2020.

Biological Resources Setting: Biological resources are protected by statute including the Federal Endangered Species Act (FESA), the California Endangered Species Act (CESA), and the Clean Water Act (CWA). The Migratory Bird Treaty Act (MBTA) affords protection to migratory bird species including birds of prey. These regulations provide the legal protection for plant and animal species of concern and their habitat. As reported in the 2025 General Plan EIR several plant and animal species with special status have been recorded or are suspected to occur within the Urban Growth Boundary of the City of Petaluma. The City also contains species identified in the California Natural Diversity Database (CNDDDB) due to rarity and threats and are considered sensitive resources.

The Regional Water Quality Control Board (RWQCB) is responsible for implementing Section 401 of the Clean Water Act through the issuance of a Water Quality Certification when development includes potential impacts to jurisdictional areas such as creeks, wetlands or other Waters of the State. The United States Army Corps of Engineers (Corps) regulates activities that dredge or fill material in Waters of the United States under Section 404 of the Clean Water Act.

The City of Petaluma’s Tree Preservation Ordinance provides protection, preservation, and maintenance guidelines for mature trees. The City of Petaluma considers the following trees to be protected:

- California native oaks (*Quercus* spp.) four inches in diameter or greater measured at 4.5 feet above grade (“diameter at breast height” or DBH)
- California buckeye (*Aesculus californica*) 6 inches DBH or greater
- California Bay (*Umbellularia californica*) 12 inches DBH or greater
- California or coast redwood (*Sequoia sempervirens*) 18 inches DBH or greater
- heritage trees as approved by Council resolution per Title 8 of the Petaluma Municipal Code
- significant groves or stands of trees
- trees located in riparian corridors
- any tree required to be planted or preserved as mitigation or condition of approval for a discretionary development project, and
- trees in the public right-of-way.

To accommodate the proposed development and associated frontage improvements a total of twelve trees located along the Copeland Street frontage will be removed. Of the twelve existing trees, eight are Purple Leaf Sand Cherry and four are Callery Pear, neither of which are protected species under the City of Petaluma Implementing Zoning Ordinance. However, the City’s Tree Preservation Ordinance includes the protection of tree in the public right-of-way. As such, trees along Copeland Street are considered protected and required replacement in accordance with the City’s Tree Preservation Ordinance.

Biological Resources Assessment

A project-specific Biological Resources Assessment (**Appendix B**) was prepared by WRA Environmental Consultants, November 2020. The Assessment included database searches, remote assessment, and a series of on-site surveys of the approximately 4.58-acre site as well as the offsite stormwater outfall area, located

between Weller Street and the Petaluma River Turning Basin. The Assessment includes information on the presence of sensitive land cover types, the potential for land cover types to support special-status plant and animal species, and the presence of other sensitive natural resources which are protected by local, state, or federal regulations.

As described in the Assessment, the overall topography of the site is flat with slopes of less than one percent, and elevations ranging from 12 to 16 feet above sea level. The dominant soil type onsite includes clear lake soils, which consist of deep clay soils formed in alluvium, located on river valley basin floors, and characterized by poor drainage and slow permeability. The project site has been subject to past disturbance and use and primarily contains compacted soil/gravel and non-native vegetation. The existing offsite stormwater outfall is located at the high tide line of the Petaluma River, above which is ruderal vegetation and below which is concrete riprap and Open Water of the Petaluma River. The Assessment identified three non-sensitive land cover types including barren/disturbed, ruderal, and developed, and two sensitive communities including open water and potential seasonal wetlands. Sensitive communities are further described below.

Sensitive Communities

Open Water

The open water sensitive community is located off site at the existing outfall area and consists of the Petaluma River. Vegetation within the top of bank and above the mean high-water line consists of non-native iceplant, sour clover, ripgut brome, and wild radish. California bulrush, which is a species typically found along riparian corridors, occurs sparsely below the mean high water line. The riverbank at the outfall location below the mean high water line consist of concrete riprap, remnant wooden piers, and lacks vegetation. No plant species typically found along riparian corridors are present along the river bank proximate to the existing outfall. Less than 0.01 acres of tidal shoreline, which is defined as the area below the mean high water line, is present at the location of the storm drain outfall. Tidal vegetation up and downstream of the outfall is dominated by hardstem bulrush and sparsely emergent vegetation is present at the existing outfall as a result of the concrete rip rap. This portion of the river corridor is considered non-vegetated waters of the U.S under the jurisdiction of the Army Corp of Engineers.

Seasonal Wetlands

Seasonal wetlands occupying approximately 0.02 acres of the overall project area were identified at the southwest portion of the site. Indications of seasonal wetlands include inundation after two weeks of a significant rainfall event and biotic crust and are known from a variety of topographic positions and soil types including areas where surface waters collect and water flow is reduced, or where subsurface waters approach the soil surface as the water table rises. Vegetation observed within the seasonal wetlands consisted of a prevalence of wetland classified plants including hyssop loosestrife (*Lythrum hyssopifolia*), prostrate knotweed (*Polygonum aviculare*), and annual blue grass (*Poa annua*), however a majority of the ground area was barren. Two weeks after a significant rainfall event, a soil pit was dug to approximately 16 inches below the surface of the seasonal wetlands. The subsurface exploration did not result in contact with the water table and soils were observed to be moist but not saturated. This is an indication that the wetlands identified onsite are a result of precipitation rather than subsurface water. As identified in the Biological Resources Assessment, the wetlands onsite are a result of human activity and were therefore mapped as non-jurisdictional wetlands. These areas do not meet the U.S. Army Corps of Engineers three-parameter criteria of a wetland, which includes the presence of wetland vegetation, hydric soils, and wetland hydrology. Furthermore, these features likely do not provide significant surface or subsurface flows to any traditional navigable waters. Seasonal wetlands fall under the jurisdiction of the Regional Water Quality Control Board (RWQCB) and are regulated under section 401 of the Clean Water Act or the Porter Cologne Act.

Special-Status Species

The Biological Resources Assessment identifies 95 special-status plant species and 72 special-status animal species that have been documented within a five-mile radius of the project area. The project site contains suitable habitat to potentially support three special-status plant species and eight special status animal species. These special-status species and their occurrence potential on the site are provided in the Biological Resources

Assessment and briefly discussed below. Special-status species that are identified in the Assessment as regionally occurring, but with no potential to occur onsite due to a lack of suitable habitat are not further discussed.

Special-Status Plant Species

All three of the special-status plant species listed below were identified as having moderate potential to occur onsite as they are known to occur in disturbed wetlands, non-native grasslands, and in highly disturbed areas. Two of the three species are classified by the California Native Plant Society (CNPS) as having a California Rare Plant Rank (CRPR) of 1B, which includes plants that are rare, threatened, or endangered in California and elsewhere. The third special-status plant species with moderate potential to occur onsite has a CRPR rank of 3, which includes plant species that require more information with regard to distribution, endangerment, ecology, and taxonomic validity in order to assign them to another rank.

- Pappose tarplant (*Centromadia parryi ssp. parryi*) - CNPS 1B
- White hayfield tarplant (*Hemizonia congesta ssp. congesta*) - CNPS 1B
- Woolly-headed lessingia (*Lessingia hololeuca*)- CNPS 3

Special-Status Animal Species

During onsite surveys, no special-status animal species were identified. Furthermore, no special-status animal species were identified as having a high potential to occur onsite. The following special-status animal species are identified in the Biological Resources Assessment as having a moderate potential to occur onsite, but their presence is unknown. Six of the eight species are listed as species of special concern by the California Department of Fish and Wildlife (CDFW), one species is designated as fully protected under the Fish and Game code, meaning a taking of that species cannot be authorized through a state permit. Lastly, two of the eight species with moderate potential to occur in the Petaluma River are listed as federally threatened including the steelhead and the green sturgeon. The Petaluma River is identified as critical habitat for these two fish species.

- Pallid Bat (*Antrozous pallidus*) - CDFW Species of Special Concern
- White-tailed kite (*Elanus leucurus*) - CDFW Fully Protected
- Steelhead (*Oncorhynchus mykiss irideus*) - Federally Threatened
- Sacramento splittail (*Pogonichthys macrolepidotus*) - CDFW Species of Special Concern
- White sturgeon (*Acipenser transmontanus*) - CDFW Species of Special Concern
- Green sturgeon (*Acipenser medirostris*) - Federally Threatened, CDFW Species of Special Concern
- Pacific lamprey (*Entosphenus [Lampetra] tridentatus*) - CDFW Species of Special Concern
- River lamprey (*Lampetra ayresi*) - CDFW Species of Special Concern

The area of the Petaluma River where the existing storm drain outfall is proposed to be upsized is identified as suitable habitat for several of the special-status species listed above including the steelhead, Sacramento splittail, white sturgeon, green sturgeon, pacific lamprey, and river lamprey. Additionally, the Petaluma River is critical habitat for steelhead and the green sturgeon. Trees within and adjacent to the project site, including trees proposed for removal, contain suitable habitat for roosting bats and provide marginal nesting habitat for the white-tailed kite. The project site also contains foraging opportunities for each of these species.

Nesting Migratory Birds

Birds that are identified as protected under the Migratory Bird Act have the potential to nest on and around the project site including trees proposed for removal along Copeland Street.

Biological Resources Impact Analysis:

4.4 (a-b) (Special-Status Species and Sensitive Communities) Less Than Significant with Mitigation: The proposed project has the potential to result in habitat modifications to seasonal wetlands, the Petaluma River, and existing trees on and adjacent to the site that may significantly impact special-status plant and animal species. The project proposes to fill approximately 0.02 acres of seasonal wetlands and remove non-native

grasslands onsite, which could result in a potential impact to special-status plant species if present. Additionally, the project will upsize the existing storm drain pipeline and outfall from 15-inches to 30-inches in diameter between Weller Street and the Turning Basin of the Petaluma River. The area of the Petaluma River that could be potentially impacted includes approximately 130 square feet of the shoreline where the existing pipe/outfall will be replaced with an upsized pipe/outfall and rip rap will be installed to dissipate water flow and prevent erosion of the riverbank. Existing street trees along Copeland Street will be removed, which could potentially impact special status bats and birds that may utilize trees as roosting and nesting habitat.

Special-status Plant Species

Although the project site is contain barren or ruderal soils that supports non-native grasses and forbs, the site exhibits a moderate potential occurrence of three special-status plant species (Pappose tarplant, White hayfield tarplant, and Woolly-headed lessingia), all of which can occur in highly disturbed areas. Pappose tarplant and white hayfield tarplant were not identified during a protocol-level late season plant survey conducted on November 5, 2020. Woolly-headed lessingia was not observed and would not be identifiable outside of the blooming period for this species (May to July). Though no special status plant species were identified during the survey, there is moderate potential for these species to occur on the project site. In the event that special status plant species are present onsite, the proposed project would result in potentially significant impacts due to grading, ground disturbance, and development.

To ensure that the project does not result in impacts to rare plants, the project shall implement **Mitigation Measure BIO-1** which requires that a qualified biologist conduct appropriately timed rare plant bloom surveys on an annual basis throughout the planning stages as well as prior to commencement of ground disturbing activities. In the event that rare plants are observed during the bloom period surveys, Measure BIO-1 presents protocols to follow and provides for avoidance of individual populations through site design modifications. Should avoidance be deemed infeasible, BIO-1 requires preparation of a mitigation plan in consultation with the USFWS and CDFW, as warranted, and directs that a qualified botanist collect the seeds, propagules, and top soils, or other part of the plant to support successful replanting of the population elsewhere. Implementation of Measure BIO-1 will ensure that potential impacts to rare plants with moderate potential to occur onsite will be reduced to less than significant levels.

Special-status Animal Species

The project includes the upsizing of an existing storm drain outfall within the Turning Basin of the Petaluma River, which has the potential to support several special-status fish species. The Petaluma River is identified as critical habitat for steelhead and green sturgeon. Removal and replacement of the existing culvert could result in potential impacts to special status fish species including disturbance of sediment that would temporarily increase turbidity levels in suitable fish rearing habitat, deter fish as a result of noise and vibration, strand fish behind barriers, and result in the mortality of non-protected fish species which serve as prey for special-status fish species. In addition, the project also has the potential to transport invasive aquatic species into and out of the river which could potentially impact special-status species.

In order to protect special status species during improvements to the offsite storm drain outfall, the project will incorporate **Mitigation Measure BIO-2**, which establish erosion and sediment controls to prevent runoff to the Petaluma River during construction. Additionally, **Mitigation Measure BIO-3**, requires best management practices for fueling, cleaning, and operating construction equipment proximate to the Petaluma River and specifies that all necessary permits shall be obtained from regulatory and all provisions therein implemented. With implementation of measures BIO-2 and BIO-3, the project will have a less than significant impact on special-status fish species.

Existing trees proposed for removal along Copeland Street are identified as potentially suitable habitat for nesting of special-status and migratory birds. Additionally, the overall project area provides suitable habitat for foraging by these species. Removal of existing trees and development of the site have the potential to impact special-status and migratory nesting birds during project construction activities. **Mitigation Measure BIO-4** requires that tree and vegetation removal as well as initial ground disturbing activities be conducted outside of the bird nesting season (September 1 to January 31). However, where this is not feasible, measure BIO-4 requires that preconstruction nesting bird surveys be conducted no more than 7 days prior to commencement

of tree removal and ground disturbing activities. Should active nests be identified, a disturbance-free buffer shall be established as appropriate by a qualified biologist. Implementation of measure BIO-4 will ensure that potential impacts to special-status and migratory birds are reduced to less than significant levels.

The existing trees proposed for removal also have the potential to provide suitable roosting habitat for the pallid bat, which is designated by the State as a species of special concern. CEQA Guidelines Section 15380 protects rare and endangered species, which includes species designated by the CDFW as species of special concern. As such, the harming or killing of these species through destruction of habitat could result in a significant impact. **Mitigation Measure BIO-5** requires that removal of trees occur between September and March, outside of the bat maternity season. Should tree removal outside of the bat maternity season not be feasible, a qualified biologist shall conduct pre-construction surveys no more than 14 days prior to commencement of ground disturbing activities to determine if bats are present. Should bats or evidence of bat roosts be observed within trees proposed for removal, an appropriate disturbance-free buffer shall be established by a qualified biologist and removal of the trees shall be prohibited until the end of the maternity roosting season. Regardless of the time of year of removal, all felled trees shall remain on the ground for a minimum of 24-hours prior to chipping, off-site removal, or other processing to allow any bats present within the felled trees to escape. With implementation of BIO-5, potential impacts to bats including special-status bats will be reduced to less than significant levels.

4.4 (c) (Jurisdictional Waters) Less Than Significant Impact with Mitigation: The project site contains approximately 0.02-acres of seasonal wetlands that are potentially under Corps⁴ and RWQCB jurisdiction pursuant to Section 404 of the Clean Water Act and Section 401 of the Clean Water and Porter-Cologne Acts, respectively. As such, fill to the wetlands is considered a potentially significant impact to jurisdictional waters (water of the United States and/or State). The offsite area where the existing storm drain outfall is located contains less than 0.01 acres of jurisdictional tidal wetlands (open waters) within the banks of the Petaluma River. Upsizing the existing outfall culvert could adversely impact tidal wetlands.

To offset impacts to jurisdictional waters onsite and offsite, **Mitigation Measure BIO-6** shall be implemented, which requires that the applicant acquire a jurisdictional determination from the San Francisco Army Corps of Engineers District to determine regulatory jurisdiction and that mitigation credits at a 1:1 ratio (acres created and preserved: acres impacted) be purchased from an approved mitigation bank to offset fill to jurisdictional waters. In lieu of purchasing wetland mitigation credits, a new seasonal wetland may be created, preserved and managed, at an appropriate offsite location at a 2:1 mitigation ratio as described in measure BIO-6 below. Measure BIO-6 also requires conformance with the CDFW regulation under the California Fish and Game code section 1602 Lake and Streambed Alteration Agreement. With implementation of mitigation measure BIO-6 and adherence to regulatory permit conditions, the project's impacts to jurisdictional waters will be reduced to less than significant.

4.4 (d) (Wildlife Movement) Less than Significant Impact: To account for potential impacts to wildlife movement and migratory corridors, the Biological Resources Assessment included a review of maps available from the California Essential Connectivity Project, habitat connectivity data available through the CDFW Biogeographic Information and Observation System (BIOS), review of aerial imagery, and onsite observations. Due to frequent human disturbance as well as development of roads surrounding the project site, there is little to no accessibility for wildlife and as such, the site does not function as a movement corridor for wildlife. The Petaluma River is identified as essential fish habitat and serves as a wildlife corridor for special-status and other fish species. The project proposes work along the Petaluma River at the area of the existing storm drain outfall, however, the project does not propose modifications that would impact the quality of the river as a wildlife movement corridor. Therefore, the project will have a less than significant impact on wildlife movement.

4.4 (e) (Conflict with Local Policies or Ordinances) Less Than Significant Impact with Mitigation: There are no identified state or federal plans that include the project site for biological priority for protection and/or stewardship. General Plan policy 4-P-3 requires that appropriate mitigation measures to reduce impacts to sensitive habitats and special status species be imposed on a project-by-project basis. As provided by mitigation measures BIO-1, BIO-3, BIO-4, and BIO-5, the project is required to implement avoidance measures as identified in the Biological Resources Assessment related to special-status plant and animal species including rare plants

⁴ Pursuant to a change in the jurisdictional wetlands definition according to the new Federal Wetlands Protection Rule as of June 2020, onsite season wetland may not be within the Corps jurisdiction under Section 404 of the CWA.

that have the potential to occur onsite, special status fish known to occur in the Petaluma River, and special status bats and birds protected by the MBTA. Additionally, mitigation measure BIO-2 provides measures to reduce sediment runoff and erosion into the Petaluma River to protect water quality and measure BIO-6 requires mitigation related to the fill of potentially jurisdictional seasonal wetlands (0.02 acre) and tidal wetlands (0.01 acre). With implementation of mitigation measures provided herein the project will comply with General Plan policies and therefore will have a less than significant impact due to a conflict with a local policy.

As described above, the proposed project includes removal of twelve trees, including eight Purple Leaf Sand Cherry and four Callery Pear, neither of which are considered protected species under the City's Tree Preservation Ordinance. However, as street trees along the Copeland Street right-of-way, trees are considered protected and require replacement. As proposed the project will introduce new street trees in conformance with the CPSP at the site perimeter along Copeland, East Washington, and D Street, as well as internally along Transverse Street. Therefore, the project will have a less than significant impact due to a conflict with the City tree preservation ordinance.

4.4 (f) (Conflict with Habitat Conservation Plan) No Impact: There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other regional or state habitat conservation plan that exists for Petaluma. Therefore, no impact would result due to a conflict with such plans.

Biological Resources Mitigation Measures:

BIO-1: Rare plant bloom surveys shall be conducted by a qualified biologist on an annual basis through the project planning stages until the commencement of ground disturbing activities to determine if special-status plant species with the potential to occur onsite are present. Surveys shall be conducted within the bloom period of the identified plant species and results shall be submitted in writing to the City of Petaluma.

In the event that the protocol survey identifies presence of rare plants, a census of the population and mapping of outward extent shall be performed by a qualified biologist. Areas where special status species are present shall be avoided through site design modifications. In the event that avoidance cannot be achieved then a mitigation plan shall be developed to restore impacted rare plant species in a suitable habitat on or offsite within an equal area and/or equal population numbers. A qualified botanist shall collect the seeds, propagules, and top soils, or other part of the plant that would ensure successful replanting of the population elsewhere. The seeds, propagules, or other plantable portion of all plants shall be collected at the appropriate time of the year. Half of the seeds and top soils collected shall be appropriately stored in long-term storage at a botanic garden or museum (for example, Luther Burbank Home & Gardens).

The other half of the seeds, propagules, or other plantable portion of all plants shall be planted at the appropriate time of year (late-fall months) at an off-site protected property. The applicant shall retain a qualified biologist to conduct annual monitoring surveys of the transplanted plant population for a five-year period and shall prepare annual monitoring reports reporting the success or failure of the transplanting effort. These reports shall be submitted to the City and appropriate resource agency (CDFW and/or USFWS) no later than December 1st each monitoring year. Alternatively, at the discretion of the City for CNPS species, compensatory credits at an approved mitigation bank or the preservation of offsite habitat may be determined to be an acceptable means of mitigation. Proof of the purchase of mitigation credits shall be provided to the City prior to issuance of site grading permits.

BIO-2: To reduce sediment runoff and erosion into the Petaluma River, and to protect water quality from sediment and other pollutants the applicant shall comply with the following:

1. Submit a Stormwater Pollution and Prevention Plan (SWPPP) to be implemented throughout construction and post-construction.
2. Construction activities shall be conducted, to the extent feasible, during the dry season (May through October). If rainfall is forecasted to be greater than one-half inch over a 24-hour period, standard erosion control measures (e.g., straw wattles, bales, silt fencing) shall be deployed and grading shall be suspended.

3. Silt wattles shall be installed along the riverbank within the Project Area, outside of active ground disturbance. Following completion of ground disturbance, silt wattles shall be installed along the stream bank, above the mean high water. Silt wattles shall be made of jute and not plastic.
4. All equipment shall be staged above the top of bank and spill kits shall be located within working equipment. Equipment fuels and lubricants shall be prevented from reaching the river by locating fueling/maintenance areas an appropriate distance away from the river or drainage ways to the river and construction contractors shall have a spill prevention kit and plan on location.
5. Uncured concrete shall not be exposed to water flowing to the river or within the river itself and all excess uncured concrete shall be properly disposed of at an offsite location.
6. Areas of vegetation removal shall be limited to the smallest area feasible. Any areas of bare ground shall be re-seeded immediately following completion of all ground disturbance work. Additional erosion control measures (jute, hay) as feasible will be installed prior to rainy season. Areas of exposed stream bank above the mean high water shall be planted with native species appropriate for area and habitat.

BIO-3: The following general avoidance and minimization measures outlined below shall be implemented during all construction activities onsite and offsite. Additionally, prior to commencement of construction associated with upgrading the existing outfall, the appropriate permits for the work from regulatory agencies shall be obtained. The permit authorization process shall include, if needed and at the discretion of the regulatory agencies involved, consultation with National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service, and/or California Department of Fish and Wildlife (CDFW) to determine the appropriate impact avoidance, minimization, and mitigation measures (if any) for the proposed Project with respect to its potential to affect special-status fish, critical habitat and essential fish habitat. Avoidance and minimization measures required by NMFS, USFWS, and CDFW shall be implemented.

1. An environmental awareness training program will be given to all crew members working on the outfall replacement part of the Project. The training will be given by a qualified biologist and shall include education on sensitive resources such as protected wildlife with the potential to occur within the Project Area, water quality, and environmental protection measures.
2. Equipment will be cleaned prior to being moved onsite and prior to being removed such that it will not pose a potential to introduce or spread invasive plant or animal species.
3. Erosion control measures will be utilized throughout all phases of the Project where sediment runoff from construction may potentially enter waters. Erosion control structures will be monitored for effectiveness and will be repaired or replaced as needed. Appropriate erosion control measures will be installed around any stockpiles of soil or other materials which could be mobilized by rainfall or runoff.
4. Prior to construction, an Accidental Spill Prevention and Cleanup Plan shall be prepared. This plan shall include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times.
5. No fueling, cleaning, or maintenance of vehicles or equipment will take place within any areas where an accidental discharge may cause hazardous materials to enter waterways.
6. Any equipment or vehicles used for the Project will be checked and maintained daily to prevent leaks of fluids that could be deleterious to aquatic habitats.
7. All equipment will be cleaned before arriving on the site and before removal from the site to prevent spread of invasive plants.
8. Construction disturbance or removal of vegetation will be restricted to the minimum footprint necessary to complete the work. The work area will be delineated where necessary to minimize impacts to vegetated habitats beyond the work limit, or to protected vegetation within the work area.

9. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, will be located outside of the stream channel banks and outside of seasonal wetlands.
10. Stationary equipment such as motors, pumps, and generators, located adjacent to aquatic features will be positioned over secondary containment sufficient to arrest a catastrophic failure.
11. All activities performed near aquatic features will have absorbent materials designated for spill containment and cleanup activities on-site for use in an accidental spill.
12. Stockpiles of excavated soil or other will be covered when not in active use (i.e. will not be or moved for 72 hours). All trucks hauling soil, sand, and other loose materials will be covered.
13. No construction debris of any type will be allowed to enter or be placed where they may be washed into any aquatic features.
14. At the end of the project all temporary flagging, fencing, or other materials will be removed from the project site and vicinity of the channel.
15. No equipment shall be washed down where runoff could enter the creek.
16. No motorized equipment shall be left within the channel overnight.
17. All refueling and maintenance of equipment, other than stationary equipment, shall occur outside of the top-of-bank. Refueling of stationary equipment within the channel (top of bank to top of bank) shall only occur when secondary containment sufficient to eliminate escape of all potential fluids is in place.

The following avoidance and minimization measures for NMFS Species and resources including critical habitat and essential fish habitat shall be implemented during construction of the outfall, unless otherwise noted by the NMFS.

18. Any work below the top of bank shall be completed during the dry season, between June 15 and October 15.
 19. No work requiring heavy machinery to enter the channel of the Petaluma River will be conducted. Any work below the top of bank of the Petaluma River will be conducted using an excavator or other similar equipment capable of reaching the work area from above top of bank.
 20. Work will be conducted during the lowest tidal periods of the day to minimize disturbance to aquatic habitat and preclude need for using a coffer dam.
 21. Prior to beginning sediment removal work adjacent to waters which may be occupied by protected species, a qualified biologist will place exclusion nets to prevent fish from temporarily occupying waters that may be accidentally impacted by landslides or similar failures. The exclusion nets shall be of sufficient height to span the water column and small enough in size (1/8 inch or less) to exclude juvenile fish from areas that may be subject to disturbance during excavation.
 22. To prevent the spread of turbidity that might be caused by liberation of sediment, a turbidity curtain shall be installed within the exclusion zone created by block nets whenever equipment operates below top of bank.
 23. Native vegetation removed shall be limited to the minimum necessary in order to complete outfall culvert installation and shall be replanted within the work area where appropriate.
- BIO-4:** To the extent feasible, tree and vegetation removal and initial ground disturbance shall occur outside of the bird nesting season (between September 1 to January 31). Should tree/vegetation removal and ground disturbing activities commence during the bird nesting season, a preconstruction nesting bird survey shall be conducted by a qualified biologist no more than 7 days prior to the initiation of tree removal or start of ground disturbing activities, with special attention to areas of denser vegetation coverage. Areas within 500 feet of construction shall be surveyed for active nests. Should active nests be identified, a disturbance-free buffer shall be established based on the needs of the species identified

and shall be maintained until a qualified biologist verifies that the nestlings have fledged, or the nest has failed.

BIO-5: To avoid impacts to special-status bats, tree removal shall be performed outside of the bat maternity season (September to March). Where this is not feasible, a qualified biologist shall conduct a pre-construction survey of the trees proposed for removal no more than 14 days prior to removal or commencement of ground disturbing activities. If no roosting bats are detected, no further studies are warranted. Should bat maternity roosts be detected, an appropriate disturbance-free buffer shall be established by a qualified biologist and removal of the trees shall be prohibited until the end of the maternity roosting season. Regardless of the time of year of removal, all felled trees shall remain on the ground for a minimum of 24-hours prior to chipping, off-site removal, or other processing to allow any bats present within the felled trees to escape.

BIO-6: To determine applicable regulatory agencies of the approximately 0.02-acres of seasonal wetlands onsite, the applicant shall be required to obtain a jurisdictional determination from the San Francisco Corps District. Accompanying or following the jurisdictional determination, the applicant shall apply for a Nationwide Permit (NWP) 29/39 (Residential/Commercial Development), and a 401 Water Quality Certification from the RWQCB. Should it be determined that the seasonal wetlands are under Corps and/or RWQCB jurisdiction, all appropriate permits shall be obtained from regulatory agencies prior to initial grading and the applicant shall be required to purchase mitigation credits at a 1:1 mitigation ratio or as otherwise required by the Army Corps of Engineers and the Regional Water Quality Board to offset fill to 0.02 acres of Waters of the United States and the State. Wetland mitigation credits shall be purchased from a Corps and RWQCB-approved mitigation bank. The Burdell Ranch Wetland Conservation Bank Service Area covers this project site and purchase from this bank or other acceptable bank as determined by the Corps and RWQCB could satisfy this mitigation requirement.

Impacts to 0.01 acres of open waters (tidal wetlands) shall be offset through replacement at a minimum 1:1 ratio on a functions and values basis. Permits that may be necessary include a Section 10 Rivers and Harbors Act and/or Section 404 DWA fill permits from the Corps, a Section 401 Water Quality Certification from the RWQCB, and a 1602 Lake and Streambed Alteration Agreement from the CDFW.

In lieu of purchasing wetland mitigation credits, a Wetland Mitigation and Monitoring Plan (WMMP) at a 2:1 mitigation ratio shall be prepared by a qualified restoration ecologist and presented to the City/Corps/RWQCB prior to placement of fill in the wetland. The WMMP shall include a description of the impacted wetland, a map of the mitigation site with existing conditions, a description of the new wetland, wetland construction approach, landscape plan, monitoring methods and successful WMMP criteria, contingency measures if success measures are not met, and short-term and long-term management and monitoring plans. A conservation easement, as defined by Section 81.5.3 of the California Civil Code, preserving the created wetland in perpetuity and establishing an endowment to fund long-term management, maintenance and monitoring, shall be granted to a qualified entity.

4.5. CULTURAL RESOURCES

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

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma CPSP and EIR; Phase I Environmental Site Assessment, prepared by Pinnacle Environmental Inc.; and consultation with Federated Indians of Graton Rancheria.

Cultural Resources Setting: Petaluma's historic and cultural resources contribute to the city's unique character and identifiable sense of place. The City of Petaluma and vicinity contain cultural resources that date to the inhabitation of the Coastal Miwok Tribe and a number of resources that visibly chronicle the evolution of the City from early settlement, agricultural development, and through present day. Such resources include buildings, structures, landscapes, sites, and objects. The history of Petaluma is present in the contemporary landscape and the unique character that arises from the side by side existence of new and old. Petaluma's historical resources are preserved and encouraged through policies and programs that serve to maintain the historic character.

Chapter 9 of the Central Petaluma Specific Plan addresses historic preservation within the Plan area through policy direction and identification of potentially historic resources. Preserving the City's historic resources in central Petaluma is identified as a fundamental component of the CPSP as resources within this area are important reminders of the City's origins. The Turning Basin subarea of the CPSP is the location of early development in Petaluma. Although few residential buildings remain, warehouse structures along the edge of the Petaluma River are evidence of the City's origins in river trade and associated barge traffic. In conjunction with river trade, railroad spurs, which are still present today, were laid on either side of the river. The two major railroads that historically operated within the City included the Petaluma and Santa Rosa Railroad and the San Francisco and Northern Pacific Railroads, both of which were identified as potentially significant resources in the CPSP.

Preparation of the CPSP included an archaeological and historic records search at the Northwest Information Center (NWIC) and of the California Historical Resources Information System (CHRIS). Results of the search did not indicate the presence of any recorded Native American sites within the Plan area; however, several historic resources were listed in the CHRIS. Though no recorded Native American sites were identified within the Plan area, as noted in the CPSP, Native American archaeological sites within Sonoma County are often situated along ridgetops, mid-slope terraces, alluvial flats, and near ecotones, marsh regions, and sources of water. The Plan area is located near historic marsh margins including alluvial benches associated with the Petaluma River. In addition, several Native American archaeological sites have been recorded proximate to the river within the immediate vicinity of the CPSP area. Given the proximity to the Petaluma River and the presence of alluvial soils on the project site, there is potential that buried Native American resources may be present onsite.

Cultural Resources Impact Analysis

4.5 (a) (Historical Resource) Less than Significant Impact with Mitigation: Remnant train tracks on the project site, recently removed by SMART, are indicative of the sites historic use as a rail yard, which was present since at least 1888, and reportedly as early as 1870. Sanborn maps are available for the site for several years between 1888 and 1965. Beginning in 1888, maps indicate the presence of two railroad spurs, one entering the site from Copeland Street, labeled "SF&NPRR Switch", and the other entering the site from the eastern property line, labeled "Switch to McNears W.Ho" By 1894, the site is relatively the same, with illustrations noting the adjacent property as the SF&NPRR Depot with railroad tracks running parallel to Hopper Road (now Lakeville Street). The 1906 and 1910 Sanborn maps indicate a significant increase in the development of the site including several new railroad spurs, three of which extend beyond the property across East Washington Street, as well as several new structures including a water tank, sleeping room, cattle yards, turn table, round house, handcar house, bell tower/city hose house, and small shed. By 1923 the site was completely reconfigured with railroad tracks originating from the southern portion of the property, diverging into three spurs, and then again into nine spurs, two of which extend beyond the site across East Washington Street, and one extending beyond the site across Copeland Street. By this point, all structures that were previously onsite had been removed, however, a water tank and oil house were located at the southern portion of the site. The 1959 and 1965 Sanborn maps indicate similar conditions to that of the 1923 Sanborn map. Between 1965 and present, use of the site as a rail yard declined and eventually ceased. From 2014 to 2016 the site was used for staging during construction of the SMART station on the adjacent property. As reported by the applicant team, remnant rail tracks that were located on the project site were removed by SMART early in 2020.

As previously stated, the CPSP identifies the Petaluma and Santa Rosa Railroad and the San Francisco and Northern Pacific Railroads as potentially significant historic resources within the City. Improvements associated with the historic use of the site as a rail yard have been removed, the most recent being the removal of remnant tracks that ran generally parallel to the east and west property lines. As stated in the CPSP, preserving the City's historic resources in central Petaluma is a fundamental component of the Plan as resources within this area are important reminders of the City's origins. Though improvements associated with the rail yard are no longer in existence, it is possible that during the course of ground disturbing activities historical era artifacts associated with the former rail yard, which served river trade operations in the City, could be uncovered. To avoid potentially significant impacts to historic-era artifacts associated with the former use of the site, the project shall be required to comply with **Mitigation Measure CUL-1**, which requires that in the event that historic-era artifacts are uncovered, all work in the immediate vicinity of the find shall be halted and a historical resources specialist shall be retained to provide measures to protect the discovered resource. With implementation of measure CUL-1, the project will have a less than significant impact on historic resources.

4.5 (b) (Archaeological Resources) Less than Significant with Mitigation: The City of Petaluma has a rich archeological history due to the presence of the Coast Miwok Indians prior to European settlers in California. As such, undisturbed lands within the Urban Growth Boundary, particularly lands in the vicinity of ridgetops, midslope terraces, alluvial flats, ecotones, and sources of water have a greater possibility of containing prehistoric archaeological resources. Potentially significant archeological resources include, but are not limited to concentrations of artifacts or culturally modified soil deposits, modified stone, shell, bone, or other cultural or tribal cultural materials such as charcoal, ash, and burned rock indicative of food procurement, processing activities, or prehistoric domestic features including hearths, fire pits, house floor depressions, or other such historic artifacts (potentially including trash pits and all by-products of human land use greater than 50 years of age).

In accordance with AB 52, City staff provided notice of the project to FIGR, who carried out consultation including correspondence and a virtual conference call on September 29, 2020. During the consultation process, FIGR informed staff that common practice in the development of rail lines included importing fill from off-site, which often resulted in the relocation of buried archaeological resources. Furthermore, the project site contains alluvial deposits, which hold the potential to contain buried archaeological resources. To avoid inadvertently causing a substantial adverse change in the significance of an archaeological resource **Mitigation Measure CUL-2** shall be implemented, which provides for a professional archaeologist and a Federated Indians of Graton Rancheria tribal monitor to be present during ground-disturbing activities. Measure CUL-2 further establishes procedures to follow in the event that archeological resources are encountered, consistent with Public Resources Code §21083.2 and CEQA Guidelines §15064.5. **Mitigation Measure CUL-3** requires that in the event that potential resources are encountered, all work within 100 feet of the find shall be halted for a time deemed sufficient to evaluate and provide recommendations for treatment. With implementation of CUL-2 and CUL-3 potential impacts to archeological resources will be reduced to less than significant levels.

4.5 (c) (Human Remains) Less than Significant: No evidence suggests that human remains have been interred within the boundaries of the project site. However, in the event that human remains are discovered during ground disturbing activities, all requirements of state law pursuant to California Health and Safety Code Section (CA HSC) 7050.5 shall be duly complied with, including the immediate cessation of ground disturbing activities near or in any area potentially overlying adjacent human remains and contacting the Sonoma County Coroner upon the discovery of any human remains. If it is determined by the Coroner that the discovered remains are of Native American descent, the Native American Heritage Commission shall be contacted immediately. If required, the project sponsor shall retain a City-qualified archaeologist to provide adequate inspection, recommendations and retrieval. Compliance with CA HSC Section 7050.5 and performance of actions therein will ensure that in the event of accidental discovery of human remains potential impacts related to the disturbance of such remains will be less than significant.

Cultural Resources Mitigation Measures:

CUL-1: If previously unknown historic-era resources associated with the former rail yard, including, but not limited to materials from buildings previously located on the site are encountered before or during ground disturbing activities, construction shall stop in the immediate vicinity of the find and a qualified specialist shall determine whether the resource requires further study. The qualified historical resources

specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and Chapter 15 of the Implementing Zoning Ordinance.

If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the City of Petaluma. Appropriate measures for significant resources could include avoidance or capping, incorporation in the site design, such as incorporation in the Transverse Street publicly accessible open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the City of Petaluma approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or individual who is capable of providing long-term preservation to allow future study.

CUL-2: The applicant shall retain the services of a professional archaeologist who meets the Secretary of the Interior’s Standards Professional Qualifications for Archaeology and a Federated Indians of Graton Rancheria tribal monitor to observe and monitor ground disturbing activities for the inadvertent discovery of archaeological resources (prehistoric and historic-era). If a potentially significant archaeological resource is encountered the archaeologist and tribal monitor shall be provided sufficient time to evaluate the resource and make treatment recommendations in accordance with CEQA Guidelines §15064.5.

CUL-3: If during the course of ground disturbing activities (onsite and offsite), including, but not limited to excavation, grading and construction, a potentially significant archaeological resource is encountered, all work within a 100 foot radius of the find shall be suspended for a time deemed sufficient for a qualified and city -approved cultural resource specialist and a Federated Indians of Graton Rancheria tribal monitor to adequately evaluate and determine significance of the discovered resource and provide treatment recommendations developed through tribal consultation with the Federated Indians of Graton Rancheria. Pre-historic archaeological site indicators include obsidian and chert flakes, chipped stone tools, grinding and mashing implements, bedrock outcrops and boulders with mortar cups, locally darkened midden soils, bone and shell remains, and fire-affected stones. Historic period site indicators generally include fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps). Should a significant archaeological resource be identified, a qualified archaeologist shall prepare a resource mitigation plan and monitoring program to be reviewed and accepted by the Federated Indians of Graton Rancheria and carried out during all construction activities. Work shall not proceed in the vicinity of a find until all components of the resource mitigation plan have been complied with to the satisfaction of the City and the Federated Indians of Graton Rancheria.

4.6. ENERGY

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

Sources: City of Petaluma 2025 General Plan and EIR; CPSP and EIR; BAAQMD 2017 Bay Area Clean Air Plan; Climate Action 2020 and Beyond, Sonoma County Regional Climate Action Plan, prepared by the Sonoma County Regional

Climate Protection Authority, July 2016; and California Energy Consumption Database, Electricity and Natural Gas Consumption by Sonoma County 2018.

Energy Setting: Energy resources include electricity, natural gas and other fuels. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. Energy production and energy use both result in the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emission of pollutants. Energy usage is typically quantified using the British Thermal Unit (BTU). The BTU is the amount of energy that is required to raise the temperature of one pound of water by one-degree Fahrenheit. As points of reference, the approximate amount of energy contained in a gallon of gasoline, 100 cubic feet (one therm) of natural gas, and a kilowatt hour of electricity are 123,000 BTUs, 100,000 BTUs, and 3,400 BTUs, respectively.

In May 2018 the California Energy Commission adopted the 2019 Building Energy Efficiency Standards (Title 24, Part 6 of the CCR). These new standards address energy efficiency at the State level and went into effect on January 1, 2020. The new standards focus on four key areas: smart residential photovoltaic systems; updated thermal envelope standards, which prevent heat transfer from the interior to exterior and vice versa; residential and nonresidential ventilation requirements; and nonresidential lighting requirements.

California Energy Consumption

According to the California Energy Commission (CEC), total system electric generation for California in 2018 was 285,488 gigawatt-hours (GWh)⁵, down two percent from 2017. California's non-CO2 emitting electric generation categories (nuclear, large hydroelectric, and renewable generation) accounted for approximately 53 percent of total in-state generation for 2018. California's in-state electric generation was 194,842 GWh and electricity imports were 90,648 GWh. In 2018, the CEC reported that Sonoma County had a total electricity consumption of 2,914 GWh.

According to the CEC, approximately 45 percent of the natural gas burned in California was used for electricity generation totaling 90,691 GWh or 3.09 billion therms. The remainder of natural gas consumed was in the residential (21 percent), industrial (25 percent), and commercial (9 percent) sectors. Natural gas is used for many activities including generating electricity for cooking and heating, as well as an alternative transportation fuel.⁶ In 2018, the CEC reported that Sonoma County had a total gas consumption of 111 million therms.

Transportation accounts for a large portion of California's overall energy consumption. Gasoline remains the dominant fuel type within the transportation sector, followed by diesel and aviation fuel. In 2015, California consumed approximately 15 billion gallons of gasoline and approximately 4.2 billion gallons of diesel fuel.⁷ An increasing amount of electricity is also being used for transportation energy, which is attributed to the acceleration of light-duty plug-in electric vehicles.

Sonoma Clean Power

Sonoma Clean Power is a program that allows businesses and residents in Mendocino and Sonoma Counties to purchase energy created from renewable resources, including geothermal, solar, wind, water, and biomass. This service provides energy from alternative generation processes while using existing infrastructure through PG&E for delivery. By using existing infrastructure, Sonoma Clean Power is billed to customers through PG&E for providing electric generation service. In 2016, 88% of eligible customers were receiving electricity from Sonoma Clean Power. As of 2018 Sonoma Clean Power had 39% fewer greenhouse gas emissions as compared to PG&E.⁸

⁵ California Energy Commission, *Total System Electric Generation (2018)* [energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2018-total-system-electric-generation](https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2018-total-system-electric-generation), accessed August 26, 2020

⁶ California Energy Commission, *Supply and Demand of Natural Gas in California* [energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california](https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california), accessed August 26, 2020

⁷ California Energy Commission, *Transportation Energy*, <https://www.energy.ca.gov/data-reports/energyalmanac/transportation-energy>, accessed December 23, 2019

⁸ Sonoma Clean Power 2019 Annual Report, <https://vimeo.com/379072737>, accessed June 22, 2020.

City of Petaluma

Households, businesses, industry, public service systems and other operators within the City of Petaluma rely on a variety of energy resources (fuels, photovoltaic, natural gas, oil, coal, etc.) to provide energy for lighting, cooking, heating and cooling, and to operate vehicles. These energy resources are fundamental to exercising the daily life, leisure, and business activities in and around the City of Petaluma. According to the Sonoma County Regional Climate Action Plan, in 2010 the City of Petaluma's annual household consumption rate was 6,000 kwh (electricity) and 493 therms (natural gas).

The General Plan contains goals, policies and programs to reduce energy consumption. Chapter 2: Community design, Character, and Green Building identifies sustainable building strategies and practices, which minimize energy consumption. Chapter 4: The Natural Environment contains policies and programs to reduce reliance on non-renewable energy sources in existing and new development. Energy policies supporting alternative and efficient transportation systems, and the reduction of energy consumption in buildings by means of appropriate design and orientation are identified in Section 3.3: Sustainable Building and Chapter 5: Mobility. Residential energy efficiency is addressed in Chapter 11: Housing Element. Through adoption of Ordinance No. 2708 N.C.S. in 2020, the City Council adopted the Tier 2 CalGreen Standards to meet higher levels of building energy efficiency and allows for Tier 1 compliance with new all-electric development.

The following General Plan Policies related to energy resources are particularly applicable to the subject project:

- Policy 4-P-15D: Reduce emissions from residential and commercial uses by requiring the following:
 - Use of high efficiency heating and other appliances, such as cooking equipment, refrigerators, and furnaces, and low NOx water heaters in new and existing residential units;
 - Compliance with or exceed requirements of CCR Title 24 for new residential and commercial buildings; and
 - Incorporation of landscaping conducive to passive solar energy use for residential uses, i.e., landscaping with drought resistant species

The City of Petaluma has also taken steps to address GHG emissions within city limits, which in turn reduces energy consumption. See Section 4.8 Greenhouse Gas Emissions for more information.

Energy Impact Analysis:

4.6 (a) (Wasteful, Inefficient, Unnecessary Consumption of Energy) Less Than Significant Impact:

Development of the proposed project would involve the use of energy during construction and at operation. Site preparation, grading, paving, and building construction would consume energy in the form of gasoline and diesel fuel through the operation of heavy off-road equipment, trucks, and worker trips. However, consumption of such resources would be temporary and would cease upon the completion of construction. Furthermore, the project will be required to implement Mitigation Measure AQ-1, which includes BAAQMD best management practices that would minimize the inefficient, wasteful, and unnecessary consumption of energy during construction by limiting idling times and requiring that all construction equipment be maintained and properly tuned in accordance with manufacturer's specifications. As such, construction-related energy impacts would be less than significant.

Long-term energy use will result from operation of the project including 402 residential units, 5,129 square feet commercial space, and the publicly accessible open space along the new Transverse Street. Electricity consumption will include activities associated with everyday use of residential, commercial, and open space areas proposed by the project including lighting, operation of electronics, heating, air conditioning, and refrigeration, as well as energy consumption related to water usage, wastewater conveyance and treatment, solid waste disposal, and fuel consumption.

The City of Petaluma requires that all new development demonstrate compliance with CalGreen Tier 2 Building standards, which generally achieve energy efficiency approximately 30% beyond Title 24 as well as a construction waste reduction rate of 45%. For new all-electric construction, CalGreen Tier 1 is required.⁹

⁹ City of Petaluma Municipal Code, Chapter 17.04(J).

CalGreen reduces energy consumption for heating, air conditioning, and ventilation and requires use of low-water irrigation systems, water efficient appliances and faucets, cool roofs, short- and long-term bicycle parking, electric vehicle charging spaces, outdoor energy performance lighting and other mandatory energy efficiency measures. Prior to issuance of a building permit, the proposed project, as an all-electric development, will be required to demonstrate compliance with CalGreen Tier 1 standards.

Landscaping has been designed to minimize water demand, which achieves energy conservation by limiting energy needs associated with water treatment, transport, and irrigation. Proposed landscaping includes a mix of native and non-native low to moderate water usage trees, shrubs, grasses, perennials, and groundcovers located throughout the site. With the exception of two high-water use species, the proposed bioretention planters will be planted with low water usage native species. Additionally, street trees will be planted along each project frontage and along the new Transverse Street bisecting the project site, which will enhance the tree canopy, provide shading, and ultimately reduce energy costs associated with cooling.

While the long-term operation of the project would result in an increase in energy consumption compared to existing conditions, the project will incorporate design measures including related to electricity and water use in compliance with CalGreen, the General Plan, and the Petaluma IZO to minimize energy consumption. Furthermore, Sonoma Clean Power is the default provider in the City of Petaluma and would provide clean energy from renewable resources. The project is a high density mixed-use project that will introduce 402 new residential units on a site adjacent to an existing transit station, recreational opportunities, schools, employment centers, and retail. As proposed, the project will not result in any new natural gas infrastructure and includes an all-electric design. Therefore, operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy and impacts would be less than significant.

4.6 (b) (Conflict with State or Local Plan) Less than Significant Impact: The proposed project would have a less than significant impact due to a potential conflict with the Bay Area 2017 Clean Air Plan. The proposed development is consistent with that assumed by the General Plan and CPSP for the project site. The project is also consistent with energy control measures set forth in the 2017 CAP including measure EN1, which seeks to decarbonize electricity production. The project proposes an all-electric design, compliance with CalGreen Tier 1, and onsite electric vehicle charging stations. As such, the project conforms with state and local plan regarding energy efficiency. Therefore, the project will not conflict with or obstruct implementation of the Bay Area 2017 Clean Air Plan.

In December 2007, the California Energy Commission prepared the State Alternative Fuels Plan in partnership with the California Air Resources Board and in consultation with the other state, federal, and local agencies.¹⁰ The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

The Petaluma General Plan Goal 4-G-4 requires the City to reduce its dependency on non-renewable energy sources in existing and proposed developments. Policy 4-P-18 establishes several approaches to lower energy consumption, beginning by utilizing energy building standards that exceed Title 24 "Energy Efficiency Standards for Residential and Nonresidential Buildings." As described above, the City of Petaluma requires new construction to achieve CalGreen Tier 2, except for new all-electric development, which requires compliance with CalGreen Tier 1. All-electric precludes the use of natural gas thereby preserving natural gas resources and avoiding emissions associated with natural gas combustion and extension of natural gas infrastructure.

On May 6, 2019, the City of Petaluma adopted a Climate Emergency Resolution. The Resolution elevates climate issues to the highest priority and establishes a commitment to achieving carbon neutrality as quickly as possible and by no later than 2045. Furthermore, the Resolution established the Climate Action Commission which serves to guide policy direction on climate action in the City.

¹⁰ California Energy Commission, *Final Adopted State Alternative Fuels Plan, Adopted December 2007*, <http://www.energy.ca.gov/ab1007/>, Accessed September 12, 2008.

As a mixed-use development located within close proximity to existing transit, proposing an all-electric design, and subject to CalGreen Tier 1 standards, the proposed project would not conflict with or obstruct implementation of the State Alternative Fuels Plan or local policies regarding energy efficiency and therefore impacts would be less than significant.

Energy Mitigation Measures: None required.

4.7. GEOLOGY AND SOILS

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

Sources: City of Petaluma 2025 General Plan and EIR; GP DEIR Fig. 3.7-5 Geologic Hazards; GP DEIR Fig. 3.7-4 Ground shaking Intensity; Missing link between the Hayward and Rodgers Creek faults, Science Advances, Oct. 2016; Preliminary Geotechnical Report prepared by Miller Pacific Engineering Group, December 18, 2017; and Preliminary Geotechnical Report prepared by Engeo, October 5, 2016 (Appendix A to Miller Pacific Engineering Group Report).

Geology and Soils Setting: The City of Petaluma is located within California Building Code (CBC) Seismic Zone 4 and is susceptible to the effects of regional seismic activity that in the past has produced moderate to strong ground shaking reaching intensity levels of V to VIII according to the modified Mercalli scale. The nearest known active fault trace identified by the state under the Alquist-Priolo Earthquake Fault Zoning Act of 1972 is the Rodgers Creek segment of the Hayward- Rodgers Creek Fault Zone. The traces of the Rodgers Creek Fault have not been active within the last 200 years but have exhibited activity within the last 11,000 years. There

are no earthquake fault zones and no known active faults within the City's UGB. Nonetheless, seismic events in the region have the potential to result in geologic hazards from strong seismic ground shaking.

Expansive soils present geological considerations within the City of Petaluma. The clay-rich soils in Petaluma typical of low-lying regions and valley floodplains tend to shrink or swell according to fluctuations in moisture content. Without proper geotechnical considerations, buildings, utilities and roads can be damaged by expansive soils due to soil properties that can cause cracking, settling and weakening of foundations. To reduce the potential risks posed by the presence of expansive soils, the City's Building Code requires that any construction site that is intended for human occupancy and suspected to contain expansive soils be investigated and mitigated accordingly.

The City's General Plan DEIR Figure 3.7-4 identifies ground shaking intensity for a magnitude 7.1 earthquake produced by the Rodgers Creek - North Hayward fault. For an earthquake of this magnitude, the project site would be subject to very strong shaking (Modified Mercalli Intensity VIII) and is immediately adjacent to an area subject to violent shaking (Modified Mercalli Intensity IX). Figure 3.7-5 identifies geologic hazard areas within the City including areas subject to high and very high liquefaction and areas subject to landslide. Due to the proximity to the Petaluma River and underlying soils, the site is identified as having a very high liquefaction potential.

A site-specific Geotechnical Investigation was prepared by Miller Pacific Engineering Group on December 18, 2017 to identify potential geological risks of constructing the proposed project on the site (**Appendix C**). The soils report relied in part on previous investigations of subsurface conditions including six test borings that were drilled to depths of approximately 50 feet. The primary geotechnical concerns of the site include liquefaction-induced settlement, compressible soils that may settle in response to new loads proposed by project site improvements, non-engineered fills which may result in variable performance of structures, expansive soils which may cause cracking of slabs, pavements, and structures, and shallow groundwater which could impede grading activities, require temporary construction dewatering, and cause moisture damage. Additionally, investigation show that the site is underlain by Holocene-age deposits and that the northwest portion of the site may be underlain by Bay Mud.

Geology and Soils Impact Discussion:

4.7 (a.i.) (Faults) No Impact: Fault rupture occurs when the ground surface fractures from fault movement during an earthquake and almost always follows preexisting fault traces, which are zones of weakness. Given that the project site does not overlap with an Alquist-Priolo Earthquake Fault Zone and no identified active faults traverse the site, there is no expectation that the site would be vulnerable to fault rupture. There is no risk of fault-related ground rupture during earthquakes within the limits of the site due to a known Alquist-Priolo Earthquake Fault Zone. Therefore, there are no impacts due to a fault rupture at the project site.

4.7 (a.ii) (Ground-Shaking) Less than Significant Impact: The intensity of earthquake motion depends on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site-specific geologic conditions.

As identified in Figure 3.7-4 of the General Plan EIR, the proximity of the project site to the Rodgers Creek - North Hayward Fault places it within an area subject to very strong shaking (Modified Mercalli Intensity VIII). The City of Petaluma including the project site is located within close proximity to the Rodgers Creek Fault, San Andreas Fault, and West Napa Fault. As such, the project site, holds potential to expose people and structures to potentially significant adverse effects resulting from strong seismic ground shaking. The resultant vibrations would likely cause primary damage to buildings and infrastructure with secondary effects being ground failures in loose alluvium and poorly compacted fill. Both the primary and secondary effects of seismic activity pose a risk of loss of life or property.

Conformance with standards set forth in the Building Code of Regulations, Title 24, Part 2 (the California Building Code 3.7-20 Chapter 3: Setting, Impacts, and Mitigation Measures [CBC]) and the California Public Resources Code, Division 2, Chapter 7.8 (the Seismic Hazards Mapping Act) will ensure that potential impacts from seismic shaking are less than significant.

4.7 (a.iii) (Ground Failure, Including Liquefaction) Less than Significant Impact with Mitigation:

Seismically induced ground failure can occur during strong earthquakes, which could potentially expose people and property to risks. Liquefaction is the rapid transformation of saturated, loosely packed, fine grained sediment to a fluid like state as a result of ground shaking. As shown on General Plan EIR Figure 3.7-5, the potential for liquefaction at the project site is very high. As stated in the Geotechnical Investigation prepared by Engeo in October 2016, which the 2017 Geotechnical Investigation in part relies upon, soil on the project site was determined to be potentially liquefiable. As stated therein, the project site may have insufficient thickness of non-liquefiable soil to prevent sand boils, which occur when water seeps through weak spots in the soil and reaches the surface, resulting in potentially significant impacts to structures. To reduce potentially significant impacts related to liquefaction, the project shall be required to comply with **Mitigation Measure GEO-1**, which calls for a design level geotechnical investigation informed by recommendations contained in the 2016 Geotechnical Investigation prepared by Engeo, and the 2017 Geotechnical Investigation prepared by Miller Pacific Engineering Group. With implementation of measure GEO-1, the potential impacts associated with liquefaction will be reduced to less than significant levels.

4.7 (a.iv) (Landslides) No Impact: Landslides can occur from ground shaking and the presence of liquefied subsurface materials. Landslides are typically limited to slopes steeper than 15% and confined to areas underlain by geologic units that have demonstrated stability problems in the past. The project site is generally flat and is not at risk of exposure to landslides. Therefore, the project has no impacts related to landslides.

4.7 (b) (Erosion) Less than Significant Impact with Mitigation: Development of the project will require site preparation and grading activities that have the potential to result in soil erosion or the loss of topsoil if not properly controlled. It should be noted that due to past uses and ground disturbance the project site lacks undisturbed topsoil. Water and wind serve as the primary catalyst of soil erosion, with steeper slopes intensifying the effects. Vegetation removal as part of the site preparation process as well as grading and ground disturbing activities associated with development can heighten the potential for and accelerate soil erosion.

All earthwork, grading, trenching, backfilling and compaction activities associated with the project are subject to the City of Petaluma's Grading and Erosion Control Ordinance. Similarly, these activities are covered by the mandatory requirements of the National Pollution Discharge Elimination System (NPDES) General Permit which is implemented through a Storm Water Pollution Prevention Plan (SWPPP).

To ensure potential impacts related to soil erosion are reduced to levels below significant, **Mitigation Measure GEO-2**, which requires the applicant to submit an erosion control plan identifying measures to be implemented during construction and establishing provisions for grading activity during the rainy season shall be implemented. With implementation of GEO-2, impacts associated with soil erosion will be reduced to less than significant.

4.7 (c) (Unstable Geologic Unit) Less than Significant with Mitigation: Lateral spreading, lurching and associated ground cracking can occur during strong ground shaking. Lateral spreading generally occurs where liquefiable deposits flow towards unconfined spaces, such as channel banks, during an earthquake whereas lurching and ground cracking generally occur along the tops of slopes where stiff soils are underlain by soft deposits or along steep channel banks.

The geotechnical report concluded that the project site has a low potential for lateral spreading due to the relatively flat topography, distance from the Petaluma River, and site explorations which indicate that potentially-liquefiable material on the site is discontinuous. However, to ensure that the project will not result in significant impacts related to lateral spreading, the project shall be required to implement **Mitigation Measure GEO-1**, which directs the preparation of design level Geotechnical Report incorporating recommendations presented in the prior Geotechnical Reports prepared by Engeo and Miller Pacific Engineering Group. Furthermore, adherence to standard CBC stipulations are sufficient to ensure that impacts related to landslides, lateral spreading, subsidence, and collapse would remain at less than significant levels with the introduction of the proposed development.

Miller Pacific investigations identified that the northwest portion of the site may be underlain by bay mud deposits, which exhibit low strength and could be subject to significant settlements under new loading conditions. The amount and rate of settlement are influenced by several factors, including past loading history,

thickness and weight of planned fills, new building loads and variations in the thickness and compressibility of the bay mud soils. Generally, maximum settlements will occur in areas where fill and structural loads overlying thickest bay mud deposits are introduced. Bay muds have low strength and high expansive potential which can cause subsidence and differential settlement if not properly addressed, which could result in potential impacts due to an unstable geological unit. The project will address onsite fills and bay mud through soil treatment techniques which may include deep soil mixing, placement of lightweight fill, surcharge loading, and/or structural systems and foundations designed to accommodate settlement.

In order to ensure that the project is able to adequately withstand settlement under new loading conditions, the project shall comply with **Mitigation Measure GEO-1**. With incorporation of measure GEO-1 and CBC standards, the project would have less than significant impacts due to the presence of a geologic unit or soil that is unstable, or that would become unstable as a result of the project.

4.7 (d) (Expansive Soils) Less than Significant Impact with Mitigation: Expansive soils are a concern within the Urban Growth Boundary including the project site. To ensure that the presence of expansive soils does not result in significant impacts, recommendations set forth in the Preliminary Geotechnical Report and as directed by the City Engineer shall be implemented in accordance with **Mitigation Measure GEO-1**. Measures to correct expansive soils include but are not limited to pre-watering prior to the placement of foundations, removal of expansive material and replacement with non-expansive fill, and/or the use of soil stabilizers. With implementation of measure GEO-1 potential impacts due to the presence of expansive soils will be reduced to less than significant levels.

4.7 (e) (Septic Tanks) No Impact: The proposed project will include installation of new sewer laterals that will connect to existing sewer laterals in Copeland Street, which ultimately conveys flows to the regional wastewater treatment plant, providing treatment of all wastewater effluent generated within the UGB. There are no septic tanks or alternative wastewater disposal systems proposed as part of the project. Therefore, there will be no impact resulting from the adequacy of soils to support septic tanks or other wastewater disposal system.

4.7 (f) (Paleontological Resources) Less than Significant Impact: The Petaluma General Plan does not identify the presence of any paleontological or unique geological resources within the boundaries of the UGB. The project site has experienced ground disturbance from previous development activities. As such, there is limited potential for paleontological resources to be present on the project site. Given the project's location and application of standard conditions which address discovery, the project is not expected to result in a substantial adverse change to unique paleontological or geologic resources and impacts will be less than significant.

Geology and Soils Mitigation Measures:

GEO-1: As determined by the City Engineer and/or Chief Building Official, all recommendations outlined in the Updated Preliminary Geotechnical Investigation prepared by Miller Pacific Engineering Group in December 2017, which incorporates by reference the recommendations provided in the Preliminary Geotechnical Investigation prepared by Engeo in October 2016, shall be incorporated. As provided therein, the project shall be required to submit a design-level geotechnical report which includes borings and laboratory soil testing to provide data for specific recommendations related to site grading, including remedial grading measures, foundations, drainage, and settlement.

Prior to issuance of a grading permit, the applicant shall provide to the City, for review and acceptance, a final grading plan, demonstrating compliance with recommendations identified in the design level geotechnical report. Construction plans and building plans shall demonstrate that recommendations set forth in the design level geotechnical reports have been incorporated into the design of the project.

Nothing in this mitigation measure shall preclude the City Engineer and/or Chief Building Official from requiring additional information to determine compliance with applicable standards. The geotechnical engineer shall inspect the construction work and shall certify to the City, prior to issuance of a certificate of occupancy that the improvements have been constructed in accordance with the geotechnical specifications.

GEO-2: Prior to issuance of a grading permit, an erosion control plan along with grading and drainage plans shall be submitted to the City Engineer for review. All earthwork, grading, trenching, backfilling, and compaction operations shall be conducted in accordance with the City of Petaluma’s Grading and Erosion Control Ordinance #1576, Title 17, Chapter 17.31 of the Petaluma Municipal Code. Plans shall detail erosion control measures such as site watering, sediment capture, equipment staging and laydown pad, and other erosion control measures to be implemented during all construction activity. Throughout project construction, an interim plan shall be required prior to each rainy season (prior to September 1st).

4.8. GREENHOUSE GAS EMISSIONS

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

Sources: City of Petaluma 2025 General Plan and EIR; Climate Action 2020 and Beyond Sonoma County Regional Climate Action Plan, July 2016; 2017 BAAQMD CEQA Guidelines; Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020.

Greenhouse Gas Setting: Greenhouse gases (GHGs) are generated from natural geological and biological processes and through human activities including the combustion of fossil fuels and industrial and agricultural processes. GHGs include carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), chlorofluorocarbons, hydrofluorocarbons and perfluorocarbons.

While GHGs are emitted locally they have global implications. GHGs trap heat in the atmosphere, which heats up the surface of the Earth. This concept is known as global warming and is contributing to climate change. Changing climatic conditions pose several potential adverse impacts including sea level rise, increased risk of wildfires, degraded ecological systems, deteriorated public health, and decreased water supplies.

To address GHG’s at the State level, the California legislature passed the California Global Warming Solutions Act in 2006 (Assembly Bill 32), which requires that statewide GHG emissions be reduced to 1990 levels by 2020. Executive Order S-3-05 provides the California Environmental Protection Agency with the regulatory authority to coordinate the State’s effort to achieve GHG reduction targets. S-3-05 goes beyond AB 32 and calls for an 80 percent reduction below 1990 levels by 2050. Senate Bill 375 has also been adopted, which seeks to curb GHGs by reducing urban sprawl and vehicle miles traveled.

The City of Petaluma has taken steps to address GHG emissions within city limits. The City adopted Resolutions 2002-117, 2005-118, and 2018-009 (incorporated herein by reference), which calls for the City’s participation in the Cities for Climate Project effort and established GHG emission reduction targets.

A Climate Action Plan has been prepared in partnership with the County and other local jurisdictions (July 2016). This effort implements General Plan Policy 4-P-27. A number of General Plan policies serve to reduce GHG emissions associated with project construction, design and operation. General Plan Goal 5-G-8, which calls for the City to “expand the use of alternative modes of mobility serving regional needs,” is being implemented in part through the Sonoma Marin Area Rail Transit (SMART) Plan, which as of Fall 2017 provides light rail commuter service to Petaluma. The light rail effort is estimated to take more than 1.4 million car trips off Highway 101 annually and reduce GHGs by at least 124,000 pounds per day. In addition, General Plan policy 3- P-127 requires that projects prepare a Construction Phase Recycling Plan that would address recycling

of major waste generated by demolition and construction activities. This requirement is also a standard under the CalGreen Building Code and is implemented as part of the building permit process.

The City of Petaluma requires that all new development demonstrate compliance with CalGreen Tier 2 Building standards, which generally achieve energy efficiency approximately 30% beyond Title 24 as well as a construction waste reduction rate of 45%. All-electric developments are required to achieve CalGreen Tier 1 building standards. As such, new development is expected to be more energy efficient, use fewer resources, and emit fewer GHGs.

On January 22, 2018, the City of Petaluma adopted Resolution No. 2018-009 N.C.S reaffirming the City's intent to reduce greenhouse gas emissions as part of a coordinated effort through the Sonoma County Regional Climate Protection Authority. As presented in the Sonoma County Climate Action Plan, the City of Petaluma could achieve GHG reduction through a combination of state, regional and local measures. Reduction measures at the state level are promulgated through state laws and mandates addressing topics, including but not limited to vehicle fuel efficiency standard, green building standards, low carbon fuel standards and the Renewable Portfolio Standard. When realized locally in Petaluma, these measures will achieve a GHG reduction in the amount of 119,000 metric tons of carbon dioxide equivalent (MTCO_{2e}). Separate regional efforts implemented within Petaluma by entities such as the Regional Climate Protection Authority, Sonoma Water (formerly Sonoma County Water Agency), County of Sonoma Energy Independence Office, Sonoma County Transportation Authority, and Sonoma Clean Power will result in an additional GHG reduction of 28,200 MTCO_{2e}. Under the City of Petaluma's authority, the Sonoma County Climate Action Plan identifies 12 goals and 24 measures that would achieve an additional GHG reduction of 18,490 MTCO_{2e}. Taken altogether, the state, regional and local measures combined can achieve a GHG reduction of 166,350 MTCO_{2e} within Petaluma.

Under a business as usual approach (i.e., without state, regional or local GHG reduction measures), the City of Petaluma is projected to emit 542,970 MTCO_{2e} by 2020. With implementation of reduction measures, GHG emissions would be reduced to 376,620 MTCO_{2e}. This represents a 31% reduction of GHG emissions relative to the 1990 per capita emission levels. The Sonoma County Regional Climate Action Plan is an advisory document to assist the City in achieving its stated intent to reduce GHG emissions. Development projects within the City of Petaluma are encouraged to comply with the intent of the Climate Action Plan and realize GHG reductions through voluntary application of reduction measures.

On May 6, 2019, the City of Petaluma adopted a Climate Emergency Resolution. The Resolution recognizes scientific findings and social implications related to global warming while calling for citywide emergency actions to reduce greenhouse gas emissions. A Climate Action Commission was appointed to help craft policies for recommendations to the City Council, coordinate workshops with experts on climate change, encourage community involvement, and identify best practices to address climate change that can be applied in Petaluma.

Baseline Environmental Consulting prepared an Air Quality and Greenhouse Gas Assessment for the proposed project (**Appendix A**). The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions from construction and operation assuming full build-out of the project. Results of the GHG Assessment are incorporated into the impact discussion below.

Greenhouse Gas Impact Analysis

4.8 (a) (Significant GHG Emissions) Less than Significant Impact: Greenhouse gas emissions associated with the proposed project would result from short-term construction activities and ongoing operation. BAAQMD "screening criteria" provide a conservative estimate above which a project would be considered to have a potentially significant impact to air quality, including a potential to generate greenhouse gas emissions that could cause a significant environmental impact. Projects that are below the screening criteria levels are reasonably expected to result in less than significant impacts to greenhouse gases since pollutant emissions would be minimal. When projects fall below the screening criteria levels, a quantitative analysis of the project's air quality emissions is not required. Conversely, when a project is above the screening criteria, a quantitative analysis must be prepared to assess potential GHG impacts of a proposed project.

Based on screening criteria provided in the BAAQMD 2017 CEQA Guidelines, the residential portion of the project exceeds the operational GHG screening level criteria of 86 dwelling units for a mid-rise apartment. As such, a quantitative analysis was prepared by Baseline Environmental Consulting to determine potential GHG impacts of the project.

The BAAQMD 2017 CEQA Guidelines contains adopted GHG significance thresholds to determine if land use projects would comply with AB 32, which set a statewide reduction goal to reduce GHG emissions to 1990 levels by 2020. The BAAQMD is currently in the process of updating significance thresholds to evaluate GHG reduction goals beyond 2020. Given that the project will be developed post-2020 it is necessary to evaluate the potential GHG impact relative to the statewide 2030 GHG reduction goal set forth under SB 32, which seeks to reduce GHG emissions to 40 percent below 1990 levels. In the absence of adopted BAAQMD thresholds of significance, Baseline Environmental Consulting developed an interim GHG emissions threshold to evaluate the project’s potential impact. The interim 2030 GHG threshold was developed consistent with methodology used by BAAQMD to establish the 2020 GHG emission threshold, which divides 60 percent of the 1990 land-use sector GHG emissions by the projected 2030 service population.

The California Emissions Estimator Model Version 2016.3.2 was used to estimate GHG emissions during construction and operation of the proposed project. Consistent with BAAQMD CEQA Guidelines, construction emissions were annualized over a 40-year period and added to the anticipated operational emissions. GHG emissions were evaluated based on an average service population of 1,160 people, which assumes an average household size of 2.86 and a standard one employee per 500 square feet of commercial/retail space. Results of the analysis are shown in the table below. GHG emissions are expressed as carbon dioxide equivalent (CO₂e), which is a way to describe different greenhouse gases in a common unit, signifying the amount of CO₂ which would have the equivalent global warming impact.

Table 7: Project GHG Emissions

Emission Source	CO₂e (MT/year/SP)
Construction	0.02
Operation:	
<i>Area</i>	0.02
<i>Energy</i>	0.49
<i>Mobile</i>	1.61
<i>Waste</i>	0.08
<i>Water</i>	0.05
Total emissions	2.3
Interim 2030 GHG Threshold	2.9
Exceeds Threshold?	No

MT = metric tons; SP = service population; GHG emissions during construction annualized over 40 years
 Source: Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020, Table 8.

As shown in Table 7, construction and operation of the proposed project will not exceed the interim GHG emissions threshold which, as described above, is based on the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. Furthermore, with installation of electric vehicle charging stations, the proposed all-electric design, and the ability for residents to enroll in Sonoma Clean Power, GHG emissions from operation of the proposed project will be further reduced. As such, it can be determined that the proposed project would have a less than significant impact due to GHG emissions.

4.8 (b) (GHG Plan Conflict) Less than Significant Impact: The proposed project is consistent with applicable GHG regulations and General Plan policies. As an all-electric development, the project is required to comply with the CalGreen Building Tier 1 standards and the latest Building & Energy Efficiency Standards. The project proposes an all-electric design and installation of electric vehicle-charging stations. Additionally, the project includes water efficient landscaping and complies with the maximum applied water allowance and the City’s water conservation regulations. As proposed, the project is consistent with relevant General Plan policies and GHG regulations. Therefore, potential impacts due to the generation and emission of greenhouse gases would be less than significant.

Greenhouse Gas Mitigation Measures: None required.

4.9. HAZARDS/HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 of public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: City of Petaluma 2025 General Plan and EIR; Phase I Environmental Site Assessment, prepared by Pinnacle Environmental Inc., August 27, 2020; Stormwater Control Plan for a Regulated Project Petaluma Station, prepared by CSW/Stuber-Stroeh Engineering Group, Inc., June 19, 2020; Memo Addressing Impacted Soils, prepared by Pinnacle Environmental Inc., received November 2020; and Local Hazard Mitigation Plan, Executive Summary, <https://cityofpetaluma.org/documents/haz-mit-plan-executive-summary-and-toc/>, accessed November 13, 2020.

Hazards/Hazardous Materials Setting: Regulations governing the use, management, handling, transportation and disposal of hazardous materials and waste are administered by federal, state and local governmental agencies. Federal regulations governing hazardous materials and waste include the Resource Conservation, and Recovery Act of 1976 (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA); and the Superfund Amendments and Re-authorization Act of 1986 (SARA).

In California hazardous materials and waste are regulated by the Department of Toxic Substances Control (DTSC). Pursuant to California Planning and Zoning Law, the DTSC maintains a hazardous waste and substances site list, also known as the Cortese List. The Secretary for Environmental Protection established the Unified Hazardous Materials and Hazardous Waste Management Program, also known as Unified, which is intended to consolidate and ensure consistency in the administration of requirements, permits, and inspections for six programs, including the Underground Storage Tank (UST) program.

The six programs established by the Unified Program are administered and implemented locally through Certified Unified Program Agencies (CUPA). The Petaluma CUPA manages the acquisition, maintenance and control of hazardous materials and waste generated by industrial and commercial business through the Petaluma Fire Department. Under CUPA, projects that intend to store, transport or generate hazardous waste must apply for and obtain a permit and submit a Hazardous Materials Release Response Plan and Inventory on an annual basis.

The City of Petaluma has prepared a Draft Local Hazard Mitigation Plan (LHMP) which was adopted by the City Council on November 2, 2020. The Plan is intended to reduce or eliminate long-term risks to people and property as a result of hazards including hazards related to dam failure, drought, seismic impacts, flooding, sea level rise, hazardous material releases, severe weather events, and wildfire. The Plan was prepared in compliance with the Disaster Mitigation Act of 2000, which focuses on a more proactive approach to disaster response and provides opportunities for cities to receive funding from the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation and Hazard Mitigation Grant programs. The Plan establishes goals which seek to minimize loss of life and property, preserve and protect the City's environment to build community resilience against natural hazards, educate the community on the potential for natural hazard risks and the importance of resiliency and emergency preparedness, enhance City coordination and response during disasters, and implement the Plan as an integrated approach to prepare the City for natural and man-caused hazards. The Plan also sets forth actions which seek to address specific hazard within the City.¹¹

Environmental Site Assessments

In accordance with the guidelines of the American Society of Testing and Materials (ASTM) Standard Practice E1527-13, Pinnacle Environmental Inc. (PEI) prepared a Phase I Environmental Site Assessment (ESA) for the project site in August 2020 (**Appendix D**). The purpose of a Phase I ESA is to identify the presence or likely presence of any hazardous substances or petroleum products on the property, referred to as Recognized Environmental Conditions (REC), that may impact future use of the site. The Phase I ESA included a site reconnaissance of the subject property, limited observations of immediately adjacent properties, review of historical use of the site, governmental databases, and past documentation prepared for the site including the following:

- Preliminary Site Assessment, August 1994 (prepared by Geomatrix Consultants)
- Phase II and Phase III, March 1996 (prepared by Geomatrix Consultants)
- Soil and Grab Groundwater Sampling Results, 1998 (prepared by Geomatrix Consultants)
- Phase I ESA, April 2016 (prepared by Pinnacle Environmental Inc.)
- Phase II ESA, July 2016 (prepared by Pinnacle Environmental Inc.)
- Technical Review of Environmental Site Assessments, April 2020 (prepared by Baseline Environmental Consulting)

Based on the limited site reconnaissance, historical review, regulatory records review, and review of other available documentation prepared for the site, the Phase I ESA identified two Recognized Environmental Conditions (RECs) including the sites listing as a spills, leaks, investigations, and cleanups (SLIC) site under the name Northwest Pacific Railroad, which was issued a case closure letter in 1998 stating that no further investigation or remediation was required by the RWQCB as well as information in the Phase II ESA prepared in July of 2016 which indicated elevated concentrations of heavy metals and organics associated with the

¹¹ Local Hazard Mitigation Plan, Executive Summary, <https://cityofpetaluma.org/documents/haz-mit-plan-executive-summary-and-toc/>, accessed November 13, 2020.

historic use of the site as a rail yard. The subsurface investigation performed in 2016 included 14 soil borings, of which eight also collected groundwater samples. The Phase II ESA made the following findings:

- Groundwater was not impacted by total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), or semi-volatile compounds (SVOCs);
- With the exception of elevated TPH as diesel (TPHd) in soil at a depth of eight to ten feet along the western property boundary and elevated arsenic and lead in the vicinity of the railroad spur near the eastern property boundary, soil onsite was not significantly impacted by TPH, VOCs, SVOCs, pesticides, herbicides, or metals;
- Areas detected to have elevated levels of arsenic and lead should be resampled following removal of the railroad spurs, ties, and gravel to confirm that concentrations do not exceed residential screening levels;
- There is a possibility that additional subsurface contamination associated with the sites historic use could be encountered during development of the site.

Based on the findings of the 2016 Phase II ESA, PEI recommended that additional soil testing be performed, or a Soil Management Plan be prepared to address soil stockpiling, soil profiling to ensure proper reuse or disposal, and implementation of worker safety measures. Baseline Environmental Consulting conducted a peer review in April 2020 of the 2016 Phase I and Phase II reports prepared by PEI and concluded that further investigation of surficial and shallow soil onsite including areas of former railroad spurs, areas where surface staining was noted, and stockpiles should be performed. Additionally, due to elevated levels of arsenic, lead, TPHd, and phenol in soils onsite, remediation should be performed under the oversight of an appropriate regulatory agency such as the DTSC or RWQCB.

PEI issued a memorandum, Addressing Impacted Soils, in November 2020, summarizing the site's history and past uses, prior environmental assessments and results of investigations, regulatory oversight requirements, and remediation options (**Appendix D**). Based on the site's historic use, minor concentrations of total petroleum hydrocarbon (TPH-d) and heavy metals (lead and arsenic) remain in shallow soils onsite beneath the railroad spurs. Impacted soils require remediation including soils mixing, excavation and disposal under regulatory oversight.

Hazards/Hazardous Materials Impact Analysis:

4.9 (a) (Routine Transport) Less than Significant Impact: The project proposes to introduce a mix of residential and commercial uses to the project site. These uses will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. At operation there are no elements of the project that would require the routine transport, use, or disposal of hazardous materials. Activities onsite are limited to residential and commercial uses which do not typically require the use of hazardous materials nor generate hazardous waste. Common cleaners, solvents, and other products associated with residential and commercial uses may be routinely used, and do not present a significant hazard to people or the environment. The project proposes to install landscaping and pools which require ongoing maintenance and may involve application and storage of regulated chemicals, fuels, and related products. Potentially hazardous materials such as cleaning products and landscaping supplies may be transported to the project site in small quantities intended for consumer use. Materials are required to be handled, transported and stored in a manner that complies with all existing federal, state and local regulations. Therefore, impacts from the project due to routine transport of hazardous materials and hazardous waste will be less than significant.

4.9 (b) (Upset and Accident Involving Release) Less than Significant Impact with Mitigation: Site preparation and construction activities will include the temporary presence of potentially hazardous materials including, but not limited to fuels and lubricants, paints, solvents, insulation, electrical wiring, and other construction related materials. All potentially hazardous materials present onsite will be required to be handled, stored, and disposed of in compliance with existing federal, state and local safety regulations. Once construction is complete there will not be ongoing use or generation of hazardous materials onsite, except as may be necessary for ongoing maintenance of onsite landscaping and amenities.

As mentioned above, the project site contains impacted soils that include elevated levels of arsenic, lead, TPH-d, and phenol. Additionally, based on the site's former use as a railyard it is possible that subsurface contamination may be encountered during grading and site development. Disturbance to impacted soils from construction activities has the potential to result in adverse effects to human health and the environment if not properly remediated. As such, the project shall comply with **Mitigation Measure HAZ-1**, which requires remediation under the oversight of a regulatory agency including excavation, removal, and disposal of impacted soils, construction worker health and safety protocols, and additional soil sampling demonstrating that RWQCB Tier 1 Environmental Screening Level (ESL) are achieved. Implementation of measure HAZ-1 will ensure that potential hazards to the public or the environment due to upset or accidental release of hazardous materials, due to impacted soils onsite from past uses, are reduced to less than significant levels.

4.9 (c) (Emit or Handle Hazardous Materials within ¼ Mile of School) Less than Significant Impact: The project site is not located within one-quarter mile of an existing school. The nearest school to the project site is McKinley Elementary School, which is located approximately one-mile northeast on Ellis Street. There are no activities associated with operation of the proposed project that would pose a threat to schools from the release or handling of hazardous materials.

During cleanup activities, remediation, and construction all requirements of federal and state laws regarding treatment and disposal of contaminated materials will be carried out. Furthermore, all Mitigation Measures identified herein, and any additional measure required by CUPA, the County, and/or the RWQCB/DTSC will be implemented by the project. The Petaluma Fire Prevention Bureau regulates hazardous materials in the City. If and when construction activities involve the on-site storage of potentially hazardous materials, a declaration form will be filed with the Fire Marshal's office and a hazardous materials storage permit will be obtained. Therefore, impacts related to the emission or handling of hazardous, or acutely hazardous materials, within one-quarter mile of an existing or proposed school will be less than significant.

4.9 (d) (Government Code §65962.5 Site) Less Than Significant Impact: The project site is not identified as a Cortese site. As identified in Phase I ESA, the site is listed as a spills, leaks, investigations, and cleanups site under the name Northwest Pacific Railroad. However, the site was issued a case closure letter in 1998 stating that no further investigation or remediation was required by the RWQCB. Furthermore, as set forth in Measure HAZ-1, the project will be required to perform remediation of impacted soils onsite under regulatory oversight. As such, the project will not create a significant hazard to the public or the environment due to prior contamination since remediation will ensure that pollutant concentrations fall below ESL for residential uses. Therefore, the project would have less than significant impacts due to listing on a hazardous materials site.

4.9 (e) (Public Airport Land Use Plan) No Impact: The project is not located within the boundaries of an airport land use plan or located in close proximity to a private airstrip. Petaluma Municipal Airport is the nearest public airport and is located approximately 2.7 miles east of the project site. Therefore, no impacts associated with airport-related hazards are expected.

4.9 (f) (Impair Emergency Response Plan) No Impact: The project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The project will not alter any emergency response or evacuation routes. Site access adequately accommodates emergency vehicles and provides connectivity to the existing circulation and street system. Therefore, the proposed Project will have no impact on the emergency response plan or emergency evacuation plan.

Hazards/Hazardous Materials Mitigation Measures:

HAZ-1: To ensure construction workers, members of the public, and future occupants of the site are not exposed to elevated levels of contamination, a Remedial Action Workplan (RAW) or a Soil Management Plan (SMP) shall be prepared and implemented for the project site in accordance with regulatory oversight protocols. The RAW/SMP shall be prepared and implemented under the oversight of an appropriate regulatory agency (Department of Toxic Substances Control or the San Francisco Regional Water Quality Control Board), and subject to review and acceptance by the City to ensure appropriate procedures for treatment of impacted soils. Remediation activities may include additional soil sampling, excavation, stockpiling, and removal/disposal of railroad spur ballast/slag and gravel, impacted soils, as well as dust control measures, worker health and safety monitoring, and standards for transporting

impacted materials. The RAW/SMP shall include procedures for the management of subsurface features of environmental concern that could be present on the project site such as buried rail spurs, Underground Storage Tanks (USTs), sumps/vaults, and drainage lines, and management of potentially contaminated deeper soil/groundwater if encountered during construction. Prior to issuance of occupancy verification of remediation in accordance with regulatory oversight shall be provided to the City of Petaluma.

4.10. HYDROLOGY AND WATER QUALITY

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

Sources: City of Petaluma 2025 General Plan and EIR; Sea Level Rise Study Exhibits prepared by CSW/Stuber-Stroeh Engineering Group, Inc., July 29, 2020; Preliminary Stormwater Control Plan For a Regulated Project Petaluma Station, CSW/Stuber-Stroeh Engineering Group, Inc., June 19, 2020; Technical Memorandum Regarding Hines Downtown Station, prepared by CSW/ Stroeh Engineering Group, Inc., October 30, 2020; Preliminary Geotechnical Report prepared by Miller Pacific Engineering Group, December 18, 2017; and Preliminary Geotechnical Report prepared by

Engeo, October 5, 2016 (Appendix A to Miller Pacific Engineering Group Report).; Groundwater Basin Boundary Assessment Tool, CA Dept. of Water Resources; and Petaluma Valley Groundwater Sustainability Agency.

Hydrology and Water Quality Setting: The Petaluma River is the primary watercourse within the City and the Petaluma watershed which encompasses an area of approximately 46 square miles. The Petaluma River collects runoff via multiple tributaries and drains in a southeast direction through tidal marshes into San Pablo Bay. Lands near the Petaluma River and its tributaries are subject to periodic inundation during storm events. Federal and state agencies such as the U.S. Army Corps of Engineers and Regional Water Quality Control Board are responsible for protecting surface water quality. The Federal Emergency Management Agency (FEMA) designates land that is subject to flooding in support of the National Flood Insurance Program. Sonoma Water (formerly Sonoma County Water Agency) and the City of Petaluma manage waterways and regulate runoff generated from new development.

Flooding

Chapter 6 of the City's Implementing Zoning Ordinance (IZO) contains regulations for properties located in floodways and floodplains. Section 6.011 of the IZO states that flood hazard areas within the City of Petaluma are subject to periodic inundation which can result in the loss of life and property, create health and safety hazards, disrupt commerce and governmental services, cause expenditures for flood protection and relief, and impair the City's tax base, all of which have the potential to adversely impact the public health, safety, and welfare. Methods for reducing flood losses are set forth in Section 6.013 of the IZO including (a) restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which increases erosion or flood heights or velocities; (b) requiring that uses vulnerable to floods be protected against flood damage at the time of initial construction; (c) controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; (d) controlling filling, grading, dredging, and other development which may increase flood damage; and (e) preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. The site is not located within a regulated floodway or floodplain.

Sea Level Rise

The two major causes of global sea level rise include thermal expansion caused by warming of the ocean as water expands as it warms, and increased melting of land-based ice such as glaciers and ice sheets. Sea level rise is not uniform and is largely dependent on factors such as atmospheric and oceanic circulation, tectonics, and gravitational/deformational effects generated by land mass changes. Sea level rise will most directly affect areas that are on the coast. As a tidally influenced river, the Petaluma River will also be impacted by sea level rise.

While the magnitude of sea level rise ranges widely, the San Francisco Bay Conservation and Development Commission (BCDC) developed Sea Level Rise projections based on sixteen (16) inches of sea level rise by mid-century (year 2050) and fifty-five (55) inches of sea level rise at the end of the century (year 2100).¹² BCDC generally suggests that the anticipated sea level rise projections largely correspond with today's 100-year flood zone. Meaning that, under a reasonably foreseeable expectation of sea level rise, the 100-year floodplain would be subject to flooding not just during a 100-year flood event, but also during high tide.

Sea level rise projection data was prepared for the project using Our Coast, Our Future (OCOOF), which is a user-driven project that provides different sea level rise and storm scenarios, as well as a King Tide scenario for the San Francisco Bay. Sea level rise scenarios were prepared for the project and include 50 cm, 100 cm, and 200 cm sea level rise both with and without a 100-year storm event as well as with a King Tide event, which is used to describe high tides that occur during a new or full moon. As shown in the sea level rise exhibits prepared by CSW/Stuber-Stroeh Engineering Group, Inc., **Appendix E**, the project site is not projected to be impacted by sea level rise under the 50 cm, 100 cm, or 200 cm sea level rise scenarios without a 100 year storm event. With a 100-year storm event, the project site is projected to experience impacts of sea level rise

¹² Bay Conservation Development Commission. *2011 Living with a Rising Bay: Vulnerability and Adaption in the San Francisco Bay and on its Shoreline*. Available at: <http://bcdc.ca.gov/BPA/LivingWithRisingBay.pdf>

under a 200 cm scenario. Similarly, the project site is expected to experience inundation from a 200 cm sea level rise scenario with a King Tide event.

Sea level rise scenarios are provided for informational purposes and are not intended to assess potential environmental impacts of the project. The project site is forecast to be affected by sea level rise in the future, which is an impact of the environment on the project, as opposed to the project's impacts on the environment. The California Environmental Quality Act (CEQA) is concerned with environmental impacts caused by the project, and not the impacts of the environment on the project.¹³

Stormwater Runoff

Section 402 of the Clean Water Act regulates the discharge of pollutants to waters of the U.S. At the local level, this is implemented through the National Pollution Discharge Elimination System (NPDES) General Permit. Requirements apply to the project's construction activities including grading, grubbing, and other site disturbance. Construction activities on more than one acre are subject to NPDES permitting requirements including the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The NPDES General Permit requirements also address post-construction conditions resulting from development including, but not limited to Low Impact Development (LID) requirements. Under LID requirements, new development is required to mimic pre-developed conditions, protect water quality, and retain runoff from new impervious surfaces introduced onsite.

The City of Petaluma Municipal Code regulates stormwater discharges (Chapter 15.80), sets forth grading and erosion control requirements (Chapter 17.31) and establishes limitations on stormwater runoff emanating from development sites through implementation of Low Impact Development. Additionally, the City collects Storm Drainage Impact Fees as a means of mitigating impacts occurring as a result of development. The City may accept payment of fees or the construction of on- or off-site detention areas, based upon the type of project and amount of runoff generated, as calculated for a 100-year storm. Fees are used by the City for acquisition, expansion, and development of storm drainage infrastructure.

Due to the project site being greater than one acre, a SWPPP is required. A Preliminary Stormwater Control Plan for the project was prepared in accordance with the Bay Area Stormwater Management Agencies Association (BASMAA) criteria. The Preliminary Stormwater Control Plan (S WCP) identifies LID design strategies such as the use of bioretention facilities and dispersion of runoff to pervious areas. The project proposes a system of bio-retention basins designed to collect and treat storm water run-off from impervious surfaces prior to discharge to the storm drain system, which ultimately outfalls to the Petaluma River.

Groundwater

The City of Petaluma's central and eastern lands are situated above the Petaluma Valley Groundwater Basin as identified by the California Department of Water Resources Bulletin 118 Groundwater Basins published in 2018. The State of California adopted the Sustainable Groundwater Management Act (SGMA) in 2014 that called for the creation of local Groundwater Sustainability Agencies to develop and implement Groundwater Sustainability Plans for the long-term management of a healthy and functioning groundwater resource. In 2018, the Petaluma Valley Groundwater Sustainability Agency (PVGSA) was formed from representative government agencies, including the city of Petaluma, to begin assessing baseline conditions, defining sustainability for the basin, and developing a Groundwater Sustainability Plan (GSP) and corresponding projects. The draft GSP is under public review in 2020 to gather feedback on six sustainability indicators that measure conditions and activities potentially leading to unsustainable groundwater use. The indicators include lowering groundwater levels, sea water intrusion, reduction of storage, land subsidence, degraded groundwater quality, and surface water depletion. The PVGSA is scheduled to adopt the GSP in 2022 to begin implementation of projects that demonstrate improvements to groundwater sustainability by 2042 with the goal of maintaining sustainability through 2072.

¹³ *Section 21083 (c) Public Resources Code and case law established through California Building Industry Association v. Bay Area Quality Management District.*

Hydrology and Water Quality Impact Analysis:

4.10 (a) (Water Quality Standards) Less than Significant Impact: During construction the project has the potential to impact water quality if not properly controlled. Construction activities within the City of Petaluma are covered by the Construction General Permit (2009-0009-DWQ). As the project will result in disturbance to more than one acre of land, a Storm Water Pollution Prevention Plan (SWPPP) is required. Standard erosion and sediment control requirements will be implemented during all stages of construction. Typical Best Management Practices (BMP) that are generally applied during construction activities include use of fiber filter rolls, sandbags or interceptors at storm drain inlets, track pads at access points, and spill prevention, amongst others.

The project will implement best management practices for erosion control during construction activities as required by the City's grading and erosion control ordinance (Chapter 17.31 of the Municipal Code). Thus, water quality standards and waste discharge requirements will be met.

At operation, runoff from the proposed development will increase relative to existing conditions. Runoff from new impervious surfaces may result in water quality impacts if not properly controlled. The SWCP identifies installation of bio-retention features which will collect stormwater from roofs and impervious pavement surfaces and filter runoff prior to discharging water. Runoff will filter through bioretention areas prior to entering the storm drain system which will minimize pollutant loads. Therefore, the project's potential to violate water quality or waste discharge standards would be less than significant.

4.10 (b) (Groundwater Supply and Recharge) Less than Significant Impact: The City has adequate water supply resources to accommodate development of the proposed mixed-use project without depleting, degrading or altering groundwater supplies or interfering substantially with groundwater recharge. Based on the subsurface findings detailed in the Geotechnical Investigation, groundwater is estimated to occur at depths between 6 ½ and 9 ½ feet below the ground surface and fluctuates over seasons due to changes in precipitation, irrigation, and drainage patterns. At present, the site contains compacted aggregate and dirt surfaces which allow little to no infiltration into the groundwater supply. As such, development of the proposed project will not substantially change the nature of surface water percolation into the Petaluma Valley Groundwater Basin.

The proposed project will rely exclusively on potable water delivered by the City of Petaluma and does not involve any groundwater extraction onsite. The project's water demands are consistent with water demands evaluated in the City UWMP, which found sufficient water supplies are available to meet existing and planned future demands. Groundwater reserves will not be depleted due to the proposed development as the City's water supply is largely dependent on surface water flows from Sonoma Water. There are no groundwater wells proposed as part of the project, rather the project will be served by the City's municipal water supply. Therefore, the project will result in less than significant impact to groundwater supply and recharge.

4.10 (ci-civ). (Drainage Pattern, Runoff and Storm Drain Capacity) Less than Significant Impact: The proposed project will not substantially alter the course of a stream or river, or otherwise substantially alter the drainage pattern relative to predevelopment conditions. Currently stormwater runoff from the project site sheet flows across the site into drain inlets located along Copeland Street and over the sidewalk into the adjacent curb and gutter, which leads to the municipal storm drain.

According to the Stormwater Control Plan, site improvements will introduce approximately 157,760 square feet of new impervious surfaces as compared to existing conditions. As described therein, conventional concrete and asphalt pavement will be used throughout the project site. The majority of runoff from roofs and pavement will be routed to onsite bioretention planters and other landscaped areas. Bioretention areas will be connected to new 15-inch storm drains located on either side of the new Transverse Street. New storm drains are proposed to connect to the existing storm drain system located in Copeland Street, which ultimately routes stormwater runoff to existing storm drain infrastructure in East Washington Street and D Street prior to discharging to existing outfalls in the Petaluma River.

The Hines project includes upsizing of the existing storm drain outfall in the Turning Basin of the Petaluma River including replacing approximately 30 feet of 15-inch diameter with 30-inch diameter storm drain pipe. Outfall improvements include a rock rip rap collar extending 2 feet beyond the top and sides of the culvert barrel and

extending 5 feet below the culvert bottom. The rip rap collar will be 7 feet wide and 10 feet long. The entitled Haystack project includes installation of storm drain infrastructure (30-inches in diameter) within the new transverse street between Copeland and Weller Streets, and extending onto APN 007-142-012 tying into the existing 15-inch CMP outfall. Upsizing by Hines will complete the infrastructure improvements identified in the CPSP to accommodate storm water runoff. In the event that Haystack installs storm drain improvements within transverse street and completes upsizing of the storm drain pipeline in advance of the Hines development, then the Hines Project would be able to use new storm drain infrastructure through transverse street and the upsized storm drain outfall consistent with CPSP. Regardless of the pending Haystack infrastructure improvements, the Hines storm drain infrastructure improvements proposed provide adequate capacity to accommodate storm water runoff.

With implementation of the SWCP, storm drain infrastructure improvements onsite and offsite including upgrading of the existing outfall to the turning basin, the introduction of new impervious surfaces onsite would not substantially increase the rate or amount of surface runoff or adversely impact the storm drain capacity. Therefore, impacts from the proposed project will be less than significant.

4.10 (d). (Flood Hazards, Seiche, Tsunami, Mudflow) No Impact: The project site is not located within a flood hazard area, nor is it within an inundation area of a levee or dam, or within a tsunami or seiche zone. Therefore, the project will have no impacts regarding release of pollutants due to inundation of the project site.

4.10 (e). (Conflict with Water Quality Control or Sustainable Groundwater Management Plans) Less than Significant Impact: The project will not conflict with a water quality control plan or a sustainable groundwater management plan. As described above, implementation of a Storm Water Pollution Prevention Plan and compliance with the City’s erosion control requirements will avoid erosion and sediment runoff during all stages of construction. During operation, the project site will be improved with bio-retention basins and LID features that will minimize runoff, reduce sedimentation and protect water quality. Implementing the project’s SWCP as described above provides for protection of water quality during construction and at operation. Therefore, the project will not result in a conflict with water quality control and impacts will be less than significant.

The City of Petaluma is in the process of developing a Groundwater Sustainability Plan, which must be prepared by 2022 in accordance with the Sustainable Groundwater Management Act (SGMA). As no Groundwater Management Plan has been adopted, the project will not result any conflicts with such a plan. Therefore, potential impacts will be less than significant.

Hydrology and Water Quality Mitigation Measures: None required

4.11. LAND USE AND PLANNING

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

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma CPSP and EIR; City of Petaluma SMART Rail Station Areas: TOD Master Plan and Appendix A: SmartCode Amendments; City of Petaluma Implementing Zoning Ordinance; Petaluma Bicycle and Pedestrian Plan: An Appendix to the General Plan 2025, May 2008.

Land Use Setting: The project site is located at 315 East D Street, west of Highway 101, east of the Petaluma River, and within the Central Petaluma Specific Plan subarea of the General Plan, which is characterized by the Petaluma River, Turning Basin, and the active rail corridor. The CPSP is further divided into four distinctive

subareas, including the Turning Basin subarea which is the place of early development in the City and includes agricultural, industrial, municipal, residential, and vacant land uses on the east side of the basin, and the Historic Commercial District and associated retail and commercial uses on the west side. The project site is also located within a Priority Development Area and identified in the City's Station Area Master Plan as a catalyst site, development of which is intended to transform the Station Area, meeting the goals of the General Plan and the CPSP.

The site is bounded by East Washington Street to the north, the Petaluma Downtown SMART Station to the east, East D Street to the south, and Copeland Street to the west. Surrounding uses include low intensity retail and commercial, the SMART station, Petaluma Visitors Center, industrial uses, and vacant land. Located west of the project site across Copeland Street is the entitled Haystack Mixed-Use Project. Though not yet constructed, the project is entitled to develop 178 residential dwelling units and approximately 24,855 square feet of retail/commercial use in three and four-story buildings, public and private open space, a new street (transverse street) bisecting the site, frontage improvements, parking, landscaping, and ancillary improvements.

The Hines project site is designated Mixed-Use on the General Plan Land Use map (**Figure 3: General Plan Land Use**). Within the CPSP, the Mixed-Use designation provides for a combination of uses and orients development toward the pedestrian. Residential density standards and Floor Area Ratio maximums do not apply to areas designated MU in the CPSP, rather density and intensity are indirectly regulated by the SmartCode's building form, mass, and height standards. The site is zoned T-5 Urban Center and T-6-O Urban Core-Open where the first 50 feet of site depth along East Washington Street, East D Street, and the eastern property line are designated T-6-O and the remainder of the site is designated T-5. (**Figure 4: Zoning**). The T-5 Zone anticipates higher density mixed-use buildings that accommodate retail, offices, rowhouses and apartments with a tight network of streets, wide sidewalks, steady street tree plantings, and buildings set close to the sidewalks. The T-6-O Zone anticipates the highest building density and height, the greatest variety of uses, large blocks, streets with steady street tree plantings, and buildings set close to wide sidewalks.

The Station Area Master Plan (SAMP) and the Central Petaluma Specific Plan each call for an east-west 104-foot-wide street/linear park (Transverse Street) bisecting the project site from Copeland Street to a newly envisioned north-south Station Access Street, east of the project site. The intent of the envisioned network of streets is to improve pedestrian and vehicular access to the SMART Station. The new east-west Transverse Street is also proposed to bisect the Haystack project site, from Copeland Street to Weller Street forming a larger overall network that would provide connectivity from the Petaluma River Turning Basin to the SMART Station, providing an integrated network of open spaces, visual connection between the station and the riverfront, and improving pedestrian and vehicular access to the SMART station. In addition, the SAMP envisions a new 50-foot-tall vertical element at the intersection of the new Transverse Street and the new north-south oriented street. This element is intended to add a visual point of interest and anchor in the Transverse Street area.

To construct and implement the north-south Station Access Street, a portion of the SMART owned property would need to be obtained by the City. The necessary land acquisition was considered by the City Council in 2019, but the cost was deemed prohibitive and as a result, the north-south Station Access Street cannot be developed as previously envisioned. As a result, vehicular access from the Transverse Street onto the privately owned SMART property is infeasible. The Hines project is proposing to preclude vehicles on transverse street through the project site and has designed transverse street for non-vehicular circulation along a linear park setting. Vehicular access to the Hines site will be limited to the existing street network.

The applicant is requesting approval of Site Plan and Architectural Review to construct two mixed-use buildings, inclusive of 402 dwelling units, 5,129 square feet of commercial area, and associated landscaping, frontage, and offsite improvements. The project is subject to provisions contained in the Implementing Zoning Ordinance including Chapter 21 (Performance Standards) and Chapter 24 (Site Plan and Architectural Review). In addition, the project is subject to the requirements of the SmartCode including Section 3 (Building Function Standards), Section 4 (Urban Standards), Section 5 (Thoroughfare Standards), and Section 6 (Parking Standards and Procedures). The project proposes deviations from the required frontage types, minimum courtyard widths, distances between entries, ground floor depths, building setbacks, and sidewalk widths. Additionally, the design deviates from site specific requirements including the width of Transverse Street, and installation of a vertical element. These deviations may be permitted through granting of 13 warrant(s), as set

forth in Section 8.10.020(H) of the SmartCode. As stated therein, where a project is inconsistent with a specific provision, but meets the overall intent of the code, a warrant may be granted allowing deviation from the specific requirements.

The City's Bicycle and Pedestrian Plan and Figure 5-2 of the General Plan identify existing and proposed bicycle routes throughout the City. Existing Class I bicycle facilities in the vicinity of the project site include the Lynch Creek Trail, which is accessible via Lakeville Street, approximately 0.4 miles north of the project site and the SMART Trail between Payran Street and Southpoint Boulevard, approximately 1.1 miles northeast of the project site. On-street Class II bicycle facilities in the project vicinity are located along East D Street from the City limits to Fourth Street, Caulfield Lane between Lakeville Street and Ely Boulevard, along Johnson Street, and along Lakeville Street from the Highway 101 interchange to East D Street. Existing Class III bicycle routes are located on Lakeville Street from East D Street to Petaluma Boulevard, on East D Street from Fourth Street to Payran Street, and along Petaluma Boulevard, East Washington Street, Payran Street, and Ellis Street.

Land Use Impact Analysis:

4.11 (a) (Divide an Established Community) No Impact: The project proposes to develop a vacant, underutilized site in central Petaluma, identified as an opportunity site. The site is located adjacent to the existing SMART station and Copeland Street Transit Mall. Though not yet constructed, the site is also located in close proximity to the Haystack Mixed-Use Project which includes development of residential and commercial uses as well as ancillary site improvements including installation of an east-west Transverse Street which will provide linear continuity between the Haystack project site and the Hines project site.

Division of an established community typically occurs when a new physical feature, in the form of an interstate or railroad, physically transects an area, thereby removing mobility and access within an established community. The division of an established community can also occur through the removal of an existing road or pathway, which would reduce or remove access between a community and outlying areas. The project proposes installation of a new publicly accessible linear park (transverse street), sidewalks, and other bicycle and pedestrian improvements that will increase circulation and connectivity between the project site and surrounding existing and proposed uses. Furthermore, the project will provide increased bicycle and pedestrian circulation between the riverfront and the SMART station as envisioned by the CPSP and the SAMP. The project will not introduce a physical barrier or otherwise divide an established community. Therefore, no impacts will occur under this criterion.

4.11 (b) (Land Use Plan, Policy, Regulation Conflict) Less than Significant Impact with Mitigation: Approval of Site Plan and Architectural Review for the proposed mixed-use project, including 402 new residential dwellings, 5,129 square feet of commercial space, and associated landscaping, frontage, and offsite improvements will be generally consistent with the General Plan, Zoning, and land use regulations established by the City of Petaluma. Though the project proposes deviations from specific provisions of the SmartCode including variations in the required frontage types, minimum courtyard widths, distances between entries, ground floor depths, building setbacks, sidewalk widths, and the design of the envisioned north-south and east west Transverse Streets, Section 8.1.020(H) of the code provides for these deviations so long as the project is consistent with the overall intent of the code. As proposed, the project must secure 13 warrants under Section 8.1.020(H).

The project site is identified as site #31 in the Residential Land Inventory Opportunity Sites (Appendix E) of the City's 2015-2023 Housing Element, prepared December 2014. As described in the Housing Element, the Mixed-Use classification within the Central Petaluma Specific Plan area assumes a residential density of up to 60 dwelling units per acre, however, there are no established residential densities within the CPSP, rather density is regulated through the specific building form, mass, and height regulations set forth in the SmartCode. During preparation of the Housing Element, an analysis of several housing developments within the CPSP area revealed densities ranging from 31 to 45 units per acre with an average density of 38 units per acre. Conditions in place at the time were utilized to prepare a projection of housing units that could be accommodated on the identified opportunity sites included in the Housing Element. Considering the average density range of developed housing projects, the site was anticipated to accommodate approximately 170 dwelling units under the Housing Element, whereas the project proposes to accommodate 402 dwelling units in two buildings. Though the proposed number of dwelling units differs from that identified in the Housing Element, the project

proposes a development that is generally consistent with the regulations set forth in the SmartCode. Furthermore, a higher density development near transit is consistent with the intent and policies set forth in the General Plan and Central Petaluma Specific Plan. As such, the proposed project is within the established density for the Mixed-Use General Plan land use designation and zoning provisions.

The project site is located within the Station Area Master Plan adjacent to the existing Downtown Petaluma SMART Station and includes the introduction of new residential and commercial uses, new sidewalks on East Washington Street, East D Street, and Copeland Street, a new Class VI bicycle facility along East D Street, and a publicly accessible linear park (Transverse Street) which will serve as a bicycle and pedestrian throughway. The new Transverse Street will provide connection west of the site through the proposed Haystack Mixed-Use Project to the Petaluma riverfront and Cavanaugh park at the Turning Basin. As such, the project supports the primary objectives of the Plan, which are to guide development that will support transit ridership and improve non-motorized connectivity between the station site and existing adjacent commercial, employment, and residential areas.

New bicycle facilities proposed by the project include a Class IV, physically separated bike lane along East D Street and a two-way cycle track along the south end of the Transverse Street. Accordingly, the project is consistent with the City's Bicycle and Pedestrian Plan and does not present a conflict that would result in an environmental impact.

Except for minor deviations for which warrants are permitted and will be required, the project is consistent with the building form, mass, and height regulations set forth in the SmartCode, which regulates density limits established by the Mixed-Use General Plan land use designation. The proposed project and associated site improvements are compatible with surrounding uses including adjacent entitled and existing mixed-use, commercial, retail, and recreational uses. Furthermore, the project is consistent with applicable General Plan and CPSP policies including those related to land use, the natural environment, and bicycle and pedestrian circulation. There are no conflicts with the City's land use regulations and therefore, impacts due to a conflict that would result in an environmental impact as a result of the project are less than significant.

Land Use Compatibility

The project site is located adjacent to the Copeland Street Transit Mall, Downtown Petaluma SMART station, and East Washington Street, all of which generate TAC emissions associated with operation of buses, trains, and other mobile emission sources. The proposed project will introduce new sensitive receptors immediately adjacent to these existing sources of TAC's, and new residents will be exposed to noise, odors, and air emissions generated by ongoing operation of the existing transit mall, SMART train, and vehicles traveling along East Washington Street and other streets in the vicinity. As described in Air Quality Section 4.3 above, introduction of these receptors to the area is not an environmental impact under CEQA. Even so, cumulative health risk at the project site from combined sources in the vicinity fall below the cumulative health risk threshold (Table 8: Cumulative Health Risks).

The City of Petaluma General Plan policy 4-P-17 aims to protect public health by suggesting incorporation of buffer zones between new residential uses and stationary sources of TAC emissions. There are no stationary sources of toxic air contaminant that pose potential health risks within 1,000 feet of the project site. Furthermore, establishing a physical buffer zone on the project site could conflict with the overall intent of the General Plan and CPSP which seek to densify central Petaluma, activate street frontages, and place the highest density residential uses near existing transit. Therefore, the project as proposed would not result in land use compatibility conflicts due to ambient air quality levels and cumulative health risk exposure of new sensitive receptors introduced by the Hines development.

As discussed below in the Section 4.13 Noise, the project would result in a potential noise compatibility conflict due to noise generated by surrounding roadways and operation of the SMART train. The General Plan establishes land use compatibility standard and identifies noise level of up to 65 dBA for residential uses as normally acceptable and up to 70 dBA as conditionally acceptable. The California Building Code establishes acceptable interior noise levels of 45 dBA and 50 dBA for residential and non-residential uses, respectively. Additionally, the City's Implementing Zoning Ordinance establishes an ambient noise environment of 60 dBA for open space areas. The project will introduce new sensitive noise receptors to an environment with noise levels between 60 and 77

dBa, which could potentially exceed land use compatibility standards established by the General Plan and zoning ordinance. As described above, introduction of these receptors to the area is not an environmental impact under CEQA. Nonetheless, to ensure that new residents and individuals accessing public open space are not exposed to noise levels exceeding the Community Noise Exposure levels, **Mitigation Measure LU-1** shall be implemented. Measure LU-1 requires that the applicant retain an acoustical engineer to prepare a Noise Reduction Plan that includes noise reduction measures such as sound rated windows, walls, and door assemblies. With implementation of measure LU-1, new residential and non-residential uses as well as individuals accessing open space would not be exposed to excessive noise levels and potential land use conflicts would be reduced to less-than-significant levels. (See also Section 4.13 Noise)

Land Use Mitigation Measures:

LU-1: Prior to submittal of a building permit, a qualified acoustical engineer shall be retained to prepare a Noise Reduction Plan for City review and approval. The plan shall contain noise reduction measures that achieve an acceptable interior noise level of 45 dB CNEL for the multi-family residential uses and 50 dBA L_{eq} for commercial uses. The plan shall also include measures to reduce exterior noise levels of the publicly accessible open space consistent with the requirements set forth in Section 21.040 of the City’s Implementing Zoning Ordinance. The feasibility of the following measures to achieve acceptable interior and exterior noise levels shall be considered:

1. Installation of forced air mechanical ventilation.
2. Installation of sound rated windows and doors that reduce interior noise levels at or below 45 dBA for residential uses and 50 dBA for non-residential uses.

4.12. MINERAL RESOURCES

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

Sources: City of Petaluma 2025 General Plan and EIR.

Mineral Resources Impact Discussion

4.12 (a-b). (Mineral Resources or Resource Plans) No Impact: There are no known mineral resources within the UGB. The project site has not been delineated as a locally important resource recovery site. It is not expected that the project will result in the loss of availability of known mineral resources, including those designated as “locally important”. Therefore, the proposed project will have no impact to mineral resources.

Mineral Resources Mitigation Measures: None required.

4.13. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with	Less than Significant Impact	No Impact

	Mitigation			
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: City of Petaluma 2025 General Plan and EIR; IZO 21.040; Noise and Vibration Technical Study, prepared by Baseline Environmental Consulting, December 3, 2020; Downtown San Rafael to Larkspur Extension Environmental Assessment SMART, 2014; and Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

Noise Setting: Noise is generally defined as unwanted sound. It is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). The sound pressure level is the most common descriptor used to characterize the loudness of an ambient (existing) sound level. The decibel (dB) scale is used to quantify sound intensity, given that the human ear is not equally sensitive to all frequencies in the entire spectrum, noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called “A-weighting,” written as “dBA” and referred to as “A-weighted decibels”. In general, human sound perception is such that a change in sound level of 1 dB cannot typically be perceived by the human ear, a change of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling the sound level. The average A-weighted noise levels measured across a given study period is denoted as the Equivalent Noise Level (L_{eq}). The Community Noise Exposure Level (CNEL) is a weighted average of noise level over time which calculates the equivalent noise level for a continuous 24-hour period while imposing a five-decibel penalty in the evening (7pm-10pm) and 10-decibel penalty during nighttime and early morning hours (10pm-7am).

The City of Petaluma regulates the noise environment through Section 21.040 of the Implementing Zoning Ordinance (IZO). The IZO stipulates an hourly average level of 60 dBA as the maximum that may be generated on one land use that may affect another land use; the allowable levels are adjusted to account for the ambient noise levels and in no case shall the maximum allowed noise level exceed 75 dBA after adjustments are made.

The 2025 General Plan provides policies to protect the health and welfare of the community from undesirable noise levels. Figure 10-2 of the General Plan provides Land Use Compatibility Standards and relative acceptability levels for various land uses. Multi-family residential land uses are considered normally acceptable in noise environments up to 65 dB whereas commercial uses are considered normally acceptable in environments up to 70 dB (Community Noise Equivalent Level or CNEL). In addition, the 2019 California Building Code specifies interior noise levels for both residential and non-residential uses. For residential uses, interior noise levels attributable to exterior sources shall not exceed 45 dBA whereas non-residential uses shall not exceed 50 dBA. Figure 10-1, Noise Contours of the General Plan indicates that noise levels at the site are projected to be between 60 and 65 dB CNEL at General Plan buildout due to noise from surrounding roadways.

A Noise and Vibration Technical Study was prepared for the project by Baseline Environmental Consulting, dated October 23, 2020 (**Appendix F**). The study analyzes noise impacts associated with project construction, operation, and project-generated traffic on area roadways. Additionally, the study analyzes impacts of the project on nearby sensitive receptors as well as land use compatibility issues associated with siting new sensitive receptors in an area with elevated noise levels.

As described in the Noise and Vibration Study, primary sources of noise in the vicinity of the project site include traffic on major roadways including Lakeville Street, located 170 feet east of the project site, East Washington Street located immediately north of the site, and D Street located to the west of the site. Other noise sources include operation of the SMART train and Copeland Street Transit Mall. According to an environmental assessment prepared for the SMART train, operation of the trains without horns could generate noise levels of 52 to 57 dBA Ldn at the project site, while operation of the trains with horns could generate noise levels of 72 to 77 dBA Ldn at the project site. The combination of roadway noise and operation of the SMART could result in ambient noise levels of 60 to 77 dBA CNEL at the project site. It should be noted that SMART operations which pass by the site are within a quiet zone, and therefore the train horn is not routinely sounded in this area.

Noise Impact Analysis:

4.13 (a) (Noise Standards) Less than Significant Impact with Mitigation: Construction activities including grubbing, tree removal, grading, site improvements, installation of utilities, building construction, paving, and landscaping will temporarily increase noise levels in the vicinity of the project site. Noise levels associated with construction will vary depending on the number and type of equipment used, duration of activity, distance between the noise source and sensitive receptors, and the presence or absence of any barriers between the noise source and receptors. As proposed, the project will be constructed over approximately 33 months. The South Building will be completed first and is anticipated to be occupied with new residents prior to completion of construction of the North Building. The Noise and Vibration Technical Study utilized the construction equipment list contained in the California Emissions Estimator Model to estimate noise generated during construction of the project. **Table 9** shows typical noise levels associated with operation of construction equipment at a distance of 50 feet. Noise levels were calculated for simultaneous operation of the two noisiest pieces of equipment. As shown below, construction activities have the potential to result in noise levels between 76 and 84 dBA for new onsite residents of the South Building and between 61 and 82 dBA for the nearest offsite residents which exceeds the 60 dBA standard for single family residential uses and 65 dBA for multi-family uses.

Table 9: Calculated Noise Levels (dBA) of Construction Equipment

Construction Phase	Equipment	Reference Noise Levels at 50 Feet	Noise Levels from the Two Noisiest Pieces of Equipment	Calculated Noise Levels at the Nearest On-site Residences	Calculated Noise Levels at the Nearest Off-site Residences
Site Preparation	Auger Drill Rig	85	88	84	69
Site Preparation	Rubber Tired Dozers	85			
Site Preparation	Tractors/Loaders/Backhoes	84			
Grading	Excavators	85	88	84	69
Grading	Graders	85			
Grading	Rubber Tired Dozers	85			
Grading	Tractors/Loaders/Backhoes	84			
Grading	Cranes	85	88	84	69
Building Construction	Cranes	85			
Building Construction	Forklifts	NA			
Building Construction	Generator Sets	82			
Building Construction	Tractors/Loaders/Backhoes	84			

Table 9: Calculated Noise Levels (dBA) of Construction Equipment

Construction Phase	Equipment	Reference Noise Levels at 50 Feet	Noise Levels from the Two Noisiest Pieces of Equipment	Calculated Noise Levels at the Nearest On-site Residences	Calculated Noise Levels at the Nearest Off-site Residences
Building Construction	Welders	73			
Paving	Cement and Mortar Mixers	85	88	84	69
Paving	Pavers	85			
Paving	Paving Equipment	85			
Paving	Rollers	85			
Paving	Tractors/Loaders/Backhoes	84			
Architectural Coating	Air Compressors	80	80	76	61

Source: Noise and Vibration Technical Study, prepared by Baseline Environmental Consulting, Oct. 23, 2020, Table 5

Construction of the project will expose nearby residents to noise levels. Use of an auger drill rig would generate the highest noise level during construction and has the potential to result in short term noise disturbance to nearby residents and businesses while operating. However, exposure is intermittent and temporary and will cease upon completion of the project. Furthermore, the project is required to adhere to the performance standards set forth in Section 21.040(A)(3)(a) of the City’s Implementing Zoning Ordinance, which limits hours of construction activities. Furthermore, due to the anticipated elevated noise levels at future onsite receptor locations as well as existing offsite receptor locations, the project shall comply with **Mitigation Measure NOI-1** which requires implementation of best construction management practices as well as notification prior to commencement of construction activities and establishment of a noise complaint tracking system.

At operation, the project will result in an increase in ambient noise levels associated with installation of heating, ventilation, and air conditioning (HVAC) systems. The project will be required to comply with standards set forth in the City’s Implementing Zoning Ordinance related to operational standards of mechanical equipment as well as General Plan Policy 10-P-3(C), which requires that fixed mechanical equipment such as air conditioning be placed inside walls or on roof-tops in order to reduce noise impacts on nearby sensitive receptors. The nearest sensitive receptors are located about 435 feet from the project site and would not be exposed to elevated noise levels from new HVAC equipment. Therefore, the project will have a less than significant impact on ambient noise in the project vicinity due to new mechanical equipment introduced onsite.

The project will result in new vehicles trips on area roadways associated with the introduction of 402 new residential units and commercial uses onsite. A significant impact on noise levels would occur from a project generating an additional 4 dBA of roadway noise which correlates to a doubling of current roadway volume. As further discussed in Section 4.17 (Transportation), the project will result in an increase in traffic volumes of up to 33 percent on nearby roadways. The greatest increase in traffic volume is anticipated to occur on East D Street between Copeland Street and Lakeville Street. The existing traffic noise level along this roadway segment is 56 dBA whereas existing plus project conditions are estimated to be 57.2 dBA. As such, new vehicle trips associated with the project will result in an increase of 1.2 dBA, which is below the 4 dBA significance threshold. Therefore, the project will have less than significant impacts due to project generated traffic noise.

Land Use Compatibility with Existing Noise Environment

As described above under Section 4.11 Land Use and Planning, the project would introduce new sensitive receptors (residents) to an area with elevated noise levels due to existing operational activities associated with surrounding roadways, operation of the SMART train, and the Transit Mall on Copeland Street. The General

Plan establishes an acceptable exterior noise level of 65 dBA for residential and non-residential uses. Additionally, the City’s zoning ordinance sets forth ambient noise standards for open space in the City, which is generally compatible up to 75 dB CNEL. Exposure of new residents to elevated community noise levels does not constitute an environmental impact because ambient community noise levels are not caused by the project. Rather, exposure of new residents to excessive noise levels is addressed as a land use compatibility consideration as it relates to General Plan policies and applicable zoning and building code regulations.

The project will introduce new sensitive noise receptors to an environment with noise levels between 60 and 77 dBA, which exceeds land use compatibility standards established by the General Plan and zoning ordinance. Construction of new buildings is expected to attenuate ambient noise levels at the interior linear park by approximately 5 dBA. As such, ambient noise levels within the public park area is expected to meet the land use compatibility standard of 75 dB CNEL. Standard construction practices generally achieve a reduction of 15 CNEL from exterior to interior. To achieve interior noise levels of 45 dB CNEL for new residents and 50 dB CNEL for new retail spaces, enhanced construction techniques and sound rates windows, doors and assemblies will be required. To ensure new residents and employees/consumers are not exposed to excessive interior noise levels, Mitigation Measure LU-1, set forth above, shall be implemented and requires that the applicant retain an acoustical engineer to prepare and implement a Noise Reduction Plan identifying construction technique and materials (sound rated windows, walls, and door assemblies) demonstrating that new buildings are designed and constructed in a manner that achieves acceptable interior noise levels. With implementation of measure LU-1, new residents and employees/customers onsite would not be exposed to excessive noise levels due to a potential land use conflict.

4.13 (b) (Groundborne Vibration and Noise) Less than Significant Impact with Mitigation: The project would result in temporary noise and vibration during construction activities including grading, site improvements, building construction, and material hauling associated with construction of the project including onsite and offsite improvements. Construction activities will involve the use of heavy-duty construction equipment that generates groundborne noise and vibration. Groundborne vibration during construction has the potential to damage structures and be perceptible to people within close proximity of the project site. Table 10 includes vibration levels of construction equipment anticipated to be used by the project and the distance required to reduce vibration levels below thresholds established by the Federal Transit Administration (FTA). As described in the Noise and Vibration Study, vibration amplitudes are expressed as either Peak Particle Velocity (PPV) or Root Mean Square (RMS) velocity where PPV is used to evaluate potential damage to buildings and RMS is used to evaluate human response to vibration. As shown below, the thresholds established by FTA for building damage are differentiated between buildings extremely susceptible to vibration damage (0.12 PPV) and engineered concrete and masonry buildings (0.3 PPV). For the purposes of this analysis, the 0.12 PPV threshold was applied to adjacent historic buildings including the Train Depot at the adjacent downtown SMART station and the nearby River House near the location of the offsite storm drain outfall to be upsized. The 0.3 PPV threshold was used for all other buildings in close proximity to the site. The threshold for human annoyance is 80 VdB, which is expressed as RMS and described in vibration decibels.

Table 10: Construction Equipment Vibration at 25 Feet from

EQUIPMENT	25 FEET FROM SOURCE		REQUIRED DISTANCE FROM SOURCE (FEET)		
	PPV (in/sec)	RMS (VdB)	Building Damage (Old Structures)	Building Damage (New Structures)	Human Annoyance
Vibratory Roller	0.210	94	36	20	73
Caisson Drilling	0.089	87	20	11	43
Large Bulldozer	0.089	87	20	11	43
Loaded Trucks	0.076	86	18	10	40
Small Bulldozer	0.003	58	2	1	5
Vibration Threshold			0.12 PPV	0.3 PPV	80 VdB

PPV = peak particle velocity; RMS = root mean square velocity; in/sec = inches per second

Source: Noise and Vibration Technical Study, prepared by Baseline Environmental Consulting, Nov. 20, 2020, Table 6

As shown above, the construction equipment that would generate the highest vibration level is vibratory roller, which would generate 0.210 PPV and 94 VdB at a distance of 25 feet from the source. The closest existing

residences are located approximately 435 feet from the project site, and as such vibration from construction of the proposed project will not exceed FTA thresholds for human annoyance.

The existing Train Depot at the adjacent SMART station was originally constructed in 1914 and is located approximately 65 feet northeast of the project site. As presented in Table 10 above, vibration from construction activities would potentially impact the Train Depot or the River House, if equipment were to operate within 36 feet of these older structures. The distance between the project site and the adjacent Train Depot exceeds the 36-foot distance and ensures that potential damage to older structures due to vibration caused by construction equipment is avoided. As such, construction activities, including use of a vibratory roller and an auger drill rig (caisson drilling equivalent) will not approach or exceed the 0.12 in/sec PPV threshold established by the FTA.

Construction associated with upsizing of the existing storm drain outfall would result in vibration from operation of dozers, excavators, graders, pipelayers, and loaders. A large bulldozer would generate the highest vibration level for upsizing the outfall generating a maximum of 0.089 PPV and 87 VdB at a distance of 25 feet from the source. The River House is located at 222 Weller Street and was originally constructed in the early 1900's. This structure is located outside of the 20-foot buffer where a large bulldozer could exceed the 0.12 in/sec PPV threshold. The existing office building located at 226 Weller Street is of newer construction and is located outside of the 11-foot buffer where a large bulldozer would exceed the 0.3 in/sec PPV threshold. Vibration from construction activities will be intermittent and temporary. Therefore, the project will result in less than significant impacts due to groundborne vibration including potential adverse impacts to nearby historic buildings.

New Sensitive Receptors

As proposed, the project will be constructed in two phases. The South Building, located adjacent to East D Street will be constructed first, followed by the North Building, located adjacent to East Washington Street. The project assumes construction will take 33 months and proposes occupation of the South Building prior to completion of construction of the North Building. As such, onsite sensitive receptors, which include residents of the South Building, will be subject to vibration impacts associated with construction. The construction equipment that would generate the highest vibration levels at the onsite receptors is a vibratory roller. The buildings are located approximately 80 feet apart, and as such onsite sensitive receptors would be located outside of the 73-foot buffer distance where a vibratory roller could exceed the 80-VdB threshold. Therefore, construction activities would not generate vibration with the potential to disturb new onsite sensitive receptors and impacts will be less than significant.

4.13 (c) (Airport Noise) No Impact: The project site is not located near a private airstrip, within an airport land use plan or within two miles of a public airport or public use airport and would therefore not expose people residing or working in the project area to excessive noise levels. The Community Noise Equivalency Level (CNEL) noise contours from the Petaluma Municipal Airport do not affect the subject site. The project would not expose people working onsite to significant noise levels generated by the Petaluma Municipal Airport. Therefore, noise from the Petaluma Airport will have no impact to people residing or working onsite.

Noise Mitigation Measures:

NOI-1: The following Best Construction Management Practices shall be implemented to reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance:

1. Limit construction hours to between 8 a.m. and 5:30 p.m., Monday through Friday and between 9:00 a.m. and 5:00 p.m. on Saturday. Construction activities shall be prohibited on Sundays and State, Federal and Local Holidays.
2. Delivery of materials and equipment to the site and truck traffic coming to and from the site is restricted to the same construction hours specified above.
3. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
4. Unnecessary idling of internal combustion engines shall be strictly prohibited.

5. Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
6. Acoustically shield stationary equipment located near residential receivers with temporary noise barriers.
7. Utilize "quiet" air compressors and other stationary noise sources where technology exists.
8. Impact tools (e.g., jack hammers and pavement breakers) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust, which can achieve up to a 10 dBA reduction in noise, shall be used. External jackets shall be used on the tools themselves, if such jackets are commercially available, which can achieve a reduction of up to 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with required construction procedures.
9. Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities.
10. Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from existing residences.
11. Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
12. The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses and businesses so that construction activities can be scheduled to minimize noise disturbance.
13. No less than two weeks prior to commencement of construction activities, the applicant shall provide written notification disclosing the construction schedule, including the various types of activities that will occur throughout the duration of the construction period, to all land uses within a 1,000-foot radius of the site.
14. Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.
15. Prior to the issuance of a construction-related permit, the applicant shall submit a set of procedures for responding to and tracking complaints pertaining to construction noise to the City for review and approval. These measures shall, at a minimum, include the following:
 - a. a sign posted on-site describing noise complaint procedures and a complaint hotline number;
 - b. designation of an on-site construction compliance and enforcement manager for the project;
 - c. protocols of receiving, responding to, and tracking received complaints; and
 - d. maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.

4.14. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

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

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma CPSP and EIR; City of Petaluma SMART Rail Station Areas: TOD Master Plan and Appendix A: SmartCode Amendments; City of Petaluma Implementing Zoning Ordinance; Petaluma Housing Element 2015 – 2023, Attachment 1. American Community Survey 2018 5-Year Estimate, Selected Housing Characteristics, Table DP04, Petaluma; and Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, September 11, 2020, Page 18 (population projections)

Population and Housing Setting: The 2025 General Plan contemplates development of approximately 6,000 residential units and a buildout population of approximately 72,700. This represents an annual growth rate of approximately 1.2 percent per year. The Residential Land Inventory of the City of Petaluma 2015-2023 Housing Element identifies opportunities for housing development in the City including individual parcel capacity and environmental constraints. The project site is identified as site #31 on the Residential Land Inventory. As described in the Housing Element, site #31 is classified as Mixed Use and was identified as having a capacity of 170 dwelling units.

The CPSP EIR assumed a maximum development potential of 1,617 dwelling units and 2.9 million square feet of commercial uses within the four subareas of the Central Petaluma Specific Plan. Within the Turning Basin subarea in which the site is located, the EIR assumed a total of 360 dwelling units and 568,126 square feet of commercial space would be developed. To date, approximately 295 dwelling units and 123,480 square feet of commercial space have been developed or obtained necessary entitlements within the Turning Basin subarea including the recently approved Haystack Mixed-Use development located west of the site. Subsequently, the Petaluma General Plan 2025 and its EIR, increased the development potential citywide including within the CPSP area.

Additionally, the project site is located within the City of Petaluma’s Priority Development Area (PDA). PDAs are locally-identified, infill development opportunity areas within existing Bay Area communities. They are generally areas of at least 100 acres where there is local commitment to develop more housing along with amenities and services to meet the day-to-day needs of residents in a pedestrian-friendly environment served by transit. The subject Hines Mixed-Use project is located within the “Petaluma: Central PDA” of the Priority Development Area Investment and Growth Strategy Update.¹⁴

Pursuant to the City’s inclusionary housing policy, a minimum of 15% of the units onsite are required to be provided at an affordable level including 7.5% at the low-income level, 7.5% at the moderate-income level, or alternative compliance. The project applicant has proposed Alternative Compliance to meet the City’s inclusionary housing requirements. In the event that the proposed Alternative Compliance is not approved or otherwise cannot otherwise be implemented, the project will be required to comply with the City’s inclusionary housing policy providing 15% of the units onsite at an affordable level.

According to the U.S. Census Bureau’s American Community Survey, five-year estimates, the City of Petaluma had a total of 23,172 housing units and 60,635 people between 2014 and 2018. The project will introduce 402 residential units and 5,129 square feet of commercial space. The project population was estimated based on an average household size of 2.86 and an average employment rate of one employee per 500 square feet of commercial space. As such, the project is anticipated to introduce 1,150 new residents and 10 new employees, for a total project population of 1,160.

Population and Housing Impact Analysis:

¹⁴ Sonoma County Transportation Authority, Priority Development Area Investment and Growth Strategy Update, Adopted June 12, 2017, <https://scta.ca.gov/wp-content/uploads/2017/05/PDA-IGS-2017-update.pdf>. Accessed April 18, 2019. Map 4- Petaluma: Central PDA.

4.14 (a) (Substantial Unplanned Growth) Less than Significant Impact: The project site is located within the UGB, on a property that is identified in the City’s Housing Element as a residential development opportunity site. The proposed project exceeds the anticipated development potential of 170 units identified in the Housing Element and will also exceed development anticipated for the Turning Basin subarea under the CPSP EIR. However, the proposed design is consistent with the regulations of the SmartCode which indirectly regulate density through specific requirements related to building form, mass, and height and is also consistent with the Mixed-Use General Plan land use designation within the CPSP, which does not establish a maximum residential density. Furthermore, the project will introduce transit-oriented development (TOD), on an infill site, within a PDA, and in line with the SCS. The projected population increase of 1,160 persons does not constitute a substantial increase and is within the General Plan 2025 population projections. The project site is adjacent to existing transit services, is within close proximity to goods and services, and is surrounded by compatible planned mixed-use developments including the Haystack Mixed-Use Project. The extension and upgrading of utilities will provide adequate service to the proposed project and will accommodate future development in the project vicinity as anticipated by the General Plan and CPSP. The project is not expected to promote further development beyond what is proposed for the project site and will not extend services to areas where services were previously unavailable. Therefore, the project will have less than significant impacts related to direct or indirect unplanned population growth.

4.14 (b) (Housing or Persons Displacement) Less than Significant Impact: The proposed project would introduce 402 new residential units and 5,129 square feet of commercial uses to a currently undeveloped site adjacent to existing transit and within close proximity to goods and services in downtown Petaluma. The site is identified as a housing opportunity site and the proposed development is consistent with densities envisioned by the SmartCode and Mixed-Use General Plan land use designation. The project will not displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere and therefore will have a less than significant impact under this criterion.

Population and Housing Mitigation Measures: None required.

4.15. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation	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, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sources: City of Petaluma 2025 General Plan and EIR; and City of Petaluma CPSP and EIR.

Public Services Setting: The City of Petaluma charges one-time impact fees on new private development to offset the cost of improving or expanding City facilities to accommodate the demand generated by new development. Impact fees are used to fund the construction or expansion of capital improvements. Petaluma also collects impact fees for open space, parkland, and other amenities. Development impact fees are necessary to finance public facilities and service improvements and to pay for new development's fair share of the costs of City planned public facilities and service improvements identified to accommodate buildout of the General Plan.

The General Plan EIR concluded that with policies set forth in the General Plan, public services impacts would be less than significant. General Plan policy 7-P-12 requires the City to work with school districts to ensure availability of appropriate sites to accommodate needs of the City's School Districts. Policies 7-P-17 through 7-P-36 ensure that facilities, equipment and personnel are adequate to maintain police and fire protection services. Policies 7-P-22 through 7-P-24 ensure that emergency response equipment, personnel training, and critical facilities are adequate to serve the city in an emergency (e.g., earthquake, flood, severe storm events, etc.).

The CPSP EIR determined that implementation of the Specific Plan would result in less than significant impacts related to public services. As described in the CPSP and as standard practice as part of the development review process, the City requires the police and fire departments to review and approve project plans. As service demands warranted, additional police officers, fire fighters, and facilities are acquired through the City's general fund. The CPSP determined that there would likely be adequate enrollment capacity to support future development projects and that payment of school impact fees would provide funds to support school facility improvements as needed.

Public Services Impact Analysis:

4.15 (a-b) (Fire & Police Protection) Less than Significant Impact: The project site is located in central Petaluma in close proximity to established residential, commercial, and industrial uses and is well served by existing public services. The increase in residents and employees from the proposed project will result in an increase in demand for police and fire services. However, the incremental increase on fire and police services are anticipated by the CPSP and the General Plan and are accounted for with the City Facilities Development Impact Fees that are intended to offset the impacts of growing demand for fire and policing services.

General Plan policy 7-P-19 establishes a four-minute travel time and six-minute response time for emergencies within the City. The project is situated approximately 0.3 miles from Fire Station 1, located at 198 East D Street, 5.2 miles from Fire Station 2, located at 1001 N. McDowell Boulevard, and approximately 1.6 miles from Fire Station 3, at 831 S McDowell Boulevard. The project is within the response radii of Fire Station 1 and Fire Station 3 (General Plan EIR Figure 3.4-2) and travel time is achievable within the targeted four minutes. The project is consistent with the General Plan 2025 due to its location within an established four-minute travel and six-minute response time, the ability of emergency response vehicles to override traffic controls with lights, sirens, and signal pre-emption, and ability to travel in opposing travel lanes in congested conditions.

As stated in the CPSP EIR, development facilitated by the Specific Plan, including the proposed project, would increase the demand for emergency and non-emergency fire and police services, which may result in the need for additional personnel. Although additional fire and/or police service calls may occur as a result of the project, substantial new fire protection or police protection facilities will not be warranted to maintain necessary levels of service. As a standard condition of project approval, the applicant is required to pay all development impact fees applicable to a mixed-use development, including a facilities fee. These funds are sufficient to offset the cumulative increase in demands to fire and police protection services that may result from the new development, therefore the impacts on the City's emergency services are less than significant.

4.15 (c) (Schools) Less than Significant Impact: The Project will not result in a substantial increase in student enrollment requiring new school facilities. The project site is located within the Petaluma Unified School District which includes elementary (K-6) and secondary (7-12) educational services. The nearest schools to the project site include McKinley Elementary School, located approximately one mile north on Ellis Street, Petaluma Junior High School, located approximately 1.7 miles west of the site on Bantam Way, and Petaluma High School, located approximately 1.2 miles west on Fair Street. The General Plan projects that the Petaluma Unified School

District will experience a slight increase in enrollment, but that the projected enrollment would not exceed the existing capacity of the public elementary schools located within the city limits. Overall, the projected enrollment for public elementary schools would decline and would utilize 93.9 percent of current capacity. Adequate school facilities are in place to accommodate the increase in enrollment associated with development of the proposed 402 multi-family units. Furthermore, the project is subject to the payment of statutory school impact fees to offset any cumulative impacts on the school system. Therefore, the proposed project will have less than significant impacts to schools.

4.15 (d) (Parks) Less than Significant Impact: The City has adopted a citywide parks standard of five acres of parkland per 1,000 residents. The nearest existing parks to the project site include Steamer Landing Park, located approximately 250 feet south of the project site, Cavanaugh Park located west of the site at the Turning Basin, Walnut Park, located 0.4 miles west, and Wickersham Park, located 0.6 miles south west. The project also proposes a publicly accessible linear park, which comprises a total of approximately 0.4 acres of the project site.

Existing and proposed parks in the vicinity of the project site provide recreational opportunities to future residences and employees. The anticipated population associated with the project will not constitute a substantial growth in population and has been anticipated by the General Plan. Existing and proposed park facilities are expected to be sufficient to meet active and passive recreational demands of new residents and employees introduced to the project site. A substantial adverse impact to park facilities is not expected to occur from implementation of the project. Therefore, impacts to park lands as a result of project will be less than significant.

4.15 (e) (Other Public Facilities) No Impact: The Project will not result in substantial adverse impacts associated with other public facilities. The project area is within close proximity to established residential, commercial, and industrial uses and is well served by existing public services and facilities. The project will not generate a substantial increase in demands that warrant the expansion or construction of new public facilities. Therefore, there would be no impacts related to other public facilities.

Public Services Mitigation Measures: None required.

4.16. RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma Central Petaluma Specific Plan and EIR; City of Petaluma SMART Rail Station Areas: TOD Master Plan and Appendix A: SmartCode Amendments; California Protected Areas Database, 2019; Bay Area Ridge Trail, Helen Putnam Regional Park and City of Petaluma Ring Trail, accessed December 2019; Petaluma Station Transportation Impact Study, prepared by Fehr & Peers, November 2020; and Architectural Plans, prepared by AO Architects, August 21, 2020.

Recreation Setting: The City of Petaluma offers a variety of passive and active recreational opportunities within the UGB with approximately 18% of land (1,300 acres) devoted to parks and open space according to the

Petaluma General Plan 2025. Sonoma County and the State also operate parks and recreational facilities near the City of Petaluma. Petaluma Adobe State Historic Park, east of the City limits, is owned and operated by the California State Parks Department. The 256-acre Helen Putnam Regional Park, located in the southwestern edge of the city, is managed by the Sonoma County Regional Parks Department. Regional trails traverse the City limits as existing and proposed sections of multi-county trail networks that span the nine-county region, including the Bay Area Ridge Trail and San Francisco Bay Trail. The City of Petaluma and Sonoma Water own and maintain most of Petaluma's creeks and channels, with several waterways designed to include a multi-use trail alongside banks. These creekfront and riverfront trails contribute to outdoor recreational opportunities.

The General Plan sets forth policies and programs intended to retain and expand recreational resources to maintain and improve quality of life. Policy 6-P-1 seeks to develop additional parkland and recreational facilities in areas where facilities are currently lacking and where new growth is proposed in order to meet the park acreage standard of 5 acres per 1,000 residents, or approximately 0.005 acres of park space per resident as set forth in General Plan Policy 6-P-6. Park land development and open space acquisition impact fees are imposed as a standard condition of approval to help offset any potential impacts on recreation resources generated by development projects.

Existing parks within close proximity of the project site include Steamer Landing Park, which is located approximately 250 feet south of the project site adjacent to the Petaluma River, Cavanaugh Landing, located at the Turning Basin proximate to the project site, Walnut Park, which is located approximately 0.4 miles west of the project site at the intersection of Petaluma Boulevard South/D Street, and Wickersham Park, which is located approximately 0.6 miles south west of the site at the corner of G Street/Fourth Street.

In addition to the City's General Plan, the CPSP and SAMP call for mixed-use neighborhoods with public open spaces that provide for informal outdoor social activity and recreation. The SAMP specifically calls for a new east-west Transverse Street and linear park bisecting the project site between Copeland Street and a newly envisioned north-south Transverse Street that would run parallel to the project site's eastern property boundary. The new Transverse Street and linear park are intended to provide open space for residents, transit riders, and visitors as well as provide vehicular access to the SMART station to address circulation issues on surrounding roadways. As described above under Land Use and Planning (Section 4.11), the project proposes to exclude vehicular access onto Transverse Street and instead provide for a linear park accessible to pedestrians and bicyclists.

The project proposes to provide both public and private open space throughout the project site. The east-west Transverse Street is designed as a linear park and pedestrian/bicycle thoroughway. As previously discussed, the SAMP envisions the east-west Transverse Street as also having vehicular access, however, due to prohibitive costs of obtaining the land necessary to develop the street, the project is proposing to provide only bicycle and pedestrian access. Features of the linear park include two seven-foot wide pedestrian paths on either side, a 10-foot wide, two-way cycle track restricted to use only by bicycles on the south end, a 28-foot wide social lawn, a plaza with splash pad fountain, a food truck plaza, and retail dining areas. Other amenities include water fountains, water bottle filling stations, and benches. All features of the Transverse Street are publicly accessible and measure 60 feet in total width. Semi-private open space, which will be limited to use by residents is provided in interior courtyard areas. Each courtyard contains a clubhouse, pool, jacuzzi, cabana, outdoor kitchen/dining area, fire table lounge, and dog areas. Additionally, private open space is provided in the form of deck and patio areas.

The project also includes installation of bicycle and pedestrian facilities. New facilities include a Class IV bicycle facility along the East D Street frontage, which will align with the Class IV bicycle facility proposed to the west along the Haystack project site's East D Street frontage, and sidewalks along East D Street, East Washington Street, and Copeland Street. The Class IV bicycle facility will be separated from vehicular traffic by a physical landscaping and a bus shelter barrier and is intended for bicycle use only. Sidewalks along East D Street and East Washington Street will measure 15 feet in width with pinch points narrowing the sidewalk to approximately 12.5 feet and 13.5 feet, respectively. The sidewalk along Copeland Street will measure 17 feet in width.

Recreation Impact Analysis:

4.16 (a-b) (Park Deterioration and Recreation Facilities) Less Than Significant Impact: The project will result in an incremental increase in the use of nearby parks and multi-use trail systems including Lynch Creek Trail, the Petaluma SMART Trail, Steamer Landing Park, Cavanaugh Landing, Walnut Park, and Wickersham Park. Increased park use as a result of implementation of the project would not result in substantial physical deterioration of facilities nor would deterioration be accelerated. Furthermore, the project proposes to include publicly accessible recreational facilities that will be utilized by residents of the project as well as nearby residents, patrons of retail and commercial uses, and individuals walking/biking to and from the SMART station. Additionally, park and open space-related development impact fees will be imposed on the project and funds are used to maintain existing park facilities and to acquire and development additional parkland consistent with the City General Plan. Therefore, impacts related to the physical deterioration of parks and other recreational areas as a result of the project would be less than significant.

4.16 (b) (Recreation Facilities) Less Than Significant Impact: The proposed mixed-use project will introduce 402 multi-family residential units and approximately 5,129 square feet of retail space which is expected to introduce approximately 1,160 new residents and employees as park users to the City’s existing recreation resources. The project includes installation of bicycle and pedestrian frontage improvements including a Class IV, physically separated bicycle facility along the entirety of the East D Street frontage, and new sidewalks on East Washington Street, Copeland Street, and East D Street. The project will also install a linear park (Transverse Street) with amenities including bicycle and pedestrian facilities. The installation of the new Transverse Street will result in a new publicly accessible recreational facility; however, it is not anticipated that implementation of the linear park would result in an adverse physical impact on the environment. The project, including the proposed onsite recreational facilities have been reviewed to determine potential impacts, and where appropriate, mitigation measures have been imposed. As such, construction of the proposed linear park will not result in an adverse physical effect on the environment and impacts would be less than significant.

Recreation Mitigation Measures: None Required.

4.17. TRANSPORTATION

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

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma CPSP and EIR; City of Petaluma Bicycle and Pedestrian Plan 2008; Technical Advisory on Evaluating Transportation Impact in CEQA, prepared by the California Office of Planning and Research, December 2018; Traffic Impact Study, prepared by Fehr & Peers, November 2020; Civil Engineering Plans, prepared by CSW/Stuber-Stroeh Engineering Group, Inc., August 21, 2020.

Transportation Setting: The City of Petaluma is bisected by Highway 101, which serves as the primary route between San Francisco and Marin and Sonoma Counties. Highway 101 accommodates over 90,000 vehicles per day, within Petaluma. The City is served by several bus operators including Golden Gate Transit, Sonoma

County Transit, Petaluma Transit, and Sonoma Marin Area Rail Transit (SMART). The SMART rail corridor bisects the city and provides commuter rail service via Petaluma's Downtown Station. The circulation system within the City of Petaluma consists of approximately 140 miles of streets including arterials, collectors, connectors, and local streets. The City's roadway system also includes a bicycle network, sidewalks, and off-street trails.

Level of service (LOS) has historically been used as a standard measure of traffic service within the City of Petaluma and focuses on delay-based criteria. The City of Petaluma, through General Plan policy 5-P-10 establishes a goal of maintaining a LOS 'D' or better. Although LOS was formerly an acceptable measure for evaluating traffic impacts under CEQA, as of July 1, 2020, jurisdictions in California must comply with CEQA Guidelines section 15064.3(b), which requires analysis of transportation-related impacts using a vehicle miles traveled (VMT) metric. The VMT metric focuses on balancing the needs of congestion management with statewide goals related to infill development, promotion of public health through increased active transportation facilitated by closer proximity to alternative travel modes, and the reduction of greenhouse gas emissions.

In December 2018, the California Governor's Office of Planning and Research (OPR) published the *Technical Advisory on Evaluating Transportation Impacts in CEQA*¹⁵, which provides technical recommendations for evaluating a project's transportation impact using a VMT metric, including thresholds of significance and mitigation measures. Pursuant to Government Code Section 15064.3(b), lead agencies have discretion to select the most appropriate methodology for evaluating a project's VMT impacts. On June 18, 2020 and on July 30, 2020 the City of Petaluma VMT Technical Advisory Committee (TAC) met to discuss the development of Petaluma's VMT program including the appropriateness of OPR's recommended threshold of significance (15% below base level VMT per capita), screening criteria for specific project types, and mitigation options. At a future VMT TAC meeting Draft VMT Implementation Guidelines will be discussed. Following input from the VMT TAC, the Draft VMT guidelines will be considered by the Planning Commission who will serve as a recommending body for City Council, who will consider adopting VMT Implementation Guidelines for the City of Petaluma.

To date the City of Petaluma has not adopted VMT thresholds or guidelines. In the absence of locally adopted thresholds, the City of Petaluma is relying upon recommendations set forth in OPR's Technical Advisory.

CEQA Guidelines section 15064.3 subdivision (b)(1) provides specific qualitative conditions under which a project can be presumed to result in a less than significant transportation impact. This includes projects that are located within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor or projects that decrease vehicle miles traveled in the project area as compared to existing conditions. Public Resources Code Section 21064.3 defines a major transit stop as an existing rail transit station, a ferry terminal serviced by either a bus or rail transit, or the intersection of two or more major bus routes with a frequency of 15 minutes or less during the morning and afternoon peak commute periods. A high-quality transit corridor is defined under Public Resources Code Section 21155 as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

As previously stated, projects that meet certain screening criteria can be qualitatively determined to have a less than significant impact. Projects that do not meet these, or other locally adopted screening criteria are required to conduct a quantitative analysis to determine the project's impact as it relates to the generation of VMT. The project meets the screening criteria based on its location near transit, however, since the residential portion of the project proposes to provide parking in excess of the minimum requirements set forth in the SmartCode, a qualitative analysis of VMT was required. As such, a Traffic Impact Study (TIS) was prepared by Fehr & Peers for the project and analyzes the project's potential transportation-related impacts including VMT generation, potential conflicts with plans and policies related to operation of the overall transportation system, hazards, emergency access, and potential impacts during construction (**Appendix G**).

The project site is located west of Highway 101 in central Petaluma at 315 East D Street and is bordered by the existing downtown SMART Station, East Washington Street, East D Street, and Copeland Street, which supports Transit Mall. East Washington Street is an east-west major arterial and transit route that carries approximately 24,000 vehicles per day and provides connection over the Petaluma River to the City's downtown west of the project site and to Highway 101 east of the project site. Regionally, East Washington Street carries

¹⁵ http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

traffic west to Bodega Bay as well as other portions of Sonoma County. East D Street is a two-lane east-west arterial that also provides connection over the Petaluma River to the City's downtown as well as beyond the City limits to rural west Marin County. Copeland Street is a two-lane north-south street that provides access to existing industrial uses north and south of the project site. The Transit Mall on Copeland Street provides local and regional connections between Petaluma Transit, Sonoma County Transit, Golden Gate Transit, and the SMART train.

Transit Facilities

The project site is immediately adjacent to the Copeland Street Transit Mall, and is served by fixed route bus service operated by Petaluma Transit including routes 10, 24, and 11, Sonoma County Transit routes 40, 44, and 48, and Golden Gate Transit routes 100, 101X, and 74. A summary of existing transit routes is provided below. The site is also located adjacent to the Downtown Petaluma SMART station which provides regional service between the Sonoma County Airport to the north and Larkspur to the south. Future SMART service is proposed to extend as far north as Cloverdale.

- **Petaluma Transit Route 10** operates Monday through Friday from 7:30 am to 6:30 pm with one-hour headways and provides services between the Downtown Petaluma SMART Station and Petaluma Boulevard/Gossage Avenue to the north.
- **Petaluma Transit Route 24** operates Monday through Friday from 6:15 am to 7:10 pm with 30-minute headways during peak hours and one-hour headways during off-peak hours. Route 24 provides service between the Downtown Petaluma SMART Station and the Kaiser Medical Center in the southwest portion of the City.
- **Petaluma Transit Route 11** operates Monday through Friday from 6:30 am to 8:30 pm and Saturday and Sunday from 7:30 am to 8:30 pm with 30-minute headways. Route 11 runs primarily along East Washington Street and provides access between downtown and the Washington Square retail center.
- **Sonoma County Transit Route 40** operates Monday through Friday with greater than one-hour headways and provides access between downtown Petaluma and Sonoma.
- **Sonoma County Transit Route 44 and 48** operate Monday through Sunday with approximately one-hour headways during the weekdays. Both routes provide service between downtown Petaluma and Santa Rosa.
- **Golden Gate Transit Route 101 and 101X** operate Monday through Sunday with approximately one-hour headways during the weekdays. Both routes provide service between San Francisco and Santa Rosa.
- **Golden Gate Transit Route 74** operates Monday through Friday during the morning and afternoon commute period and provides access between San Francisco and Santa Rosa.

Bicycle Facilities

The City's Bicycle and Pedestrian Plan and Figure 5-2 of the General Plan identify existing and proposed bicycle routes throughout the City. Existing Class I bicycle facilities in the vicinity of the project site include the Lynch Creek Trail, which is accessible via Lakeville Street, approximately 0.4 miles north of the project site and the SMART Trail between Payran Street and Southpoint Boulevard, approximately 1.1 miles northeast of the project site. Existing Class II facilities in the project vicinity are located along East D Street from the City limits to Fourth Street, Caulfield Lane between Lakeville Street and Ely Boulevard, along Johnson Street, and along Lakeville Street from the Highway 101 interchange to East D Street. Existing Class III bicycle routes are located on Lakeville Street from East D Street to Petaluma Boulevard, on East D Street from Fourth Street to Payran Street, and along Petaluma Boulevard, East Washington Street, Payran Street, and Ellis Street.

The project proposes installation of a Class IV, physically separated bicycle facility along the East D Street frontage which will align with the Class IV bicycle facility proposed along the adjacent Haystack project site's East D Street frontage. The proposed Class IV bicycle lane will be a one-way, five-foot-wide lane with a physical barrier between the path and vehicle travel lanes, consisting of landscaping, curb, and a bus shelter. A cycle track is also proposed along the south end of the Transverse Street area and will include a two-way facility

measuring 10 feet in width with each lane being five feet in width. The cycle track is physically separated from both vehicular traffic as well as sidewalks and other pedestrian facilities. Secured bicycle parking will be provided in each building on the East Washington Street and East D Street frontages. Bicycle parking rooms will be accessed directly from the street frontage or from interior hallways and will contain a total of 108 secured spaces for both short- and long-term parking including 36 spaces in the North Building and 72 spaces in the South Building. Unsecured bicycle parking racks accommodating up to two bicycles per rack will be provided on East Washington Street (1 rack), Copeland Street (6 racks), East D Street (4 racks), and on Transverse Street (12 racks) for a total of 46 unsecured bicycle parking spaces. In addition to bicycle parking, the project also proposes to install a bicycle share station with five bicycles on the Copeland Street sidewalk where it intersects with the Transverse Street.

Pedestrian Facilities

Existing pedestrian facilities in the vicinity of the project site include sidewalks, crosswalks, and ADA curb ramps. Sidewalks generally measuring five feet in width currently exist on all frontages of the project site. One midblock crosswalk is located on Copeland Street and provides access to the Transit Mall. Other crosswalks in the vicinity of the project site include signalized crossings at the north, east, and west legs of East D Street/Lakeville Street, all legs of East Washington/Lakeville Street, and all legs of East Washington Street/Copeland Street. The East D Street/Copeland Street intersection contains two unsignalized crosswalks with rapid rectangular flashing beacons (RRFBs) to alert drivers to crossing pedestrians. The project proposes to install sidewalks of up to 15 feet in width along East D Street and East Washington Street with areas of the sidewalks narrowing to approximately 13.5 feet on East Washington Street and 12.5 feet on East D Street. A sidewalk width of 17 feet is proposed along Copeland Street.

Transportation Impact Analysis:

4.17 (a) (Conflicts with Plans, Policies, Ordinances) Less Than Significant Impact with Mitigation: The proposed project is generally consistent with City’s plans, policies, and ordinances relating to the circulation system including policies and regulations contained in the City’s General Plan, CPSP, SAMP, SmartCode, and zoning ordinance.

As previously stated, CEQA no longer relies on LOS to determine a project’s potential to result in environmental impacts. However, the Traffic Impact Study evaluated LOS at twelve study intersections to determine the project’s potential to conflict with established policies related to motor vehicle circulation. General Plan Policy 5-P-10 establishes a standard of LOS D to ensure efficient traffic flow that supports multi-modal mobility goals. Policy 5-P-10 further provides that a lower level of service may be considered acceptable if circulation improvements would conflict with the General Plan’s guiding principles including those which seek to provide a range of attractive and viable transportation alternatives. To determine the project’s contribution to traffic on area roadways and consistency with General Plan Policy 5-P-10, the TIS included an analysis of the project’s anticipated trip generation, which was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual, 10th Edition, 2017* for Multifamily Housing Mid-Rise (ITE LU #221) and Shopping Center (ITE LU #820). Additionally, the analysis utilized MXD+ methodology, which accounts for trips generated by mixed-use projects by capturing travel within the project between land uses, and non-vehicular travel to and from the project site. As shown below, the project would result in 2,061 new daily trips including 130 during the a.m. peak hour and 169 during the p.m. peak hour.

Table 11: Project Trip Generation

Land Use	Daily		AM Peak Hour		PM Peak Hour	
	Rate	Trips	Rate	Trips	Rate	Trips
Base Trip Generation from ITE Trip Generation Manual, 10th Edition						
Multifamily Residential Mid-Rise (402 du)	5.44	2,187	0.36	145	0.44	177
Shopping Center (5.13 ksf)	37.82	194	0.97	5	3.90	20
ITE Trip Generation Subtotal	-	2,381	-	150	-	197
MXD+ Trip Reductions						

Internal	-1.4%	-34	-1.3%	-2	-3.0%	-6
Transit	-4.2%	-101	-4.0%	-6	-4.1%	-8
Walk/Bike	-7.8%	-185	-7.9%	-12	-7.1%	-14
Total External Vehicle Trips	-	2,061	-	130	-	169

du = dwelling unit; ksf = thousand square feet

Source: Traffic Impact Study prepared by Fehr & Peers, November 2020, Table 5

The TIS analyzed LOS for twelve study intersections, under six scenarios including existing, existing plus project, pipeline, pipeline plus project, cumulative, and cumulative plus project. The projected LOS at the twelve study intersections for each scenario is further described below, but is not used to assess environmental impacts under CEQA. Rather LOS is provided for informational purposes to understand operating conditions with and without the proposed project.

Existing and Existing Plus Project

As shown in **Error! Reference source not found.** all intersections, with the exception of East D Street/Copeland Street operate acceptably at LOS D or better under the existing conditions scenario. Due to the stop-controlled configuration on Copeland Street, this intersection was analyzed at LOS F during the pm peak hour which is a result of vehicles waiting at the stop sign for adequate clearance to turn onto East D Street. However, as noted in the TIS, it is likely that this intersection operates more efficiently in real-world conditions as through traffic traveling on East D Street periodically allows vehicles from Copeland Street to enter the roadway, especially during periods of congestion when vehicle speeds are reduced. With the exception of Lakeville Street/East D Street¹⁶, which would operate at LOS E during the pm peak hour, the addition of project generated traffic to existing conditions would result in a marginal increase in delay at the twelve study intersections during the am and pm peak hours. Additionally, side street delay for the worst approach at East D Street/Copeland Street is expected to degrade from LOS B to F during the am peak hour and will continue operating at LOS F during the pm peak hour under existing plus project conditions.

Pipeline and Pipeline Plus Project

The pipeline no project scenario analyzes intersection operations associated with traffic generated by projects which have been approved and are reasonably foreseeable to be operating within the next five to ten years whereas the pipeline plus project scenario analyzes intersection operations associated with pipeline and project generated traffic. Pipeline projects include two commercial projects (Adobe Road Winery and Valero Gas Station), four mixed use projects (Riverfront 2010, Haystack Mixed-Use, Scannell Mixed Use and North River Apartments) and six residential projects (109 Ellis Street, Riverview Apartments (formerly Baywood), Sepaher Residential, East Washington Commons, Sid Commons, and Riverbend). Under the pipeline no project scenario, four study intersections are projected to degrade to LOS D, E or F during the am and pm peak hour including Lakeville Street/East Washington Street, Lakeville Street/East D Street, East Washington Street/Copeland Street, and East D Street/ Copeland Street. With the addition of project generated traffic to pipeline conditions, these four intersections will continue to operate at degraded LOS E or F during the am and pm peak hour.

Cumulative and Cumulative Plus Project

Under cumulative and cumulative plus project conditions Lakeville Street/East Washington Street and Lakeville Street/East D Street will operate at LOS F during the am peak hour and will continue operating at LOS F during the peak hour. Similarly, East D Street/Copeland Street will operate at LOS E/F during the am and pm peak hour with and without the project under cumulative conditions. E. Washington Street/Copeland Street will operate at deficient LOS E without the project during the pm peak and with the project this intersection will

¹⁶ The City of Petaluma adopted a statement of overriding considerations for this intersection as part of the General Plan EIR recognizing that deteriorated LOS would result from General Plan implementation and that options to mitigate deficient operations would conflict with other General Plan objectives.

degrade to LOS F during the pm peak hour. Lakeville Street/Caulfield Lane will operate at LOS F during the peak hours with and without the proposed project.

Table 12: LOS Intersection Operations Analysis

Intersection	Peak Hour	Existing Delay (LOS)	Existing Plus Project Delay (LOS)	Pipeline No Project Delay (LOS)	Pipeline Plus Project Delay (LOS)	Cumulative No Project Delay (LOS)	Cumulative Plus Project Delay (LOS)
Lakeville St/E Washington St	AM PM	38 (D) 48 (D)	41 (D) 54 (D)	74 (E) 123 (F)	78 (E) 150 (F)	83 (F) 93 (F)	95 (F) 85 (F)
Lakeville St/E D St	AM PM	45 (D) 53 (D)	45 (D) 79 (E)	76 (E) 139 (F)	86 (E) >150 (F)	125 (F) 124 (F)	125 (F) >150 (F)
Lakeville St/Caulfield Ln	AM PM	21 (C) 30 (C)	21 (C) 30 (C)	29 (C) 43 (D)	30 (C) 45 (D)	>150 (F) 143 (F)	>150 (F) 146 (F)
E Washington St/101 NB Ramps	AM PM	10 (A) 15 (B)	9 (A) 14 (B)	10 (B) 17 (B)	10 (A) 17 (B)	7 (A) 9 (A)	7 (A) 9 (A)
E Washington St/101 SB Ramps	AM PM	31 (C) 32 (C)	30 (C) 32 (C)	30 (C) 35 (C)	30 (C) 37 (D)	37 (D) 44 (D)	38 (D) 45 (D)
E Washington St/Ellis St	AM PM	18 (B) 31 (C)	17 (B) 30 (C)	18 (B) 33 (C)	18 (B) 33 (C)	30 (C) 40 (D)	30 (C) 40 (D)
E Washington St/Payran St	AM PM	28 (C) 33 (C)	28 (C) 34 (C)	31 (C) 43 (D)	32 (C) 45 (D)	47 (D) 53 (D)	47 (D) 54 (D)
E Washington St/Copeland St	AM PM	14 (B) 24 (C)	17 (B) 22 (C)	38 (D) 106 (F)	53 (D) 110 (F)	25 (C) 75 (E)	32 (C) 85 (F)
E Washington St/Petaluma Blvd S	AM PM	46 (D) 43 (D)	45 (D) 43 (D)	48 (D) 51 (D)	49 (D) 52 (D)	52 (D) 41 (D)	53 (D) 42 (D)
E D St/Copeland St ¹	AM PM	5/35 (A/D) 13/79 (B/F)	11/72 (B/F) 33/>150 (D/F)	13/107 (B/F) 51/>150 (F/F)	29/>150 (D/F) 53/>150 (F/F)	45/>150 (E/F) 50/>150 (E/F)	40/>150 (E/F) 45/>150 (E/F)
E D St/Petaluma Blvd S	AM PM	26 (C) 48 (D)	25 (C) 47 (D)	26 (C) 50 (D)	26 (C) 50 (D)	28 (C) 51 (D)	28 (C) 52 (D)
E D St/First St	AM PM	12 (B) 13 (B)	12 (B) 12 (B)	18 (B) 27 (B)	18 (B) 17 (B)	14 (B) 41 (D)	14 (B) 43 (D)

¹ E D St/Copeland St was evaluated as a side-street stop-controlled intersection. The delay noted in each scenario includes the whole intersection average delay/worst movement delay

Bold indicates intersections operating at LOS E or F, which is below the City’s established LOS D standard

Source: Traffic Impact Study prepared by Fehr & Peers, November 2020, Tables 7, 8, 9, and 10

Potential traffic operation improvements were considered to address the project’s impact on traffic operations at Lakeville Street/East Washington Street, Lakeville Street/East D Street, Lakeville Street/Caulfield Lane, East Washington Street/Copeland Street, and East D Street/Copeland Street. Potential improvements considered by the TIS included the following:

- **Lakeville Street/East Washington Street:** signal timing, additional turn pockets
- **Lakeville Street/East D Street:** signal timing, additional turn pockets
- **Lakeville Street/Caulfield Lane:** signal timing, restriping to provide dedicated turn pockets
- **East Washington Street/Copeland Street:** signal timing, extending existing turn pockets, additional turn pockets
- **East D Street/ Copeland Street:** Installation of traffic signal

At Lakeville Street/East Washington Street, Lakeville Street/East D Street, and East Washington Street/ Copeland Street, signal timing is influenced by grade crossing events associated with operation of the SMART train, which limit the effectiveness and therefore were not recommended as intersection operation improvements. Expansion of roadway widths at these intersections was also considered and determined to be infeasible due to right-of-way constraints. Additionally, expanding roadway widths would be in conflict with the City’s General Plan as it would impact the multi-modal goals set forth in several policies. As such, the addition of turn pockets was not recommended.

As stated in the TIS, signal timing adjustments and restriping of the existing lane configuration at the Lakeville Street/Caulfield Lane intersection could decrease the overall intersection delay under the cumulative plus project scenario, resulting in LOS D during the am peak hour and LOS E during the pm peak hour. These improvements would not be in conflict with the goals of the General Plan as no additional right-of-way would be necessary and though the improvements would not reduce the pm peak hour LOS to the identified standard of D or better, this intersection was deemed acceptable to operate at a lower LOS due to physical constraints that limit feasible improvements. Installation of a traffic signal at the East D Street/Copeland Street intersection was deemed feasible and would result in LOS D during the am and pm peak hour under the cumulative plus project scenario. As such, as a condition of approval the project is required to pay a proportional share of the cost for signalization of Copeland Street/East D Street. In addition to paying a proportional cost for signalization of the intersection, the project will also be subject to standard conditions of approval which require the applicant to pay applicable transportation development impact fees, which fund routine signal maintenance activities. Compliance with standard conditions of approval and uniformly applied development standards will ensure that the project does not result in potential conflicts with General Plan Policy 5-P-10.

Transit Facilities

As previously discussed, the Traffic Impact Study analyzed the projects anticipated trip generation, including non-vehicular trips. As shown in Table 11, the project is anticipated to generate 101 new daily transit trips including 6 trips during the am peak hour and 8 trips during the pm peak hour. The increase in transit trips associated with the project will be distributed across SMART, Petaluma Transit, Sonoma County Transit, and Golden Gate Transit and does not represent a significant increase for any one transit service.

As proposed, the project will provide transit improvements to the Copeland Street Transit Mall including reconfiguration of the existing bus gates, installation of four new City-standard bus shelters, new benches, bicycle racks, drinking fountains/water bottle filling stations, and trash and recycling bins. Existing red curbs will be repainted and one new "No Parking Bus Stop" sign for each bus gate will be installed. Additionally, two LED information signs will be installed between gates and will provide transit riders with real-time updates for various routes. The existing stop on East D Street will be re-aligned and will continue to have a 100-foot-long pull-out with associated red curb and no parking signs. Additional improvements include a new bus shelter with two six-foot benches and two four-foot benches, four bicycle racks, trash and recycling bins, and one new LED information display providing real-time transit updates. The project is consistent with goals and policies set forth in the General Plan including Policy 1-P-6, which encourages mixed-use development that will provide opportunities for increased transit access, and Policy 5-P-43 which supports efforts for transit oriented development around the Petaluma Depot as well as along the Washington Street transit corridor. As such, the project will not conflict with a plan, policy, or ordinance related to transit access and impacts to transit facilities as a result of the project will be less than significant.

Pedestrian and Bicycle Facilities

Currently, pedestrian access to the site is provided via existing crosswalks at the four nearest intersections including East Washington Street/Lakeville Street, East Washington Street/Copeland Street, Lakeville Street/East D Street, and East D Street/Copeland Street. Each intersection includes crosswalks at all legs with the exception of Lakeville Street/East D Street, where pedestrians are discouraged from crossing on the south leg via "no sidewalk" signage and the lack of a marked crosswalk. Three of the four intersections are signalized with the exception of East D Street/Copeland Street which is controlled by stop signs on Copeland Street and two RRFBs across East D Street, which pedestrians and bicyclists can use when crossing East D Street. East D Street/Copeland Street has been identified for future signalization in the CPSP and as previously noted, as a condition of approval the project will contribute its fair share towards this improvement. Additionally, one mid-block crossing currently exists along Copeland Street. Bicycle access to the site currently exists on East Washington Street and East D Street, which are classified as Class III bike routes and on Lakeville Street between the US- 101 Interchange and East D Street which is a designated Class II bike lane.

As proposed, pedestrians and bicyclists will access the site via East D Street, East Washington Street and Copeland Street using intersection crosswalks, mid-block pedestrian entryways or parking garage entrances. Consistent with the SAMP and CPSP, the project will also install a new east-west Transverse Street which will provide pedestrian and bicycle circulation through the project site. Though the Transverse Street was originally

intended to also provide vehicular access, the north-south Transverse Street envisioned by the plan has been deemed infeasible due to prohibitive costs associated with land acquisition and as such, access along the new east-west Transverse Street which bisects the project site will be limited to non-vehicular traffic. The Transverse Street will connect the mid-block crosswalk on Copeland Street and the Copeland Street Transit Mall and associated transit improvements with the Downtown Petaluma SMART station adjacent to the project site. The section of Transverse Street west of Copeland to Weller Street, is proposed as part of the Haystack Mixed-Use Project, which when fully constructed will provide through access between the SMART station to the Petaluma River waterfront as envisioned by the CPSP and SAMP.

As proposed, the project will expand existing sidewalks widths along East Washington Street and East D Street to 15 feet with certain points narrowing to approximately 12.5 and 13.5 feet respectively. Sidewalk widths along Copeland Street will be increased to 17 feet. Through the proposed narrowing of sidewalks to less than 15 feet on East Washington and East D Street deviates from the standards set forth in the SmartCode, deviations are permitted through approval of a warrant if it can be found that the deviation remains consistent with the overall intent of the code. The overall increased sidewalk widths as well as installation of pedestrian and bicycle amenities will improve non-vehicular access to the site consistent with the intent of the SmartCode. Proposed bicycle improvements include installation of a Class IV facility along East D Street, which will connect to the Class VI facility proposed by the Haystack Mixed-Use Project. As proposed, the Class IV facility will be grade separated with landscaping, curb, bus stop, and garage loading area providing a buffer to minimize conflicts between bicyclist, vehicles, buses, and refuse collection vehicles accessing the site. A Class IV two-way cycle track is also proposed on the south side of the new Transverse Street, providing physically separated bicycle access through the project site. Additionally, the project will provide 108 secured and 46 unsecured bicycle parking spaces, which exceeds the minimum bicycle parking requirements. Overall, the project will improve pedestrian and bicycle access to and from the site by expanding existing sidewalks, installing new bicycle facilities, and implementing the east-west Transverse Street. Additionally, as conditioned, the project will be required to comply with recommendations provided in the TIS including installation of audible warning devices to alert pedestrians along Copeland Street of vehicles exiting the garages, improvements to adjacent pedestrian crossings to provide ADA compliant access, installation of a high-visibility crosswalk and pedestrian crossing signs at the mid-block crossing on Copeland Street as well as a raised crosswalk or intersection, coordination with the City and adjacent Haystack Mixed-Use developer to install wayfinding signage with suggested pedestrian and bicycle paths of travel, and installation of a bicycle repair station consistent with the City's Bicycle and Pedestrian Master Plan. As proposed and conditioned, the project will not conflict with a plan, policy, or ordinance related to pedestrian and bicycle access and impacts to pedestrian and bicycle facilities as a result of the project will be less than significant.

4.17 (b) (Conflict with 15064.3(b) VMT) Less Than Significant Impact: As previously discussed, CEQA Guidelines section 15064.3 (b)(1) provides specific qualitative conditions under which a project can be presumed to result in a less than significant transportation impact. The commercial component of the project was considered to be local-serving, which tends to shorten trips and reduce VMT, and as such was considered to have a less than significant impact. The residential portion of the project meets the screening criteria based on its location near transit, however, since this portion of the project proposes to provide parking in excess of the minimum requirements set forth in the SmartCode, a qualitative analysis of VMT was included in the TIS to analyze the project's potential to conflict with CEQA Guidelines 15064.3(b). Absent locally adopted VMT thresholds, the City of Petaluma is relying on guidance set forth in OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which establishes that projects generating vehicle travel that is 15 percent or greater than the citywide VMT per capita would result in a significant environmental impact.

VMT analysis for the residential portion of the project was completed using the SCTA Travel Demand Model to estimate existing and existing plus project conditions. The version of the model utilized in the TIS relies on latest available data (2015 base year data and incorporates trip estimates beyond the County boundary to provide a better understanding of trip lengths beyond the City limits). Since the SMART train was not operational in 2015, the model does not account for travel behavior associated with use of SMART. The 2015 city-wide average of 19.3 VMT per resident was utilized to account for the impacts of 2017 and 2019 fires in Sonoma County as well as the 2020 COVID-19 pandemic. Based on a baseline of 19.3, the project would have to generate 16.4 VMT or less per resident to have a less than significant impact due to a conflict with Section 15064.3(b) of the CEQA Guidelines. The TIS utilized the 2020 home-based VMT for the traffic analysis (TAZ) in which the site is located, which is 13.3 VMT per resident. As such the project will have a less than significant impact with regard to a

conflict or inconsistency with CEQA Guidelines 15064.3(b), even though the project exceeds the minimum parking standard.

4.17 (c) (Geometric Design Feature Hazard) Less Than Significant Impact with Mitigation: Vehicular access to the site will be provided to each building via two new garages which are accessible via Copeland Street. Due to lower traffic volumes along Copeland Street as compared to East Washington and East D Street, vehicular access at the proposed locations were determined to be the best option for the project. The Traffic Impact Study utilized criteria contained in the Caltrans *Highway Design Manual* (HDM) which determines stopping sight distance requirements based on design speed of roadways. Bus stops along Copeland Street present periodic obstructions between motorists exiting garages and vehicles traveling northbound on Copeland Street toward East Washington Street. Other elements that could limit sight distance include landscaping, though as proposed and conditioned landscaping would not obstruct sight distances along Copeland Street.

As proposed, 50 feet of sight distance is available when buses are present adjacent to proposed garages. A 50-foot sight distance corresponds to a design speed of 10 mph, whereas Copeland Street has a design speed of 25 mph, which requires a minimum stopping sight distance of 150 feet. As such, the project has the potential to result in significant impacts related to hazardous conditions associated with motorists exiting garages. **Mitigation Measures TRANS-1** requires that the project incorporate several measures to improve sight distance including consideration of bus stop positioning and increased red curb distance adjacent to garage access points, incorporation of traffic calming measures on Copeland Street, bus layover siting that avoids adjacency to garage access points, and landscaping design that avoids obstructing sight distances along Copeland Street. With implementation of measure TRANS-1, the project will result in less than significant impacts due to a design feature hazard.

4.17 (d) (Emergency Access) Less Than Significant Impact with Mitigation: Adequate emergency vehicle access is provided along East Washington Street, East D Street, and Copeland Street. The project does not propose substantial alteration of the existing roadway network nor will the project install new vehicular roadways. Furthermore, the site is located within one-half mile of an existing fire station and is within an established four-minute travel and six-minute response time for emergency vehicles. As such, at operation, the project will have a less than significant impact to emergency access.

The increase of construction vehicles traveling to and from the project site on a temporary basis could potentially result in significant impacts to area roadways including impacts to emergency vehicle access to the site and in the project vicinity. As such, the project shall be required to comply with **Mitigation Measure TRANS-2**, which requires review and approval of a Construction Management Plan. The Plan shall be required to develop construction truck routes, comprehensive traffic control measures, and notification procedures for public safety personnel. With implementation of measure TRANS-2, impacts to emergency access during project construction will be less than significant.

Transportation Mitigation Measures:

TRANS-1: The project shall be required to comply with the following:

1. The applicant shall coordinate with the City's Department of Public Works and transit operators to reposition bus stops on Copeland Street to meet industry standards for stopping sight distance for vehicles exiting the proposed garages. The project shall also increase the amount of painted red curb adjacent to garage access points.
2. The applicant shall work with the City's Department of Public Works to designate Copeland Street between East Washington Street and East D Street as a transit priority street, implement traffic calming strategies, and/or set a 15-mph speed limit, if consistent with local and state laws, to reduce the speed of traffic.
3. The applicant shall coordinate with the City's Department of Public Works and transit operators to site any planned bus layovers at bus gates that are not directly adjacent to garage access points to help maintain sight distances for vehicles exiting the garages.

4. Landscaping near garage access points, including installation of street trees, shall be designed to avoid obstruction of sight distances for vehicles exiting the garages.
5. Consider installing audible and visual warning devices at garage exist to alert pedestrian along Copeland Street when a vehicle is existing a garage.

TRANS-2:

A construction management plan shall be prepared for review and approval by the City of Petaluma Public Works Department. Additionally, activities that would potentially affect transit operations at the Copeland Street Transit Mall shall be reviewed by local and regional transit agencies, as needed. The plan shall include at least the following items:

1. Development of a construction truck route that would appear on all construction plans to limit truck and auto traffic on nearby streets.
2. Comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures if required, sidewalk closure procedures if required, cones for drivers, and designated construction access routes.
3. Evaluation of the need to provide flaggers or temporary traffic control at key intersections along the truck route(s).
4. Notification procedures for adjacent property owners and public safety personnel regarding schedules when major deliveries, detours, and lane closures would occur.
5. Location of construction staging areas for materials, equipment, and vehicles if there is insufficient staging area within the work zone of the proposed project.
6. Identification of truck routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety; provision for monitoring surface streets used for truck movement so that any damage and debris attributable to the proposed project's construction trucks can be identified and corrected by the proposed project applicant.
7. A process for responding to and tracking complaints pertaining to construction activity, including identification of an on-site complaint manager.
8. Documentation of road pavement conditions for all routes that would be used by construction vehicles both before and after proposed project construction. Roads found to have been damaged by construction vehicles shall be repaired to the level at which they existed prior to construction of the proposed project.

4.18. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

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

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma CPSP and EIR; Phase I Environmental Site Assessment, prepared by Pinnacle Environmental Inc.; and consultation with Federated Indians of Graton Rancheria.

Tribal Cultural Resources Setting: Petaluma’s tribal cultural resources contribute to the city’s unique character and identifiable sense of place. The City is named after the Petalumans, a group of native Americans whose main village was located at the base of Sonoma Mountain east of the Petaluma River. The city and adjacent areas contain resources that date to the inhabitation of the Petalumans as part of the larger Coastal Miwok Tribe.

Preparation of the CPSP included an archaeological records search at the Northwest Information Center, which did not indicate the presence of any recorded Native American sites within the Plan area. In accordance with PRC Section 21080.3.1(d), the City of Petaluma provided written formal notification to the Federated Indians of Graton Rancheria on September 3, 2020, which included a description of the proposed project and its location, City staff’s contact information, and a notification of the 30 day timeframe to request consultation. FIGR requested consultation, which was carried out on September 29, 2020 through a virtual conference call and subsequent correspondence. During the consultation process, FIGR noted that the project site contains alluvial deposits to depths of approximately 50 feet which could contain buried tribal cultural resources.

Tribal Cultural Resources Impact Analysis:

4.18 (ai) (Listed or Eligible for Listing) No Impact: As provided in the CPSP, there are no know Native American Sacred Site within or in the immediate vicinity of the project site. Furthermore, during the consultation process with FIGR, no Native American Sacred sites were identified. Therefore, the project would have no impact on a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).

4.18 (aii) (Significant Resource) Less Than Significant Impact with Mitigation: Due to the presence of alluvial deposits on the project site as well as the proximity to the Petaluma River, there is an elevated potential for the site to contain buried tribal cultural resources. Furthermore, given the sites historic use as a rail yard, there is an elevated potential to uncover buried cultural resources which may have been imported from an offsite location during construction of the rail lines that have existed since as early as 1888. As such, implementation of the proposed project has the potential to result in a significant impact to tribal cultural resources if encountered during ground disturbing activities. **Mitigation Measure TCR-1** requires implementation of mitigation measures provided under the Cultural Resources discussion, which ensures protection of cultural resources, including tribal cultural resources in the event of accidental discovery. With mitigation, the project will have a less than significant impact to tribal cultural resources.

Tribal Cultural Resources Mitigation Measure:

TCR-1: To avoid inadvertently causing a substantial adverse impact to tribal cultural resources that may be encountered during ground disturbing activities, the project shall be required to implement Mitigation Measures CUL-2 and CUL-3.

4.19. UTILITIES AND SERVICE SYSTEMS

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

Sources: City of Petaluma 2025 General Plan and EIR; City of Petaluma Central Petaluma Specific Plan and EIR; Stormwater Control Plan For a Regulated Project Petaluma Station, CSW/Stuber-Stroeh Engineering Group, Inc., June 19, 2020; Preliminary Maximum Applied Water Allowance - Landscape Plans, Sheet L6.0, Lemon Brooke, Aug. 21, 2020.

Utilities and Service Systems Settings: The City of Petaluma collects development and capacity fees on new construction within the City to support the maintenance and growth of public utility infrastructure, including water, wastewater, and storm drains. The project is subject to all applicable development fees.

Water Supplies

The City's water supply is sourced from the Russian River Water System and occasionally supplemented with local groundwater. Water from the Russian River Water System is obtained via the Petaluma Aqueduct through a contract with Sonoma Water (formerly Sonoma County Water Agency). The City's Water Resource and Conservation Division (WR&C) provides municipal water service to approximately 60,000 customers and therefore must comply with the Urban Water Management Plan Act, which requires the preparation of an Urban Water Management Plan (UWMP) every five years. In 2015, the City updated its UWMP including a baseline demand analysis in compliance with the interim 2015 Urban Water Use target. An Urban Water Use target analysis for 2020 projected water use through 2040 and identified programs intended to achieve the target water demand reductions. The City, in conjunction with Sonoma Water and other Sonoma County jurisdiction is in the process of preparing an updated to the UWMP, with expected adoption in 2021.

Based on the evaluation of future Russian River supply including minimum in-stream flow requirements, Sonoma Water expects to obtain water rights approvals necessary to increase its total diversions above 75,000

acre-feet per year (AFY) by 2027 and to 80,000 AFY by 2035. This assumption is based on the most likely outcome of decisions by regulatory agencies, implementation of the Restructured Agreement (executed in 2006), and proposed improvements to the water delivery system.

To assure that the City of Petaluma has sufficient water supplies to meet increased water demand, the General Plan requires routine monitoring of water supplies against actual use and evaluation for each new development project (Policy 8-P-4). Additionally, the Utilities and Public Services Chapter of the CPSP establishes policies that seek to construct an adequate water system to provide service and fire flow capacity to serve new development, require that all public water mains be constructed in the public right-of-way and dedicated to the City, and require public and private projects to conserve water resources and minimize discharge. Development of the project site at the proposed density has been planned for in the General Plan and EIR and captured in the water demand assumptions of the City's UWMP. The City's water supplies are sufficient to accommodate increased demand generated by the proposed project.

The project is subject to the latest building code standards, which require water efficiency for indoor and outdoor water uses. The City imposes a Maximum Applied Water Allowance (MAWA) for landscaping, which minimizes water use for irrigation. A preliminary report assessing the MAWA indicates that the project is able to achieve the MAWA targets by introducing a mix of low and moderate water demanding plants.

Wastewater

The Ellis Creek Water Recycling Facility treats all wastewater generated by the City of Petaluma and the unincorporated Sonoma County community of Penngrove. The collection system is comprised of approximately 195 miles of underground piping and nine (9) pump stations. The treatment capacity is about 6.7 million gallons per day (average dry weather flow). Approximately five (5) million gallons per day are treated under the existing wastewater generation condition, leaving approximately 1.7 million gallons in available treatment capacity. In the winter, secondary treated wastewater effluent is conveyed to the Petaluma River. During the summer, effluent receives tertiary treatment and the recycled water is used for irrigation of agricultural lands, golf courses, city parks, schools, and landscaped areas of residential and commercial development. The City's wastewater infrastructure and treatment facility are sufficient to accommodate increased demand from the proposed project.

Storm Drains

Within the City of Petaluma storm drains convey runoff from impervious surfaces such as streets, sidewalks, and buildings to gutters that drain to creeks and the Petaluma River and ultimately the San Pablo Bay. Most stormwater is untreated and carries with it any contaminants picked up along the way such as solvents, oils, fuels and sediment. The City has implemented a storm drain-labeling program to provide a visual reminder that storm drains are for rainwater only. The City's Stormwater Management and Pollution Control Ordinance, set forth in Chapter 15.80 of the City's Municipal Code, establishes the standard requirements and controls on the storm drain system. All existing and proposed development must adhere to the City's Stormwater Management and Pollution Control Ordinance.

CSW/Stuber-Stroeh Engineering Group, Inc. prepared a site-specific preliminary Stormwater Control Plan and a Preliminary Drainage Analysis. As described in the Stormwater Control Plan, conventional concrete and asphalt pavement will be used throughout the project site. The majority of runoff from roofs and pavement will be routed to onsite bioretention planters and other landscaped areas. Bioretention areas will be connected to new onsite (15-inch) storm drains located on either side of the new Transverse Street. New storm drains will connect to the existing storm drain system located in Copeland Street, which ultimately routes stormwater runoff to the Petaluma River.

Utilities and Service Systems Impact Analysis:

4.19 (a) (Relocation/Expansion of Utilities) Less Than Significant Impact: The project does not propose the use of any new natural gas and is currently served by existing electric power and telecommunication facilities. Proposed improvements include extending existing utilities to the site to accommodate the proposed mixed-use development. Two new 6-inch sewer laterals will be installed near the garage entry in each respective building and will connect to the existing 22-inch sanitary sewer line in Copeland Street, which

ultimately conveys flows to the regional wastewater treatment plant. In addition to the new laterals, the project also proposes to install two new manholes in Copeland Street at the point of connection, providing access for maintenance.

Consistent with policies set forth in the CPSP, the project will install new water utility infrastructure to accommodate the proposed project. The project includes installation of a new eight-inch water line that will connect to the existing six-inch water line east of the project site on the adjacent SMART property. The new eight-inch water line will run parallel to the eastern property line, extending to East D Street and will then extend west along the East D Street frontage, connecting with an existing water line at the intersection of East D Street/Copeland Street. Consistent with utility needs anticipated under the CPSP for the project site, a new eight-inch private water line will also be installed within the east-west Transverse Street. The new water line will connect to the existing water line in Copeland Street as well as to two new fire hydrants to be located within the Transverse Street area. The project will also install new water lines from each building to the existing water lines in East Washington Street and East D Street.

The project includes new storm drainage infrastructure to accommodate the increase in impervious surfaces resulting from development of the site. Onsite improvements include installation of a new storm drain within the onsite Transverse Street which will capture storm water onsite, connect to the existing storm drain within Copeland Street, and ultimately convey flows to the Petaluma River. Onsite storm drain infrastructure will be sized and designed to ensure that the project's outflows are maintained with the available capacity of the storm drain infrastructure. The new storm drain pipe will be installed in the same location as the existing pipe. The project proposes the use of bioretention planters, which will capture stormwater runoff during precipitation events and provide treatment prior to release into the City's stormwater drainage system.

The entitled Haystack Project proposed install a 30-inch storm drain within Transverse Street and extending offsite approximately 30 feet from the outfall in the Turning Basin. Consistent with the infrastructure improvements identified by the CPSP, the Hines project will upsize the final segment of an existing 15-inch storm drain pipe and outfall to the Turning Basin to a 30-inch diameter/outfall to accommodate storm water runoff.

Extension of utility and service systems is consistent with needs anticipated under the General Plan and CPSP. As stated in the CPSP EIR, replacement and upgrading of mains and subordinate lines in a looped system are expected to occur within existing City-owned rights-of-way, which will result in temporary construction-related impacts such as traffic, noise, and dust. The project will be required to implement BAAQMD best management practices to reduce dust emissions associated with construction, as set forth in Section 4.3 (Air Quality). The project is also subject to City of Petaluma noise regulations for construction activity and requirements for application of an encroachment permit when work is performed in the public right-of-way. With implementation of required best construction management practices and standard conditions of approval, the project will have less than significant impacts due to the expansion of existing storm water drainage facilities and extension of water and wastewater facilities.

4.19 (b) (Sufficient Water Supplies) Less Than Significant Impact: In evaluating the sufficiency of water supplies to meet existing water demands in addition to water demand generated by the proposed project, the City has compared General Plan 2025 projected water demand to actual use. In 2018 the City's average per capita water usage rate was 75.35 gallons per capita per day (GPCD).¹⁷ In tracking water use, the primary driver is the SB X7-7 20x2020 compliance requirement, which requires the City to calculate the baseline GPCD, a 2015 target, and a 2020 target. As presented in the City's UWMP the SB X7-7 GPCD target for the City of Petaluma, was 130.74 for the year 2018, which the City elected to track outside of standard requirement.¹⁸ Additionally, as presented in UWMP, the SB X7-7 GPCD target for 2020 is 136.¹⁹ Based on projected use and average per capita use as of 2018, the City is meeting the planned GPCD target and available Sonoma Water supplies. Therefore, existing supplies will be sufficient to meet demand of the project and existing and planned demands through 2035 as set forth in the 2015 UWMP.

¹⁷ *Water Usage Summary February 2019, City of Petaluma Department of Public Works.*

¹⁸ *City of Petaluma 2015 Urban Water Management Plan, Appendix D, page 23.*

¹⁹ *Ibid*

As noted in General Plan 2025 Policies 8-P-5-C and 8-P-19, the City anticipated continuing use of groundwater to meet emergency needs and to offset peak demands. Per Policy 8-P-4 of the Petaluma General Plan 2025, City staff is required to monitor actual demand for potable water in comparison to the supply and demand projections in the 2006 Water Supply and Demand Analysis Report. Based on the 2015 UWMP, the demand for potable water supplies in 2015 was 8,226 acre-feet for all uses including single and multi-family residential, commercial, industrial, institutional/governmental, and landscaping. By 2040 the water demand for buildout of the General Plan is projected to be 9,435 acre-feet per year.²⁰ The UWMP establishes a 2015 baseline daily per capita water use of 111 gallons based on a gross water use of 7,678 acre-feet per year. For year 2015, the UWMP concludes that the City complies with the 2020 water use target, which aims to achieve a 5% reduction in the per capita use relative to the 5-year baseline.

A comparison of actual demand for potable water was made relative to the annual Sonoma Water supply limit for Petaluma of 4,366 million gallons per year (13,400 acre-feet) and a peak supply limit of 21.8 million gallons per day. In both instances, potable demand is well within available supply capacity. The projected demand is less than 10,000 acre-feet.²¹ In recent years, tiered water rates, conservation efforts, and the conversion of Rooster Run Golf Course to recycled water have kept annual and peak demands within the available supply.

The UWMP establishes Demand Management Measures and a Water Shortage Contingency Plan (2016 Updated), which provide a means for water conservation and planning for periods of drought. Additionally, individual development projects are required to comply with the City's Water Conservation Ordinance for interior and exterior water usage, thereby minimizing water demands generated by new development. The UWMP concludes that there are sufficient water supplies to meet water demands projected by the General Plan.

The proposed project is consistent with development anticipated by the General Plan and water demands are captured in the 2015 UWMP for future year conditions. Additionally, the project will be subject to the latest California Building Code requirements including plumbing and water efficiency standards as well as the City's Water Conservation Ordinance, which will further reduce water demands generated by the proposed Project. Therefore, existing water supplies, facilities, and infrastructure are sufficient to meet the water demands of the project and future development during normal, single, and multiple dry year events. Impacts of the project to water supplies are considered to be less than significant.

4.19 (c) (Sufficient Wastewater Treatment Capacity) Less Than Significant Impact: The expected wastewater generated by the project is consistent with the service needs anticipated by the Petaluma General Plan 2025 and will not require the expansion of treatment facilities. Applicable City Wastewater Capacity fees will be collected to fund the project's share for use of wastewater facilities and planned improvements. Wastewater flows from the proposed project will be conveyed to the Ellis Creek Water Recycling Facility, which has sufficient operating capacity to handle the additional flows generated by the proposed project. There would be no new construction or expansion of wastewater facilities as part of the proposed project.

As a high density mixed-use project which has been anticipated by the General Plan and CPSP, the project is not expected to exceed wastewater treatment requirements set forth by the Regional Water Quality Control Board, nor necessitate the expansion or construction of wastewater treatment facilities. The estimated wastewater generation of the proposed project falls within the capacity of the existing sanitary sewer lines and the City's wastewater treatment plant. The project does not include any activities that would generate wastewater requiring special treatment nor would it contain constituents exceeding applicable standards. The project would not exceed wastewater treatment requirements and adequate treatment capacity would be available to accommodate wastewater generated by the project. Therefore, the project would have less than significant impacts to wastewater treatment facilities.

4.19 (d, e) (Solid Waste Generation/Compliance with Solid Waste Management) Less Than Significant Impact: Construction of the project will contribute to the generation of solid waste. As a mixed-use project located in central Petaluma adjacent to existing transit services, the amount of solid waste generated will be consistent with the service needs anticipated by the Petaluma General Plan and evaluated in the General Plan EIR. The project will be required to develop a construction waste management plan consistent with General Plan Policy 2-P-122 and as mandated by the California Green Building Standards Code. As such, the project

²⁰ City of Petaluma 2015 Urban Water Management Plan, Table 3-6, Total Water Demands.

²¹ See Item 4(B) of June 1, 2015 City Council agenda (<http://cityofpetaluma.net/cclerk/archives.html>).

will have a less than significant impact due to the generation and disposal of solid waste generated through construction of the proposed project including associated frontage and off-site improvements.

General Plan policy 4-P-21 requires waste reduction in compliance with the Countywide Integrated Waste Management Plan (CoIWMP) including requiring new development to incorporate sufficient, attractive, and convenient interior and exterior storage areas for recyclables and green waste and replacing bottled water with alternate sources of drinking water. The City is under contract with Recology for solid waste disposal and recycling services. Recology provides canisters for garbage, green (plant waste) materials, and recycling. Solid waste is collected and transferred to the Sonoma County landfill sites. Solid waste disposal facilities are owned and operated by the Sonoma County Department of Transportation and Public Works and the City maintains a franchise solid waste hauling agreement requiring the franchise hauler as part of its contractual obligations to select properly permitted Approved Disposal Location(s) with adequate capacity to serve city service needs.

The project would be provided with the same solid waste and recycling opportunities through the County’s existing waste management system via the City’s solid waste service provider. The project proposes to install drinking fountains with water bottle filling stations, which will help to reduce generation of waste associated with single-use plastic water bottles. Although the project would generate additional solid waste, it is not expected to exceed landfill capacity and is not expected to result in violations of federal, state, and local statutes and regulations related to solid waste. Therefore, the project will have a less than significant impact due to the generation and disposal of solid waste.

Utilities and Service Systems Mitigation Measures: None Required.

4.20. WILDFIRE

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sources: City of Petaluma 2025 General Plan and EIR; CalFire Fire Hazard Severity Zone Maps, Sonoma County, 2019; and Petaluma Fire Prevention Bureau, Fire Hazard Severity Zones.

Wildfire Setting: Petaluma is susceptible to wildland fires due to the steep topography, abundant fuel load such as trees, bushes and grassland surrounding the City, and climatic conditions. Areas most susceptible to fire hazards are located near the City limits and the Wildland Urban Interface Area. Lands surrounding the City of Petaluma that are within the State Responsibility Area are classified as moderate fire hazard severity zone to the west and south of the City and high and moderate to the east and north. The hills within the southern City limits are classified as Very High Fire Hazard Severity Zone (VHFHSZ) as part of the city's local responsibility areas determined by the Petaluma Fire Prevention Bureau.

In October 2017, the Tubbs Fire (Central LNU Complex) burned approximately 36,807 acres in Sonoma County. In October 2019, the Kincade Fire burned approximately 77,758 acres in Sonoma County. The 2020 fire season also resulted in wildfires in Sonoma County. Residents were exposed to direct effects of wildfires, such as the loss of structures and to secondary effects, such as smoke and air pollution. Smoke generated by wildfires consists of visible and invisible emissions that contain particulate matter (soot, tar, water vapor, and minerals) and gases (carbon monoxide, carbon dioxide, nitrogen oxides). Public health impacts associated with wildfires include difficulty in breathing, odor, and reduction in visibility.

The project site is a relatively flat lot located in Central Petaluma, proximate to downtown, and is surrounded by roadways, the Petaluma River and developed urban uses. Some vacant lots surround the site; however, these sites are also characterized by their flat topography and contain minimal vegetation that could potentially fuel the spread of wildfire. Furthermore, the project site is not located within close proximity of a fire hazard severity zone of local or state responsibility.

Wildfire Impact Analysis:

4.20 (a) (Impair Emergency Plan) Less than Significant Impact: The project site is categorized as a Non-VHFHZ by CAL FIRE and by Petaluma's Fire Prevention Bureau. Furthermore, the site is not located within close proximity of a state responsibility area classified as a moderate fire hazard severity zone nor is not located within or immediate adjacent to land classified as a very high fire hazard severity zone. The proposed development will be required to comply with all fire safety standards set forth by the City of Petaluma and is not expected to substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, the project would have a less than significant impact under this criterion.

4.20(b-d) (Wildfire Risk Exacerbation, Infrastructure Contributing to Wildfire Risk, Exposure to Wildfire-Related Risks) Less Than Significant Impact: The project site is relatively flat and is surrounded by roadways and existing urban uses. Though there are some vacant lots within close proximity to the site, they are also characterized by flat topography and are primarily void of vegetation. The project will be required to comply with the latest California Building and Fire codes, which contain fire prevention standards. Furthermore, there are no factors, such as steep slopes, prevailing winds, or the installation/maintenance of new infrastructure, that would exacerbate fire risk or expose project occupants to the uncontrolled spread of a wildfire, pollutant concentrations from a wildfire, post-fire slope instability, or post-fire flooding. Therefore, the project would have less than significant impacts related to wildfire risks.

Wildfire Mitigation Measures: None required.

4.21. MANDATORY FINDINGS OF SIGNIFICANCE (CAL. PUB. RES. CODE §15065)

A focused or full environmental impact report for a project may be required where the project has a significant effect on the environment in any of the following conditions:

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

Mandatory Findings Discussion:

4.21 (a) (Degrade the Environment) Less Than Significant Impact with Mitigation Incorporated: The project is located within the Central Petaluma Specific Plan and a Priority Development Area (PDA) which is envisioned for high density development given its location proximate to the City’s downtown and existing high quality transit that provides local and regional access. The proposed development on the project site is consistent with the General Plan Land Use and generally complies with the goals, policies, and programs outlined in the General Plan, CPSP, SAMP, and the provision of the Implementing Zoning Ordinance and SmartCode.

As presented throughout this analysis the project has the potential to result in temporary and permanent impacts to environmental resources. However, with standard condition of approval, uniformly applies development standards, and implementation of mitigation measure identified herein, potential impacts will be reduced to less than significant levels. As described above in the Biological Resources discussion, impacts to special-status plants, wildlife species, or sensitive habitat communities will be avoided or reduced with implementation of mitigation measures. Additionally, the Cultural Resources and Tribal Cultural Resources discussions identify measures to ensure that potential impacts to buried cultural resources are avoided. The Geology discussion identifies measures to avoid and minimize potential environmental impacts associated with soil stability. No other impacts associated with environmental degradation, plant or animal communities, species population and ranges, or California history or pre-history have been identified. As such, with conditions of approval imposed by the City and implementation of mitigation measures set forth herein, the project will not degrade the quality of the environment, reduce habitat, or affect cultural resources. Therefore, the project will have less than significant impacts due to degradation of the environment.

4.21 (b) (Cumulatively Affect the Environment) Less Than Significant Impact: The project will contribute to cumulative impacts identified in the City's General Plan EIR but not to a level that is considered cumulatively considerable. As described above, the project will contribute to incremental growth in the City resulting in increased demands for public services and utilities, additional trips on City and regional roadways, and contributions to air quality and GHG emissions. Cumulative impacts of the project on air quality, noise, greenhouse gas emissions, and transportation have been analyzed and found to be less than significant.

Furthermore, development of the project site as a high density mixed-use project adjacent to existing transit services is consistent with local, regional, and state goals which seek to promote public health through increased active transportation facilitated by closer proximity to alternative travel modes, and in turn reduce greenhouse gas emissions by reducing single-occupancy vehicular trips. The project is consistent with the goals and policies set forth in the General Plan, Central Petaluma Specific Plan, and Station Area Master Plan. Public utility and service providers will be capable of serving the project with existing or planned facilities. Potential environmental impacts are expected to remain at, or be mitigated to levels below significance, and long-term environmental goals are not expected to be adversely impacted by the project. Therefore, the project's cumulative impacts will be less than significant.

4.21 (c) (Substantial Adverse Effect on Humans) Less Than Significant Impact: The project has the potential to result in adverse impacts to humans due to air quality, biological resources, hazards and hazardous materials, noise, and transportation. With mitigation measures set forth above, environmental effects that would directly or indirectly impact humans onsite or in the project vicinity will be reduced to less than significant. Therefore, the project will have less than significant impacts due to substantial adverse effects on humans.

Mitigation Measures: None required.

5. REFERENCE DOCUMENTS

5.1. TECHNICAL APPENDICES

- A. Air Quality and Greenhouse Gas Technical Study, prepared by Baseline Environmental Consulting, October 26, 2020.
- B. Biological Resources Assessment, prepared by WRA Environmental Consulting, November 2020.
- C. Memorandum Regarding Bay Mud (November 6, 2020) and Preliminary Geotechnical Report prepared by Miller Pacific Engineering Group, December 18, 2017.
- D. Memorandum Regarding Impacted Soils (November 2020) and Phase I Environmental Site Assessment, prepared by Pinnacle Environmental Inc., August 27, 2020.
- E. Noise and Vibration Technical Study, prepared by Baseline Environmental Consulting, October 23, 2020.
- F. Traffic Impact Study, prepared by Fehr & Peers, November 2020.

5.2. OTHER DOCUMENTS REFERENCED

- 1. American Community Survey 2018 5-Year Estimate, Selected Housing Characteristics, Table DP04, Petaluma.
- 2. Architectural Submittal, prepared by AO Architects, June 19, 2020.
- 3. BAAQMD 2017 Bay Area Clean Air Plan, prepared by the Bay Area Air Quality Management District, April 2017.
- 4. Bay Area Air Quality Management District website, Air Quality Index – Fine Particulate Matter, November 2019.
- 5. California Scenic Highway Mapping System, Scenic Highway System Lists, 2019.
- 6. California Department of Conservation, Farmland Mapping and Monitoring Program, Sonoma County, 2016.
- 7. California Environmental Quality Act Air Quality Guidelines, prepared by the Bay Area Air Quality Management District, May 2017.
- 8. CalFire Fire Hazard Severity Zone Maps, Sonoma County, 2019.
- 9. California Energy Consumption Database, Electricity and Natural Gas Consumption by Sonoma County 2018.
- 10. California Energy Commission, Energy Almanac, Total System Electric Generation, 2018.
- 11. California Energy Commission, Energy Almanac, Supply and Demand of Natural Gas in California, 2018.
- 12. California Energy Commission, Energy Almanac, Transportation Energy, 2018.
- 13. California Environmental Quality Act Air Quality Guidelines, prepared by the Bay Area Air Quality Management District, May 2017.
- 14. California Green Building Standards Code (CalGreen), effective January 1, 2020.
- 15. City of Petaluma, General Plan 2025 and Environmental Impact Report, 2008.
- 16. City of Petaluma Municipal Code and Implementation Zoning Ordinance.

17. City of Petaluma 2015 Urban Water Management Plan, prepared June 2016.
18. Civil Engineering Plans, prepared by CSW/Stuber-Stroeh Engineering Group, Inc., August 21, 2020.
19. Climate Action 2020 and Beyond, Sonoma County Regional Climate Action Plan, prepared by the Sonoma County Regional Climate Protection Authority, July 2016.
20. Conceptual Lighting Plan, Petaluma Station, prepared by Lighting Design Alliance, June 19, 2020.
21. Federal Emergency Management Agency's Flood Insurance Rate Map.
22. Groundwater Basin Boundary Assessment Tool, CA Dept. of Water Resources, November 2019.
23. Hines Petaluma Station Project – Response to Air Quality Analysis Comment, prepared by Baseline Environmental Consulting, November 20, 2020
24. Memo Addressing Impacted Soils, prepared by Pinnacle Environmental Inc., received November 2020.
25. Petaluma Valley Groundwater Sustainability Agency, Draft Petaluma Valley Groundwater Sustainability Plan, 2019.
26. Petaluma Housing Element 2015 – 2023, Attachment 1.
27. Preliminary Maximum Applied Water Allowance Calculations, prepared by Lemon Brooke, June 19, 2020.
28. Preliminary Stormwater Control Plan for a Regulated Project Petaluma Station, prepared by CSW/Stuber-Stroeh Engineering Group, Inc., June 19, 2020.
29. Petaluma Fire Prevention Bureau, Very High Fire Hazard Severity Zones, June 2007.
30. Permit Sonoma's Williamson Act Properties 2017.
31. Quantifying Greenhouse Gas Mitigation Measures, A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures, California Air Pollution Control Officers Association, August 2010.
32. Sonoma Clean Power 2019 Annual Report.
33. Sonoma County Water Agency Stream Maintenance Program Zone 2A map, November 2019.
34. Sonoma County Draft Vital Lands Initiative, December 2019.
35. Technical Advisory on Evaluating Transportation Impact in CEQA, prepared by the California Office of Planning and Research, December 2018.
36. Technical Memorandum Regarding Hines Downtown Station, prepared by CSW/ Stroeh Engineering Group, Inc., October 30, 2020

6. MITIGATION MONITORING AND REPORTING PROGRAM



City of Petaluma, California

Community Development Department
Planning Division
11 English Street, Petaluma, CA 94952

Project Name: Hines Downtown Station Project
File Number: File No. PLSR20-0010
Address/Location: 315 East D Street, Petaluma, Sonoma County, CA
(APN: 007-131-003)

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with Section 21081.6 of the California Environmental Quality Act (CEQA) and Section 15097 of the CEQA Guidelines. This document has been developed to ensure implementation of mitigation measures and proper and adequate monitoring/reporting of such implementation. CEQA requires that this MMRP be adopted in conjunction with project approval, which relies upon a Mitigated Negative Declaration.

The purpose of this MMRP is to: (1) document implementation of required mitigation; (2) identify monitoring/reporting responsibility, be it the lead agency (City of Petaluma), other agency (responsible or trustee agency), or a private entity (applicant, contractor, or project manager); (3) establish the frequency and duration of monitoring/reporting; (4) provide a record of the monitoring/reporting; and (5) ensure compliance.

The following table lists each of the mitigation measures adopted by the City in conjunction with project approval, the implementation action, timeframe to which the measure applies, the monitoring/reporting responsibility, reporting requirements, and the status of compliance with the mitigation measure.

Implementation

The responsibilities of implementation include review and approval by City staff including the Engineering, Planning, and Building divisions. Responsibilities include the following:

1. The applicant shall obtain all required surveys and studies and provide a copy to the City prior to issuance of grading permits or approvals of improvements plans.
2. The applicant shall obtain all required permits, agreements, and approvals from State and Federal regulatory agencies, as applicable and provide copies to the City prior to issuance of grading permits or approvals of improvements plans.
3. The applicant shall incorporate all applicable code provisions and required mitigation measures and conditions into the design and improvement plans and specifications for the project.
4. The applicant shall notify all employees, contractors, subcontractor, and agents involved in the project implementation of mitigation measures and conditions applicable to the project and shall ensure compliance with such measures and conditions.

5. The applicant shall provide for the cost of monitoring of any condition or mitigation measure that involves on-going operations on the site or long-range improvements.
6. The applicant shall designate a project manager with authority to implement all mitigation measures and conditions of approval and provide name, address, and phone numbers to the City prior to issuance of any grading permits and signed by the contractor responsible for construction.
7. Mitigation measures required during construction shall be listed as conditions on the building or grading permits and signed by the contractor responsible for construction.
8. All mitigation measures shall be incorporated as conditions of project approval.
9. The applicant shall arrange a pre-construction conference with the construction contractor, City staff and responsible agencies to review the mitigation measures and conditions of approval prior to the issuance of grading and building permits.

Monitoring and Reporting

The responsibilities of monitoring and reporting include the engineering, planning, and building divisions, as well as the fire department. Responsibilities include the following:

1. The Building, Planning, and Engineering Divisions and Fire Department shall review the improvement and construction plans for conformance with the approved project description and all applicable codes, conditions, mitigation measures, and permit requirements prior to approval of a site design review, improvement plans, grading plans, or building permits.
2. The Planning Division shall ensure that the applicant has obtained applicable required permits from all responsible agencies and that the plans and specifications conform to the permit requirements prior to the issuance of grading or building permits.
3. Prior to acceptance of improvements or issuance of a Certificate of Occupancy, all improvements shall be subject to inspection by City staff for compliance with the project description, permit conditions, and approved development or improvement plans.
4. City inspectors shall ensure that construction activities occur in a manner that is consistent with the approved plans and conditions of approval.

MMRP Checklist

The following table lists each of the mitigation measures adopted by the City in connection with project approval, the timeframe to which the measure applies, the person/agency/permit responsible for implementing the measure, and the status of compliance with the mitigation measure.

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
AESTHETICS				
AES-1: Upon submittal of a building permit the applicant shall revise the proposed lighting plan to reduce indirect and direct glare from new lighting to be below 3-foot candles. A revised photometric plan shall be submitted which demonstrates compliance with Section 21.040(D) of the Implementing Zoning Ordinance	<ul style="list-style-type: none"> • Incorporate into project design and construction documents 	<ul style="list-style-type: none"> • Applicant • Planning Division • Building Division 		
AIR QUALITY				
<p>AQ-1: Latest BAAQMD recommended Best Management Practices (BMPs) to control for fugitive dust and exhaust during all construction activities shall be incorporated into all demolition and construction plans to require implementation of the following:</p> <ol style="list-style-type: none"> 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 mph. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked 	<ul style="list-style-type: none"> • Measures shall be included in project design and construction documents. • Periodic inspections during construction to ensure that measures are in place. 	<ul style="list-style-type: none"> • Applicant • Planning Division • Building Division 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>by a certified mechanic and determined to be running in proper working condition prior to operation.</p> <p>8. A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations.</p>				
BIOLOGICAL RESOURCES				
<p>BIO-1: Rare plant bloom surveys shall be conducted by a qualified biologist on an annual basis through the project planning stages until the commencement of ground disturbing activities to determine if special-status plant species with the potential to occur onsite are present. Surveys shall be conducted within the bloom period of the identified plant species and results shall be submitted in writing to the City of Petaluma.</p> <p>In the event that the protocol survey identifies presence of rare plants, a census of the population and mapping of outward extent shall be performed by a qualified biologist. Areas where special status species are present shall be avoided through site design modifications. In the event that avoidance cannot be achieved then a mitigation plan shall be developed to restore impacted rare plant species in a suitable habitat on or offsite within an equal area and/or equal population numbers. A qualified botanist shall collect the seeds, propagules, and top soils, or other part of the plant that would ensure successful replanting of the population elsewhere. The seeds, propagules, or other plantable portion of all plants shall be collected at the appropriate time of the year. Half of the seeds and top soils collected shall be appropriately stored in long-term storage at a botanic garden or museum (for example, Luther Burbank Home & Gardens).</p> <p>The other half of the seeds, propagules, or other plantable portion of all plants shall be planted at the appropriate time of year (late-fall months) at an off-site protected property. The applicant shall retain a qualified biologist to conduct annual monitoring surveys of the transplanted plant population for a five-year period and shall prepare annual monitoring reports reporting the success or</p>	<ul style="list-style-type: none"> • Conduct surveys in accordance with this measure. • Conduct construction in conformance with measures herein. • Notify Planning Division, CDFW, and USFWS in the event of discovery. 	<ul style="list-style-type: none"> • Qualified biologist • Applicant • Planning Division • CDFW • USFWS 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>failure of the transplanting effort. These reports shall be submitted to the City and appropriate resource agency (CDFW and/or USFWS) no later than December 1st each monitoring year. Alternatively, at the discretion of the City for CNPS species, compensatory credits at an approved mitigation bank or the preservation of offsite habitat may be determined to be an acceptable means of mitigation. Proof of the purchase of mitigation credits shall be provided to the City prior to issuance of site grading permits.</p>				
<p>BIO-2: To reduce sediment runoff and erosion into the Petaluma River, and to protect water quality from sediment and other pollutants the applicant shall comply with the following:</p> <ol style="list-style-type: none"> 1. Submit a Stormwater Pollution and Prevention Plan (SWPPP) to be implemented throughout construction and post-construction. 2. Construction activities shall be conducted, to the extent feasible, during the dry season (May through October). If rainfall is forecasted to be greater than one-half inch over a 24-hour period, standard erosion control measures (e.g., straw wattles, bales, silt fencing) shall be deployed and grading shall be suspended. 3. Silt wattles shall be installed along the riverbank within the Project Area, outside of active ground disturbance. Following completion of ground disturbance, silt wattles shall be installed along the stream bank, above the mean high water. Silt wattles shall be made of jute and not plastic. 4. All equipment shall be staged above the top of bank and spill kits shall be located within working equipment. Equipment fuels and lubricants shall be prevented from reaching the river by locating fueling/maintenance areas an appropriate distance away from the river or drainage ways to the river and construction contractors shall have a spill prevention kit and plan on location. 5. Uncured concrete shall not be exposed to water flowing to the river or within the river itself and all excess uncured concrete shall be properly disposed of at an offsite location. 6. Areas of vegetation removal shall be limited to the smallest area feasible. Any areas of bare ground shall be re-seeded immediately following completion of 	<ul style="list-style-type: none"> • Measures shall be included in project design and construction documents. • Inspection by a qualified biologist shall be conducted prior to commencement of earthwork activities. 	<ul style="list-style-type: none"> • Applicant • Planning Division • Qualified Biologist 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
all ground disturbance work. Additional erosion control measures (jute, hay) as feasible will be installed prior to rainy season. Areas of exposed stream bank above the mean high water shall be planted with native species appropriate for area and habitat.				
<p>BIO-3: The following general avoidance and minimization measures outlined below shall be implemented during all construction activities onsite and offsite. Additionally, prior to commencement of construction associated with upgrading the existing outfall, the appropriate permits for the work from regulatory agencies shall be obtained. The permit authorization process shall include, if needed and at the discretion of the regulatory agencies involved, consultation with National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service, and/or California Department of Fish and Wildlife (CDFW) to determine the appropriate impact avoidance, minimization, and mitigation measures (if any) for the proposed Project with respect to its potential to affect special-status fish, critical habitat and essential fish habitat. Avoidance and minimization measures required by NMFS, USFWS, and CDFW shall be implemented.</p> <ol style="list-style-type: none"> 1. An environmental awareness training program will be given to all crew members working on the outfall replacement part of the Project. The training will be given by a qualified biologist and shall include education on sensitive resources such as protected wildlife with the potential to occur within the Project Area, water quality, and environmental protection measures. 2. Equipment will be cleaned prior to being moved onsite and prior to being removed such that it will not pose a potential to introduce or spread invasive plant or animal species. 3. Erosion control measures will be utilized throughout all phases of the Project where sediment runoff from construction may potentially enter waters. Erosion control structures will be monitored for effectiveness and will be repaired or replaced as needed. Appropriate erosion control measures will be installed around any stockpiles of soil or other materials which could be mobilized by rainfall or runoff. 	<ul style="list-style-type: none"> • Measures shall be included in project design and construction documents. • Proof of permits shall be submitted with construction documents and results of consultation with NMFS and/or CDFW, as applicable, shall be provided. 	<ul style="list-style-type: none"> • Applicant • Planning Division • Qualified Biologist • NMFS • CDFW 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>4. Prior to construction, an Accidental Spill Prevention and Cleanup Plan shall be prepared. This plan shall include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times.</p> <p>5. No fueling, cleaning, or maintenance of vehicles or equipment will take place within any areas where an accidental discharge may cause hazardous materials to enter waterways.</p> <p>6. Any equipment or vehicles used for the Project will be checked and maintained daily to prevent leaks of fluids that could be deleterious to aquatic habitats.</p> <p>7. All equipment will be cleaned before arriving on the site and before removal from the site to prevent spread of invasive plants.</p> <p>8. Construction disturbance or removal of vegetation will be restricted to the minimum footprint necessary to complete the work. The work area will be delineated where necessary to minimize impacts to vegetated habitats beyond the work limit, or to protected vegetation within the work area.</p> <p>9. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, will be located outside of the stream channel banks and outside of seasonal wetlands.</p> <p>10. Stationary equipment such as motors, pumps, and generators, located adjacent to aquatic features will be positioned over secondary containment sufficient to arrest a catastrophic failure.</p> <p>11. All activities performed near aquatic features will have absorbent materials designated for spill containment and cleanup activities on-site for use in an accidental spill.</p> <p>12. Stockpiles of excavated soil or other will be covered when not in active use (i.e. will not be or moved for 72 hours). All trucks hauling soil, sand, and other loose materials will be covered.</p> <p>13. No construction debris of any type will be allowed to enter or be placed where they may be washed into any aquatic features.</p>				

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>14. At the end of the project all temporary flagging, fencing, or other materials will be removed from the project site and vicinity of the channel.</p> <p>15. No equipment shall be washed down where runoff could enter the creek.</p> <p>16. No motorized equipment shall be left within the channel overnight.</p> <p>17. All refueling and maintenance of equipment, other than stationary equipment, shall occur outside of the top-of-bank. Refueling of stationary equipment within the channel (top of bank to top of bank) shall only occur when secondary containment sufficient to eliminate escape of all potential fluids is in place.</p> <p>The following avoidance and minimization measures for NMFS Species and resources including critical habitat and essential fish habitat shall be implemented during construction of the outfall, unless otherwise noted by the NMFS.</p> <p>18. Any work below the top of bank shall be completed during the dry season, between June 15 and October 15.</p> <p>19. No work requiring heavy machinery to enter the channel of the Petaluma River will be conducted. Any work below the top of bank of the Petaluma River will be conducted using an excavator or other similar equipment capable of reaching the work area from above top of bank.</p> <p>20. Work will be conducted during the lowest tidal periods of the day to minimize disturbance to aquatic habitat and preclude need for using a coffer dam.</p> <p>21. Prior to beginning sediment removal work adjacent to waters which may be occupied by protected species, a qualified biologist will place exclusion nets to prevent fish from temporarily occupying waters that may be accidentally impacted by landslides or similar failures. The exclusion nets shall be of sufficient height to span the water column and small enough in size (1/8 inch or less) to exclude juvenile fish from areas that may be subject to disturbance during excavation.</p>				

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>22. To prevent the spread of turbidity that might be caused by liberation of sediment, a turbidity curtain shall be installed within the exclusion zone created by block nets whenever equipment operates below top of bank.</p> <p>23. Native vegetation removed shall be limited to the minimum necessary in order to complete outfall culvert installation and shall be replanted within the work area where appropriate.</p>				
<p>BIO-4: To the extent feasible, tree and vegetation removal and initial ground disturbance shall occur outside of the bird nesting season (between September 1 to January 31). Should tree/vegetation removal and ground disturbing activities commence during the bird nesting season, a preconstruction nesting bird survey shall be conducted by a qualified biologist no more than 7 days prior to the initiation of tree removal or start of ground disturbing activities, with special attention to areas of denser vegetation coverage. Areas within 500 feet of construction shall be surveyed for active nests. Should active nests be identified, a disturbance-free buffer shall be established based on the needs of the species identified and shall be maintained until a qualified biologist verifies that the nestlings have fledged, or the nest has failed.</p>	<ul style="list-style-type: none"> • Conduct surveys in accordance with this measure. • Conduct construction in conformance with measures herein. • Notify Planning Division and CDFW in the event of discovery. 	<ul style="list-style-type: none"> • Qualified biologist • Applicant • Planning Division • CDFW 		
<p>BIO-5: To avoid impacts to special-status bats, tree removal shall be performed outside of the bat maternity season (September to March). Where this is not feasible, a qualified biologist shall conduct a pre-construction survey of the trees proposed for removal no more than 14 days prior to removal or commencement of ground disturbing activities. If no roosting bats are detected, no further studies are warranted. Should bat maternity roosts be detected, an appropriate disturbance-free buffer shall be established by a qualified biologist and removal of the trees shall be prohibited until the end of the maternity roosting season. Regardless of the time of year of removal, all felled trees shall remain on the ground for a minimum of 24-hours prior to chipping, off-site removal, or other processing to allow any bats present within the felled trees to escape.</p>	<ul style="list-style-type: none"> • Conduct surveys in accordance with this measure. • Conduct construction in conformance with measures herein. • Notify Planning Division and CDFW in the event of discovery. 	<ul style="list-style-type: none"> • Qualified biologist • Applicant • Planning Division • CDFW 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>BIO-6: To determine applicable regulatory agencies of the approximately 0.02-acres of seasonal wetlands onsite, the applicant shall be required to obtain a jurisdictional determination from the San Francisco Corps District. Accompanying or following the jurisdictional determination, the applicant shall apply for a Nationwide Permit (NWP) 29/39 (Residential/Commercial Development), and a 401 Water Quality Certification from the RWQCB. Should it be determined that the seasonal wetlands are under Corps and/or RWQCB jurisdiction, all appropriate permits shall be obtained from regulatory agencies prior to initial grading and the applicant shall be required to purchase mitigation credits at a 1:1 mitigation ratio or as otherwise required by the Army Corps of Engineers and the Regional Water Quality Board to offset fill to 0.02 acres of Waters of the United States and the State. Wetland mitigation credits shall be purchased from a Corps and RWQCB-approved mitigation bank. The Burdell Ranch Wetland Conservation Bank Service Area covers this project site and purchase from this bank or other acceptable bank as determined by the Corps and RWQCB could satisfy this mitigation requirement.</p> <p>Impacts to 0.01 acres of open waters (tidal wetlands) shall be offset through replacement at a minimum 1:1 ratio on a functions and values basis. Permits that may be necessary include a Section 10 Rivers and Harbors Act and/or Section 404 DWA fill permits from the Corps, a Section 401 Water Quality Certification from the RWQCB, and a 1602 Lake and Streambed Alteration Agreement from the CDFW.</p> <p>In lieu of purchasing wetland mitigation credits, a Wetland Mitigation and Monitoring Plan (WMMP) at a 2:1 mitigation ratio shall be prepared by a qualified restoration ecologist and presented to the City/Corps/RWQCB prior to placement of fill in the wetland. The WMMP shall include a description of the impacted wetland, a map of the mitigation site with existing conditions, a description of the new wetland, wetland construction approach, landscape plan, monitoring methods and successful WMMP criteria, contingency measures if success measures are not met, and short-term and long-term management and monitoring plans. A conservation easement, as defined by Section 81.5.3 of the California Civil Code, preserving the created wetland in</p>	<ul style="list-style-type: none"> • Provide a Corp verified jurisdictional determination. • Provide proof of mitigation credit purchase prior to issuance of grading permits OR • Prepare and submit a WMMP in accordance with this measure. 	<ul style="list-style-type: none"> • Applicant • Planning Division • Qualified restoration ecologist • Corps • RWQCB • CDFW 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
perpetuity and establishing an endowment to fund long-term management, maintenance and monitoring, shall be granted to a qualified entity.				
CULTURAL RESOURCES				
<p>CUL-1: If previously unknown historic-era resources associated with the former rail yard, including, but not limited to materials from buildings previously located on the site are encountered before or during ground disturbing activities, construction shall stop in the immediate vicinity of the find and a qualified specialist shall determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and Chapter 15 of the Implementing Zoning Ordinance.</p> <p>If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the City of Petaluma. Appropriate measures for significant resources could include avoidance or capping, incorporation in the site design, such as incorporation in the Transverse Street publicly accessible open space, or data recovery excavations of the finds.</p> <p>No further grading shall occur in the area of the discovery until the City of Petaluma approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or individual who is capable of providing long-term preservation to allow future study.</p>	<ul style="list-style-type: none"> • Conduct construction in conformance with measures herein. • Notify Professional Historical Resource Specialist and Planning Division in the event of potentially significant historic resource discovery. • Include measure on project construction and improvement plans. 	<ul style="list-style-type: none"> • Applicant • Planning Division • Qualified Historical Resource Specialist 		
<p>CUL-2: The applicant shall retain the services of a professional archaeologist who meets the Secretary of the Interior’s Standards Professional Qualifications for Archaeology and a Federated Indians of Graton Rancheria tribal monitor to observe and monitor ground disturbing activities for the inadvertent discovery of archaeological resources (prehistoric and historic-era). If a potentially significant archaeological resource is encountered the</p>	<ul style="list-style-type: none"> • Submit a tribal monitoring schedule and process 	<ul style="list-style-type: none"> • Applicant • Qualified archaeologist and/or FIGR representative 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
archaeologist and tribal monitor shall be provided sufficient time to evaluate the resource and make treatment recommendations in accordance with CEQA Guidelines §15064.5.	<ul style="list-style-type: none"> Conduct construction in conformance with measures herein. 	<ul style="list-style-type: none"> Professional Archaeologist Planning Division 		
<p>CUL-3: If during the course of ground disturbing activities (onsite and offsite), including, but not limited to excavation, grading and construction, a potentially significant archaeological resource is encountered, all work within a 100 foot radius of the find shall be suspended for a time deemed sufficient for a qualified and city -approved cultural resource specialist and a Federated Indians of Graton Rancheria tribal monitor to adequately evaluate and determine significance of the discovered resource and provide treatment recommendations developed through tribal consultation with the Federated Indians of Graton Rancheria. Pre-historic archaeological site indicators include obsidian and chert flakes, chipped stone tools, grinding and mashing implements, bedrock outcrops and boulders with mortar cups, locally darkened midden soils, bone and shell remains, and fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps). Should a significant archaeological resource be identified, a qualified archaeologist shall prepare a resource mitigation plan and monitoring program to be reviewed and accepted by the Federated Indians of Graton Rancheria and carried out during all construction activities. Work shall not proceed in the vicinity of a find until all components of the resource mitigation plan have been complied with to the satisfaction of the City and the Federated Indians of Graton Rancheria.</p>	<ul style="list-style-type: none"> Notify Professional Archaeologist and Planning Division in the event of potentially significant archaeological resource discovery. Include measure on project construction and improvement plans. 	<ul style="list-style-type: none"> Applicant Qualified archaeologist and FIGR representative Professional Archaeologist Planning Division 		
GEOLOGY AND SOILS				
<p>GEO-1: As determined by the City Engineer and/or Chief Building Official, all recommendations outlined in the Updated Preliminary Geotechnical Investigation prepared by Miller Pacific Engineering Group in December 2017, which incorporates be reference the recommendations provided in the</p>	<ul style="list-style-type: none"> Incorporate geotechnical recommendations into project construction 	<ul style="list-style-type: none"> Applicant/ Contractor/ 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>Preliminary Geotechnical Investigation prepared by Engeo in October 2016, shall be incorporated. As provided therein, the project shall be required to submit a design-level geotechnical report which includes borings and laboratory soil testing to provide data for specific recommendations related to site grading, including remedial grading measures, foundations, drainage, and settlement.</p> <p>Prior to issuance of a grading permit, the applicant shall provide to the City, for review and acceptance, a final grading plan, demonstrating compliance with recommendations identified in the design level geotechnical report. Construction plans and building plans shall demonstrate that recommendations set forth in the design level geotechnical reports have been incorporated into the design of the project.</p> <p>Nothing in this mitigation measure shall preclude the City Engineer and/or Chief Building Official from requiring additional information to determine compliance with applicable standards. The geotechnical engineer shall inspect the construction work and shall certify to the City, prior to issuance of a certificate of occupancy that the improvements have been constructed in accordance with the geotechnical specifications.</p>	<p>and improvement plans.</p> <ul style="list-style-type: none"> The project geotechnical engineer shall inspect the construction work and shall certify to the City, prior to issuance of a certificate of occupancy that the improvements have been constructed in accordance with the geotechnical specifications. 	<p>Geotechnical Engineer</p> <ul style="list-style-type: none"> Public Works and Utilities Building Division 		
<p>GEO-2: Prior to issuance of a grading permit, an erosion control plan along with grading and drainage plans shall be submitted to the City Engineer for review. All earthwork, grading, trenching, backfilling, and compaction operations shall be conducted in accordance with the City of Petaluma’s Grading and Erosion Control Ordinance #1576, Title 17, Chapter 17.31 of the Petaluma Municipal Code. Plans shall detail erosion control measures such as site watering, sediment capture, equipment staging and laydown pad, and other erosion control measures to be implemented during all construction activity. Throughout project construction, an interim plan shall be required prior to each rainy season (prior to September 1st).</p>	<ul style="list-style-type: none"> Compliance with approved erosion control plan. 	<ul style="list-style-type: none"> Applicant/ Contractor/ Geotechnical Engineer Public Works and Utilities Building Division 		
HAZARDS/HAZARDOUS MATERIALS				

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>HAZ-1: To ensure construction workers, members of the public, and future occupants of the site are not exposed to elevated levels of contamination, a Remedial Action Workplan (RAW) or a Soil Management Plan (SMP) shall be prepared and implemented for the project site in accordance with regulatory oversight protocols. The RAW/SMP shall be prepared and implemented under the oversight of an appropriate regulatory agency (Department of Toxic Substances Control or the San Francisco Regional Water Quality Control Board), and subject to review and acceptance by the City to ensure appropriate procedures for treatment of impacted soils. Remediation activities may include additional soil sampling, excavation, stockpiling, and removal/disposal of railroad spur ballast/slag and gravel, impacted soils, as well as dust control measures, worker health and safety monitoring, and standards for transporting impacted materials. The RAW/SMP shall include procedures for the management of subsurface features of environmental concern that could be present on the project site such as buried rail spurs, Underground Storage Tanks (USTs), sumps/vaults, and drainage lines, and management of potentially contaminated deeper soil/groundwater if encountered during construction. Prior to issuance of occupancy verification of remediation in accordance with regulatory oversight shall be provided to the City of Petaluma.</p>	<ul style="list-style-type: none"> • Prepare RAW/SMP in compliance with this measure • Submit plan to City of Petaluma Fire Department for review and approval • Incorporate measures into project construction document 	<ul style="list-style-type: none"> • Applicant • Fire Department • Planning Division • Building Division • DTSC • RWQCB 		
LAND USE AND PLANNING				
<p>LU-1: Prior to submittal of a building permit, a qualified acoustical engineer shall be retained to prepare a Noise Reduction Plan for City review and approval. The plan shall contain noise reduction measures that achieve an acceptable interior noise level of 45 dB CNEL for the multi-family residential uses and 50 dBA L_{eq} for commercial uses. The plan shall also include measures to reduce exterior noise levels of the publicly accessible open space consistent with the requirements set forth in Section 21.040 of the City's Implementing Zoning Ordinance. The feasibility of the following measures to achieve acceptable interior and exterior noise levels shall be considered:</p> <ol style="list-style-type: none"> 1. Installation of forced air mechanical ventilation. 	<ul style="list-style-type: none"> • Measures shall be included in project design and construction documents. 	<ul style="list-style-type: none"> • Applicant • Qualified acoustical engineer • Planning Division • Building Division 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
2. Installation of sound rated windows and doors that reduce interior noise levels at or below 45 dBA for residential uses and 50 dBA for non-residential uses.				
NOISE				
<p>NOI-1: The following Best Construction Management Practices shall be implemented to reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance:</p> <ol style="list-style-type: none"> 1. Limit construction hours to between 8 a.m. and 5:30 p.m., Monday through Friday and between 9:00 a.m. and 5:00 p.m. on Saturday. Construction activities shall be prohibited on Sundays and State, Federal and Local Holidays. 2. Delivery of materials and equipment to the site and truck traffic coming to and from the site is restricted to the same construction hours specified above. 3. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. 4. Unnecessary idling of internal combustion engines shall be strictly prohibited. 5. Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors. 6. Acoustically shield stationary equipment located near residential receivers with temporary noise barriers. 7. Utilize "quiet" air compressors and other stationary noise sources where technology exists. 	<ul style="list-style-type: none"> • Conduct construction in conformance with measures herein. • Incorporate into project design and construction documents. • Maintain delivery, hauling and construction in accordance with measure. • Provide notice to surrounding properties in accordance with measure. • Applicant shall provide for periodic inspection during construction to ensure that measures are in place. 	<ul style="list-style-type: none"> • Applicant • Planning Division • Building Division 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>8. Impact tools (e.g., jack hammers and pavement breakers) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust, which can achieve up to a 10 dBA reduction in noise, shall be used. External jackets shall be used on the tools themselves, if such jackets are commercially available, which can achieve a reduction of up to 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with required construction procedures.</p> <p>9. Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities.</p> <p>10. Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from existing residences.</p> <p>11. Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.</p> <p>12. The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses and businesses so that construction activities can be scheduled to minimize noise disturbance.</p> <p>13. No less than two weeks prior to commencement of construction activities, the applicant shall provide written notification disclosing the construction schedule, including the various types of activities that will occur throughout the duration of the construction period, to all land uses within a 1,000-foot radius of the site.</p> <p>14. Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the</p>				

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.</p> <p>15. Prior to the issuance of a construction-related permit, the applicant shall submit a set of procedures for responding to and tracking complaints pertaining to construction noise to the City for review and approval. These measures shall, at a minimum, include the following:</p> <ul style="list-style-type: none"> a. a sign posted on-site describing noise complaint procedures and a complaint hotline number; b. designation of an on-site construction compliance and enforcement manager for the project; c. protocols of receiving, responding to, and tracking received complaints; and d. maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City’s request. 				
TRANSPORTATION AND CIRCULATION				
<p>TRANS-1: The project shall be required to comply with the following:</p> <ul style="list-style-type: none"> 1. The applicant shall coordinate with the City’s Department of Public Works and transit operators to reposition bus stops on Copeland Street to meet industry standards for stopping sight distance for vehicles exiting the proposed garages. The project shall also increase the amount of painted red curb adjacent to garage access points. 2. The applicant shall work with the City’s Department of Public Works to designate Copeland Street between East Washington Street and East D Street as a transit priority street, implement traffic calming strategies, and/or set a 15-mph speed limit, if consistent with local and state laws, to reduce the speed of traffic. 3. The applicant shall coordinate with the City’s Department of Public Works and transit operators to site any planned bus layovers at bus gates that are not 	<ul style="list-style-type: none"> • Incorporate into project construction documents 	<ul style="list-style-type: none"> • Applicant • Public Works • Planning Division • Petaluma Transit • Sonoma County Transit • Golden Gate Transit 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>directly adjacent to garage access points to help maintain sight distances for vehicles exiting the garages.</p> <p>4. Landscaping near garage access points, including installation of street trees, shall be designed to avoid obstruction of sight distances for vehicles exiting the garages.</p> <p>5. Consider installing audible and visual warning devices at garage exist to alert pedestrian along Copeland Street when a vehicle is existing a garage.</p>				
<p>TRANS-2: A construction management plan shall be prepared for review and approval by the City of Petaluma Public Works Department. Additionally, activities that would potentially affect transit operations at the Copeland Street Transit Mall shall be reviewed by local and regional transit agencies, as needed. The plan shall include at least the following items:</p> <p>1. Development of a construction truck route that would appear on all construction plans to limit truck and auto traffic on nearby streets.</p> <p>2. Comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures if required, sidewalk closure procedures if required, cones for drivers, and designated construction access routes.</p> <p>3. Evaluation of the need to provide flaggers or temporary traffic control at key intersections along the truck route(s).</p> <p>4. Notification procedures for adjacent property owners and public safety personnel regarding schedules when major deliveries, detours, and lane closures would occur.</p> <p>5. Location of construction staging areas for materials, equipment, and vehicles if there is insufficient staging area within the work zone of the proposed project.</p> <p>6. Identification of truck routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety; provision for monitoring surface streets used for truck movement so that any</p>	<ul style="list-style-type: none"> • Prepare Construction Management Plan in compliance with this measure • Submit plan to City of Petaluma Public Works Department and transit agencies, as applicable, for review and approval • Incorporate final plan into project construction documents 	<ul style="list-style-type: none"> • Applicant • Public Works • Planning Division • Petaluma Transit • Sonoma County Transit • Golden Gate Transit 		

HINES DOWNTOWN STATION MITIGATION MONITORING AND REPORTING PROGRAM				
MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLETION OF IMPLEMENTATION	
			ACTIVITY	DATE COMPLETED
<p>damage and debris attributable to the proposed project’s construction trucks can be identified and corrected by the proposed project applicant.</p> <p>7. A process for responding to and tracking complaints pertaining to construction activity, including identification of an on-site complaint manager.</p> <p>8. Documentation of road pavement conditions for all routes that would be used by construction vehicles both before and after proposed project construction. Roads found to have been damaged by construction vehicles shall be repaired to the level at which they existed prior to construction of the proposed project.</p>				
TRIBAL CULTURAL RESOURCES				
<p>TCR-1: To avoid inadvertently causing a substantial adverse impact to tribal cultural resources that may be encountered during ground disturbing activities, the project shall be required to implement Mitigation Measures CUL-2 and CUL-3.</p>	See CUL-2, CUL-3	See CUL-2, CUL-3		